How to comply with your environmental permit

We are the Environment Agency. We protect and improve the environment and make it a better place for people and wildlife.

We operate at the place where environmental change has its greatest impact on people's lives. We reduce the risks to people and properties from flooding; make sure there is enough water for people and wildlife; protect and improve air, land and water quality and apply the environmental standards within which industry can operate.

Acting to reduce climate change and helping people and wildlife adapt to its consequences are at the heart of all that we do.

We cannot do this alone. We work closely with a wide range of partners including government, business, local authorities, other agencies, civil society groups and the communities we serve.

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Introduction

This guidance explains the conditions or rules of your environmental permit. It describes the standards and measures you must use to control the most common risks of pollution from your activity and how to comply with the conditions of your permit.

The rules or conditions of your environmental permit tell you what you must do to protect the environment and people. We call these objective based conditions or rules. In many cases you have flexibility about what measures to use if you can show us you are meeting these objectives.

You must read and understand this guidance and keep a copy handy with your permit paperwork. People working on a site must have read the relevant sections of this guidance and be able to refer to it at any time.

The following do not need to read this but will need to look at other guidance.

Householders If you are a householder and you have a permit for discharging treated sewage effluent up to 15m^3/day to ground or 20m^3/day to surface water you need to read the management system toolkit designed for you.

Intensive Farming If you are carrying out intensive poultry or pig production you need to read the sector guidance note *EPR 6.09 How to comply with your environmental permit for intensive farming*.

Radioactive Substances If you are carrying out a radioactive substances activity you need to read the how to comply guidance relating to your specific activity.

Before you apply for a new permit

When you apply for a permit you confirm that you will follow all the relevant guidance and have a management system.

You must read the sections of this guidance that apply to you. This guidance also refers to other guidance you may need to read Part 7 – Where to find more information page 92 explains where to find information about applying for a permit and other guidance.

Get your permit application right first time and you are likely to receive your permit decision faster. We encourage you to have a pre-application discussion with us. We can give you advice about applying for a permit and how we issue a permit. We will answer questions you have about how we regulate a permit and how to produce a management system. Contact us on 03708 506506.

Introduction

When you have a permit

Once we have given you a permit you need to use this guidance to help you carry out your activities. You must be able to explain to us and explain in your management system what measures you are using to protect people and the environment. If something goes wrong, we need to know what you are going to do about it. We can help you understand what to do to improve things.

We will inspect your site, check your management system and score you on how well you are complying with your permit. The score may affect how much you pay to us in fees each year. If you are complying, we can reduce how often we need to inspect you. Some low risk activities will not receive routine inspections.

If you want to change what you are doing, transfer the permit to someone else or you do not need your permit any more please contact us.

Layout of this document

Part 1 has general information for everybody, including information on management systems.

Parts 2 – 6 have information for different types of activities. You only need to read the part that applies to your activity.

Part 7 explains where to find more information.

Parts 1 – 6 are presented in the order the conditions appear in the permit:

1. Management
2. Operations
3. Emissions and monitoring
4. Information

We state a condition or rule and then explain the things we expect you to do to meet it. We direct you to more information where needed.

Our other guidance

This document includes general guidance about conditions and some activity specific guidance. For some activities you will need more information to understand what you need to do. This is covered in the sector technical guidance notes listed in Part 7 – Where to find more information page 92. If there is conflict between the sector technical guidance and this document, the sector guidance will apply.

Introduction

How the guidance fits together

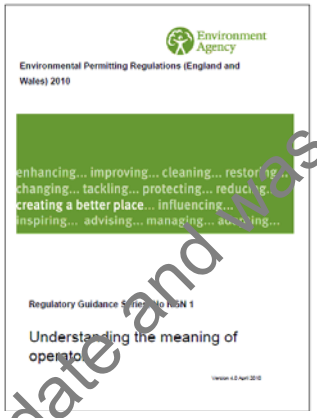
Environmental Permitting Regulations (EPR)
The legislation within which we regulate environmental permits.

Government guidance (policy)
Defra and Welsh Government are responsible for the guidance for England and Wales that provides the framework for how the environmental permitting system works.

Regulatory guidance notes (RGNs)
These include high level guidance on our approach to implementing the regulations and explain our position on various terms in the regulations.

You only need to look at these if you want a more detailed understanding of a particular issue.

For example:



Technical guidance
How to comply explains the basic requirements for all operators.

You can find further information in sector technical and horizontal guidance.

Sector technical guidance notes provide guidance tailored to a sector. These will help you complete your application and comply with the conditions of your environmental permit.

Horizontal guidance provides information relevant to all sectors regulated under EPR. The documents are:

H1 – Environmental risk assessments
H2 - Energy efficiency
H3 – Noise
H4 – Odour
H5 – Site condition report guidance

Part 7 page 92 explains where to find more information. It includes links to the guidance documents and application information on our website and other useful sources of information.

Part 1 - All activities

How permits and guidance work together

When you apply for a permit you are making a commitment to meet the standards specified in this document, using the measures described or their equivalent.

Your permit will contain a range of conditions intended to achieve the objectives in the relevant UK and European legislation. Some conditions will be detailed such as numerical limits on emissions or restrictions on the type of waste you can handle. Most conditions, for example those about your management system, will state outcomes you must achieve, but will not specify how you achieve them, this is up to you. They offer you some flexibility in the way you operate your activity and reduce the need for you to apply to us to change your permit. However, they require you to be proactive and to take responsibility for compliance with the objectives, rather than just meeting a series of "tick box" requirements. You will need to put thought and planning into how you will comply with these conditions. You must read the conditions in combination with this document and any other guidance that applies to your activity.

Our officers use this document as the basis for assessing compliance with your permit. If you are not meeting these or equivalent standards we will consider all the relevant issues and then take action to ensure compliance with the requirements. Depending on the circumstances, we may provide further help and advice, formally require compliance using a notice, or ultimately take formal enforcement action, which can result in prosecution and permit revocation. We describe our approach to enforcement in our Enforcement and sanctions position statement published on our website.

Types of permits

There are two main types of permit under the *Environmental Permitting Regulations* (EPR):

- **bespoke** permits with conditions specific to the site or a mobile plant activity
- **standard** rules permits, which impose a set of generic rules applicable to all activities of a certain type.

Bespoke permit applications have a detailed site-specific determination process. The permit will usually contain conditions specific to your activity and site. The first condition states you need a management system. Certain activities will also have a condition that incorporates the commitment you made in your application to follow relevant guidance including this document and any management plans submitted as part of the application. A bespoke permit for a number of activities can also include standard rules sets.

Standard rules permits impose a set of rules which apply to sites carrying out activities of a certain type such as composting, or waste storage, as long as they meet the screening criteria. For example, they may need to be a certain distance from housing or protected sites, species and habitats. A standard permit has one condition that says which standard rules set or sets you must comply with. If you apply for one of these permits you are confirming that you have read, understood, and will comply with these rules, the risk assessment and the appropriate guidance, including this document. If you cannot meet the standard rules criteria you must apply for a bespoke permit.

If you have a standard rules permit you will need a site-specific management system. For example, there is a standard rules set for waste storage and treatment up to 75,000 tonnes per year. This does not mean that every site granted this standard rules permit has been assessed and approved to handle this amount of waste. We are saying that up to this level the same set of standard rules will apply. Your management system must identify and control how much of

each specific waste type your site can safely handle whilst minimising the risk of pollution. We describe how to comply with this condition in more detail later in this section.

We publish the standard rules on our website and they are subject to change from time to time. We usually carry out a public consultation on proposed changes, unless they are only administrative changes. We will always tell you about the changes if you are affected. If you wish to continue to have a standard rules permit you must comply with any changes.

There are some standard rules sets for mobile plant. Other mobile plant activities are covered by bespoke permits. Once you have a permit for a mobile plant activity you need to complete a deployment application when you want to use the mobile plant at a specific site. We assess this and let you know whether we agree to the deployment going ahead. Each deployment must meet the conditions of the permit for the mobile plant activity.

Appropriate measures

Some of the conditions in your permit require you to take **appropriate measures** to comply with them. European directives use various terms to describe what type of measures should be taken to prevent pollution such as “all appropriate preventative measures”, “reasonable”, “best available” and “best practicable”. These can all be interpreted slightly differently but have the same general meaning that we call appropriate measures.

Definition of pollution
For water discharge or groundwater activities, it means the direct or indirect introduction, as a result of human activity, of substances or heat into the air, water or land which may:

- be harmful to human health or the quality of aquatic ecosystems or terrestrial ecosystems directly depending on aquatic ecosystems,
- result in damage to material property, or
- impair or interfere with amenities or other legitimate uses of the environment.

For all other activities it means any emission as a result of human activity which may:

- be harmful to human health or the quality of the environment,
- cause offence to a human sense,
- result in damage to material property, or
- impair or interfere with amenities or other legitimate uses of the environment.

You must understand what appropriate measures mean for your site. It is important that you take reasonable measures to prevent or minimise pollution. Your measures will be based on those described in this document, industry or sector guidance, good practice and an assessment of the costs and benefits. As a minimum we expect you to implement the measures described in this document that apply to your activity. You can use your own measures that provide the same level of protection but you must explain them in your management system. In certain circumstances you may need to describe them in a management plan, for example for emissions, odour or noise issues. We may ask you to submit the plan for approval.

In some cases you may need to go further than industry standards to demonstrate appropriate measures. This may be because the activity is in a particularly sensitive environment, for example close to housing or a protected sites, species and habitats. Or the activity may give

rise to more or different types of impacts, such as where you are treating very odorous or smelly wastes, or using hazardous materials.

Do not wait until there is a problem to implement measures. It is often more costly and less effective to fix and pollution may have already occurred. If you do not achieve the outcomes specified in the permit then you must review what you are doing and we may require you to implement further measures. In many cases problems occur because the site design or operational problems make the usual appropriate measures less effective.

When an operator has acted reasonably and in good faith, we will work together to achieve the right outcome. There may be times when an unacceptable impact still exists after all cost effective measures have been considered and it may be necessary to consider limiting or stopping operations.

General management condition

The purpose of environmental regulation is to protect and improve the environment. Your permit incorporates these requirements. The management condition and your written management system are key for assessing how effectively you are protecting the environment and help to improve how you manage the environmental risks from your activities.

Typical permit condition or rule 1.1.1

The operator shall manage and operate the activities:

(a)in accordance with a written management system that identifies and minimises risks of pollution, including those arising from operations, maintenance, accidents, incidents, non-conformances, [closure] (*This does not apply to mobile plant, stand-alone water discharge activities or stand-alone groundwater activities.*) and those drawn to the attention of the operator as a result of complaints; and

(b) using sufficient competent persons and resources.

Typical permit condition or rule 1.1.2

Records demonstrating compliance with condition 1.1.1 shall be maintained.

Typical permit condition or rule 1.1.3

Any person having duties that are or may be affected by the matters set out in this permit shall have convenient access to a copy of it kept at or near the place where those duties are carried out.

Management system

This condition requires you to have a written management system, run your activities according to it, and improve it if you are not compliant. The management system must be in place once your site is operational and available to us when we ask to see it.

The content of your management system depends on the risk and complexity of your activities. It must identify the risks to the environment from your activities and explain in detail the measures you will take to prevent or minimise those risks. An effective management system will enable you to manage compliance with your permit and any other legal requirements to protect the environment.

All activities

You, as the site operator, are responsible for writing your management system. You must ensure that everyone on site follows the procedures. Staff and contractors must be aware of the permit requirements, have access to the permit and management system, any relevant standard rules and understand how the site management system works.

When you apply for a permit you confirm that your management system meets our guidance. The appropriate measures in this guidance provide the basic standards we expect you to meet on your site, to show you comply with this condition.

For **bespoke permits** this guidance and your H1 risk assessment provide a set of measures that we will use to assess compliance with your permit. You need a written management system to link your procedures and measures.

For standard rules permits you must use the generic risk assessment and decide what appropriate measures you need and describe them in your management system. We explain more about how to assess the risks from your operations from page 18.

If you are not complying with the control measures in your management system we will take that into account when we assess compliance with your permit. We will look at any non-compliance as a symptom of poor management and we will focus on correcting poor performance through improved management systems and practices. Our regulatory staff may review your management system and appropriate measures on site as part of any compliance work.

Why do I need a management system?

As well as helping you comply with your permit an effective management system can help improve your business. By using your management system you will:

- be more likely to comply with your environmental permit and other environmental legislation
- demonstrate your commitment to protecting the environment
- better protect the environment and human health
- identify, provide and record all staff training
- have a structured programme of maintenance for plant and infrastructure.
- develop more consistent site operations
- be a good neighbour
- manage your site more efficiently
- be more able to develop cost saving practices (resource efficiency, recycling rates, possibility of cheaper insurance, no legal costs).

What happens if I do not have a management system?

If you do not provide an adequate written management system we will take action to ensure compliance with this requirement. Depending on the circumstances we may provide further help and advice, formally require compliance using a notice, or take formal enforcement action. We describe our approach to enforcement in our Enforcement and sanctions position statement on our website see part 7, page 92.

What type of management system should I have?

You can have an in-house management system which you design yourself (or with the help of a consultant) or you can have a system based on a recognised standard or scheme such as ISO 14001 or EMAS. You may choose to have your management system certified or inspected by independent auditors.

All activities

We expect that your management system will be proportionate to your activities. Lower risk, less complex sites and activities may only need a basic management system. For larger or more complex sites and activities, we encourage you to have a comprehensive environmental management system that either meets the requirements, or is equivalent in scope to the international standard, ISO14001, or the European Eco Management and Audit Scheme (EMAS). Larger sites or more complex activities may include:

- large, high risk or highly complex waste operations
- installations (as defined by EPR)
- large water and groundwater discharge activities.

Remember in order for your management system to be effective you and your staff must implement it. There must be evidence in the day-to-day activities taking place on the site that you are using your management system.

In-house management systems

For sites with lower risk of environmental impact or if your organisation does not have the resources to join a formal certified scheme then you can develop your own in-house management system. This can be written by you, the operator, or on your behalf by a consultant. You can use our toolkit to help you write your management system details found in Part 7 page 92.

We are available to discuss your management system approach at pre-application meetings, and we will audit your specific features of your chosen approach during compliance inspections.

External certified environmental management systems (EMS)

When you are thinking about implementing a management system, consider the value of adopting an externally recognised standard or scheme to implement a formal EMS. There are certification and inspection bodies to provide verification that the scheme used at a site meets the relevant standard.

Here we briefly describe some externally recognised standards or schemes. For more information use the website links in Part 7 page 92.

ISO14001 (ISO is the International Organisation for Standardisation) provides an acknowledged worldwide standard.

EMAS (Eco Management and Audit Scheme) was originally a European Standard but is now available to organisations outside Europe.

EMASeasy aims to help small and medium sized enterprises achieve registration for EMAS.

BS8555 is designed for any size of organisation. It enables an organisation to take a phased approach to implementing a management system. It can be used to achieve ISO14001, EMAS, or they can choose to remain at a particular phase that is appropriate to their nature and size. Alternatively, an organisation can choose to remain at a particular phase that is appropriate to their size and environmental risks. It is useful for demonstrating an organisation's commitment to environmental improvement and working towards ISO14001 or EMAS.

There are a number of schemes available in England and Wales to support implementation of BS8555. You can find out on the UKAS website which certification or inspection bodies are accredited to audit each type of EMS standard or scheme, including the level of independence that they provide.

If you adopt an externally recognised management system, it is good practice to use external independent certification bodies to verify your conformance to the requirements of the standard

or scheme. Certification or inspection bodies are commercial organisations that carry out audits of the performance of an organisation against the EMS standard or scheme requirements.

Certification and verification helps to provide independent assurance of the performance of your management system. To demonstrate that your management system passes a high level of scrutiny, we believe that the certification or inspection body you use for verification should be accredited by the United Kingdom Accreditation Service (UKAS), or an equivalent National Accreditation Body (NAB) for certification bodies based outside the UK, for the specific standard or scheme they audit against. This provides additional assurance that verification audits are carried out to recognised standards. We consider that this is best practice (but not mandatory) and recognise this in our operational risk appraisal scheme, Opra. Currently the highest recognition levels are for an EMS certified to ISO 14001 or registered to EMAS, and independently verified by an accredited certification body.

The use of an external certified EMS does not mean that you will automatically comply with all your permit conditions. Check your permit and management system carefully to ensure that all conditions are covered by your system and that it is implemented.

How do I choose the appropriate management system?

The table below lists factors to consider when weighing up whether to have an in house or a certified management system. Your operation may include other things you will also need to consider in which case add these to the table.

Tick in the column of the management system that best represents your situation. You need to think about the relative importance of each factor and may want to apply a weighting if some factors are more important than others. If you are in doubt you can discuss this with us. The combination of these factors will help you decide which type of management system will be best for your site. You can then use this as part of an appropriate measures analysis to justify your chosen approach.

In-House system	Tick	Certified system	Tick
Limited resources		Resources available	
Limited finance		Finance available	
Standard rules operation or simple bespoke operations		Installation or complex bespoke operations	
Low volume water discharge		High volume water discharge	
Simple on site processes		Complex on site processes (for example treatment of hazardous waste)	
Low volumes of materials		High volumes of materials	
No customer/client requirement		Customer/Client requirement	
Total		**Total**	

Producing and maintaining a management system

You need to produce a management system that shows how you will minimise risks of pollution from your activities .You then need to follow and keep it up to date. You must continually assess your management system to monitor the effectiveness of your operations and make

changes to it if it fails or when you can see ways of improving it. This should help you to achieve and maintain compliance with your environmental permit(s).

Your management system must be documented. It can be:

- handwritten (but must be legible)
- produced and saved on a computer
- produced on a computer and printed out.

Some operators have a number of regulated sites. You may want to have an overarching management system that covers all your sites and activities. If so, you must ensure it is relevant to the permitted activities being carried out at each site. For example, you may need to demonstrate additional measures where some sites are nearer sensitive habitats than others, or you are carrying out different types of activities.

The management system may not all be in one document, in which case you should have a signpost document that explains where to find different parts. For example, different procedures such as electrical or mechanical maintenance may be covered in separate documents but will still form part of your overall management system. The overall outcome of the management system will be that the regulated facility is effectively managed, operated and maintained to minimise the risks of pollution.

You may have processes and procedures to deal with accidents / incidents / non-conformances and complaints across your business rather than having many separate systems that deal with individual assets on a site-by-site basis. The overall outcome of the operation of these company-wide systems will be that each relevant activity will be subject to effective management that will identify and minimise risks of pollution arising from accidents / incidents / non-conformances and complaints.

You can write an effective management system by following the Plan Do Check Act (PDCA) cycle. This cycle represents a continual process of review and improvement of performance. For example if you have a non-compliance action plan, by monitoring your compliance scores you will see what the recurring problems on your site are. You can then identify how to improve your operations. You could set a compliance target for the next year to improve your levels of compliance in any area.

The diagram on the next page illustrates the key elements of PDCA to consider for a management system required by an environmental permit.

There are templates and a toolkit to help householders and small and medium sized businesses produce a management system. See Part 7 page 92 for links.

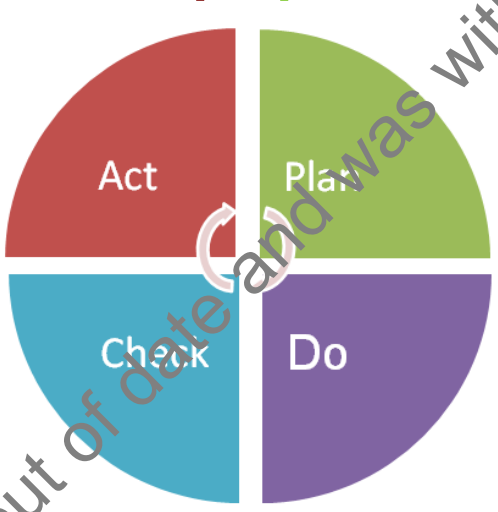
All activities

Review your management system:

- operator regularly reviews to ensure fit for purpose
- any environmental policy implemented and action plans carried out
- update procedures and control measures
- report (site) environmental performance where needed
- consider external certification or verification.

Plan your management to establish your environmental baseline and obligations:

- carry out an environmental review and risk assessment
- identify requirements for compliance with all environmental permits and applicable environmental legislation
- set objectives to maintain and improve environmental performance and compliance action plan
- operator owns management system and promotes to all staff. May include an environmental policy and action plan.



Check your management system to ensure it is being followed:

- control and monitor environmental performance and management system
- monitoring and measurements
- review continual improvements and corrective actions
- carry out internal audits
- ensure compliance with legal requirements
- record your checks.

Do - implement and operate your management system:

- establish procedures and control measures to manage and comply with all permits and other obligations
- communicate requirement to staff, contractors and external parties
- staff and contractors are trained and competent to carry out responsibilities
- establish and work to maintenance schedule
- test accident and emergency plans
- keep accurate and clear records.

All activities

Plan your management system

In order to improve your environmental performance you need to understand the impacts of your activities. Then develop a set of objectives appropriate to your operation. You will need to know if your objectives are being met. For example, targets when used properly can be useful indicators of your performance, but to be effective they need to be SMART.

Specific	Each target should be clearly stated and address one issue
Measurable	It must quantifiable and the results definitive. (e.g. 10% reduction in fuel use)
Achievable	It must be realistic – do not set targets that cannot be met
Relevant	It should be related to the environmental objectives you have defined
Time restricted	There is a clearly defined deadline or end date for delivery

You can revise your targets as part of the review and continual improvement process.

Things to consider at the Plan stage

- Complete a risk assessment to cover as a minimum, sections on site operations, maintenance, accidents, training and records. See risk assessment page 18.
- Identify and evaluate legal requirements.
- How you are meeting any standards or requirements in guidance and codes of practice, quality protocols and assurance schemes, for example bunds for large oil storage tanks need to be able to contain 110% of the maximum capacity of the oil tank.
- Any exemptions you have registered at the site.
- Any effluent discharge consents for the site from the local water company.
- How you are meeting requirements of other regulations that relate to environmental protection for example the hazardous waste regulations.

Outcomes

- A comprehensive understanding of the potential and actual impacts of the permitted activities on the surrounding environment and people's health.
- The correct appropriate measures are selected to manage environmental risks and prevent or minimise their effects so as not to cause pollution.
- If you are following a formal certified EMS you will have relevant documents needed for that such as an environmental policy.
- Action plan/development programme with objectives for improvement.

Implement your management system (Do)

Once you have developed your action plans or development programmes, you need to implement them. You may need to improve infrastructure and equipment. You or any employees may need further training. You need to identify roles and responsibilities in the management system and make sure everyone is clear about them.

A key area in reducing environmental impacts is the use of a Planned Preventative Maintenance (PPM) system instead of a reactive one. This can help improve operational reliability and reduce impacts on the environment. The amount of waste generated by sudden breakdowns is usually greater and takes more of your resources to fix than a PPM programme for the equipment you operate.

In the event of a breakdown, the level of impact on your operation as well as the environment will vary depending on the equipment. You can define the levels of impact and criticality using the Failure Mode Effect Analysis (FMEA) to determine:

1. The type of failures that may occur and the causes and effects of failure.
2. How often failures are likely to occur, over a set period of use (for example mileage or hours run).
3. The effective maintenance options available. For example, manufacturers often provide servicing schedules, but you may change the recommended period based on operational experience.

Things to consider at the Do stage

- Operational control measures, see page 20.
- Staff training and competences, see page 23.
- Staff awareness and access to the permit and management system.
- Documenting the system and keeping records, see page 24.
- Communication of requirements to internal and external parties.

Outcomes

Evidence in day to day activities taking place on site that the management system is being used and followed:

- Control measures and procedures are an integral part of business operation.
- Easy for staff to access, understand and use.
- Staff are trained and competent to carry out procedures and control measures.
- Requirements of the management system are communicated to management, staff and contractors.

Check your management system

Regular monitoring and measuring of your operational activities helps you to evaluate the level of compliance with your permit and relevant legislation. Where there are problems you can immediately consider how to address them. Record all results and any decisions or actions taken because of these results.
Internal audits will allow you to monitor the effectiveness of procedures and operations.

Things to do at Check stage

- internal audits
- independent (second or third party) audits.

Outcomes

- checks are carried out to ensure that the management system is being implemented as intended
- preventative and corrective actions are undertaken to minimise breaches (non-compliances).

Review your management system (Act)

The results of internal audits provide managers and directors with an opportunity to look at how effective the management system is and to consider any actions or changes to improve it.

Regularly review your management system to ensure it is appropriate and being implemented. You must review your management system when:

- there are changes on site, in your activities and/or equipment
- if you are applying for a variation to your permit
- if there is an accident, complaint or breach of your permit.

All activities

Once you have reviewed the outcomes for one period; you can plan the objectives and targets for the next. Once you have established your management system after one full review period, you may decide to use external auditors and to achieve certification to a recognised standard or scheme.

Things to do at Review stage

- Review the content of your management system regularly including any supplementary plans, for example noise or odour plans.
- Keep a record of all changes to your management system and let us know about any major changes.
- Following an accident or permit breach or significant near miss we may review your management system to identify any failings. We may make recommendations for improvements that we will expect you to implement.
- Determine whether your objectives, and any targets, have been met and report on them.
- For more complex activities carry out performance monitoring, measurement and reporting. You may want to use appropriate key performance indicators KPIs for example feedback from staff and stakeholders such as the local community.

Outcomes (evidence)

- The management system is kept up to date.
- The management system is continually improved.
- Where relevant interested parties (for example regulators, local community) are engaged, informed and supportive.

Risk assessments and environmental permits

Bespoke permits require you to submit an assessment of the risks from your site as part of the application. The guidance *H1 Environmental risk assessment* and our risk assessment tool help you with this. For certain water discharge activities we will do this assessment for you.

Standard rules permits require you to look at the generic risk assessment that we have already completed for each type of environmental permit. You can find this on the same web page as the standard rules sets. As no two sites are the same you need to use the generic risk assessment as a guide and consider it in relation to your site and any additional site specific risks to help you decide what appropriate measures you need. You may have to do more than the measures within this guidance if your site or the type of activity requires it. You may need to add to the generic risk assessment to make sure it includes all the activities on your site. Although H1 is aimed at those businesses whose operations do not fit a standard rules permit it provides information useful to anyone conducting a risk assessment.

How do I identify the risks my operation poses?

You can identify many risks simply and quickly. You can use our toolkits and H1 to help you.

An environmental risk is posed by any activity which could harm the environment or human health. Three separate factors must to be in place for that risk to be realised.

1. There has to be a source of pollution or hazard.
2. There has to be a receptor that can be affected by that source of pollution.
3. There has to be a pathway between the source and the receptor.

All activities

This diagram shows the waste oil in the tank as the potentially contaminating source or hazard to the plant and animal receptors in the river. The broken manhole provides the pathway to a surface water drain which discharges to the river. We can represent this in a table form to identify the risks, the harm and the actions needed to reduce the risk. The table below shows one receptor. You need to work through this process for every receptor. In this example you would also need to consider abstractors.

Receptor	Source	Harm	Possible Pathway	Solution	Actions	Is the risk reduced?
River ecosystem	Oil in tank	• Can affect oxygen levels • Poisons mammals and birds	Concrete pad draining to cracked manhole into drain	• Check drainage plan including Manhole/ Drain discharges to river • Provide physical barriers to prevent leaks from the tank escaping and collisions with tank. • Ensure EA is notified of any such leaks so that they can decide if others need to be informed. • Identify a specialist contractor who can clean up spills in river.	• Repair/replace manhole • Construct bund (110% of tank capacity) • Write a maintenance schedule into management system • Action plans detailing what to do and who to inform in the case of accident or emergency	Yes

What you need in your management system

Site plans

Your plan does not have to be highly technical but it does need to represent accurately all the main features of the site and be drawn to scale. Regularly update the plan, for example at least once a year or when processes are changed or work is carried out on site.

Show the following where they are relevant to your activity:

- the activities carried out and any discharge points
- a drainage plan which identifies both surface and foul drains and the final destination of any drain
- the location of any waste activities such as storage areas for skips (full and empty)
- the location of any oil and chemical storage facilities
- important or sensitive local receptors such as neighbours, sensitive wildlife areas, rivers, underlying groundwaters
- potentially contaminated land on your site.

All activities

Operations

You must consider how to avoid or minimise the environmental risks and impact of the normal running of the activities. Normal running includes start-ups, shut downs, and variations in materials or waste received.

Your management system must include a written contingency plan that ensures impacts on the environment are minimised if there are any breakdowns, enforced shutdowns or changes in normal operations, for example because of extreme weather, liquidation or supply chain failure.

You must refer to any codes of practice, British Standards and industry standards in your management system. Where these exist, we expect your management system to include following them and to justify where you do not follow them.

As a minimum, it must include:

- site specific processes, activities or operations
- emissions and discharges
- accidents, incidents and emergencies
- site engineering and infrastructure
- plant and machinery use and maintenance
- a review of your activities against what your permit allows you to do

For waste and installations, it must also include:

- waste acceptance, quantities, treatment and storage procedures
- storage of materials on site
- drainage infrastructure
- transportation and distribution
- how any potential pollution from the above activities could impact on air, water, land and neighbours
- procedures to enable you to apply the waste hierarchy of re-use, recover, recycle, dispose
- your Duty of Care

We address many of these types of issues in our Pollution Prevention Guidance series, such as pollution incident planning and these may prove useful as you review your site activities and risks.

Maintenance

Many pollution incidents reported to us can be traced back to a maintenance failure, so it is very important that where the poor performance of plant or infrastructure (for example impermeable surface, bunds, key mechanical or electrical equipment and pipe work) could cause pollution, you must carry out a programme of Planned Preventative Maintenance (PPM). You must include a plan for this maintenance in your management system. If you choose to use an inspection or maintenance timescale which differs from that recommended by the manufacturer, supplier or installer you must explain the reasoning behind this in your management system.

Accidents and incidents

> The word **accident** in this condition means an accident, incident or event that may result in pollution.

All activities

Accidents can cause significant pollution. You must put in place measures to deal with "*accidents, incidents and non-conformances*" (these include emergencies). Typically this is called an accident management plan and must form an integral part of your management system. Ensure that the accident management plan is communicated to all employees, managers and contractors who work at the site. Test your plan using regular drills or exercises. You may also have business continuity procedures that should be tested.

If a serious pollution occurs that you cannot immediately control, you may have to reduce or stop your activities until satisfactory controls are in place or the pollution stopped.

Accidents, incidents and emergencies can be diverse and require very different responses. You are likely to consider many of these risks as you complete your risk assessment. The pollution prevention guidance note (PPG) 21 *Pollution incident response planning* and *H1 Environmental risk assessment* (annex A or C) can help you identify the risks.

Your accident management plan must identify:

- potential accidents and put in place measures to minimise them happening
- events or equipment failures that could damage the environment, for example fires, vandalism, flooding or other extreme weather events such as drought, heat waves, strong winds, snow or extreme cold
- how likely these events or failures are to happen
- the consequences if they do happen
- the steps needed to minimise them happening
- the steps needed to minimise any impact if they do happen
- how you will record and investigate complaints, pollution incidents or breaches of your permit and the actions taken.

Your accident management plan must include:

- site plan which identifies location of any emergency kits or equipment for fire, spill kits and drain caps
- a of list key contacts and their numbers.

You must also consider any other things that may be important at your site. For example:

- making the emergency services aware of your activities
- consider having appropriate insurance to cover any clean up following an accident, including firewater
- checking whether you are in a Flood Risk Area and if so register with Flood Warning Direct
- making sure you are up to date with our or other organisations' advice about how to deal with extreme weather
- planning drills or exercises to test your accident and emergency procedures and ensure that your employees know what to do
- having a site evacuation plan and specific assembly points for staff off site
- making sure people can access key information off site if there is a problem entering the site in an emergency
- having a site board displayed to clearly identify your site contact numbers in case of emergency (waste and installations must have this, see your activity section).

If an accident or incident causes damage to the environment, or risks doing so, you must:

- immediately do what it says in your accident management plan
- report the accident to us, see Reporting/Notification on page 33
- do whatever is necessary to minimise the environmental consequences
- clean up after the incident or spillage

- record the incident or accident, in a report book or folder
- find out why the accident happened
- consider if your response and actions were adequate
- take any actions needed to stop it happening again
- review and amend your accident management plan as soon as possible.

Investigate malfunction, breakdown or failure of plant and equipment, techniques and near misses, releases to the environment, or impacts on the local amenity. You must be able to:

- detect abnormal operation and investigate the causes
- assess the information and decide what to do
- in the short-term, get back to normal operation
- in the long-term take steps to make sure the problem does not happen again
- where appropriate, make sure that the public would know what to do if a problem arises.

Severe weather may cause unforeseen environmental impacts and may increase the risk of pollution or non-compliance with permit conditions. If you are concerned during or ahead of extreme weather talk to your local officer about what you can do to avoid to prevent or minimise potential impacts. After the event make sure you review what happened in your accident management plan and if problems occurred what you need to do in future to avoid them.

Site security

You must take a risk-based approach to decide the level of security needed on site to prevent unauthorised access. What is appropriate will depend upon the environmental risks posed by the activity itself and the location. You need to be clear about the level of security needed at your site and make a written assessment of your control measures in your management system.

For example, you may need security measures to prevent vandalism that could result in equipment damage or polluting liquids from tanks or drums being released into rivers or onto the ground, or unauthorised deposit of waste at a waste treatment site.

Non-compliance

A non-compliance or non-conformance refers to any activity on a permitted site that does not meet the relevant permit condition or relevant legislation. Regulatory officers will inform you of any non-compliance they observe. Staff or members of the public may inform you about a problem that may need further action.

If you have a non-compliance:

- record it
- investigate to establish the root cause of the problem if needed
- record any action taken to resolve it
- consider whether you need to change any operations on site in response to the review of the non-compliance (part of your continuous improvement process)
- amend the management system to reflect changes
- make sure staff and managers are aware of changes
- tell us about the changes.

For agricultural permitted sites where the Rural Payments Agency or Rural Inspectorate Wales (RIW) undertake compliance assessment a breach of groundwater activity permit may lead to a reduction in the farmer's single farm payment.

Closure

This does not apply to mobile plant, standalone water discharges or standalone groundwater discharges.

It is inevitable that at some point your operation will close, but it is probably the last thing on your mind when you first apply for an environmental permit and start operating. However, this is the time when you can put plans in place that could make closing the site far easier and cheaper. This is because when you apply to surrender a permit, you will be asked to show that the state of contamination of the land when you close your site is no worse than when you began your operations. Find out more about this in the sections on waste, installations and mining waste.

Complaints

You must take complaints you receive seriously and take the necessary actions to investigate the complaint. If a complaint is valid:

- identify the cause
- minimise the impact of the activity causing the problem
- investigate the root cause of the problem
- take steps to ensure the problem is not repeated, this may include changing a piece of equipment or procedure
- record the complaint and what you did to investigate and resolve it
- amend your management system to reflect any changes.

You must have a line of communication between you, your neighbours and any complainants who may be affected by your activities. Providing feedback once the problem has been resolved will help complainants feel they can report problems directly to you as the operator and get them resolved rather than reporting it to us. Following the theme of continual improvement you must reflect the outcome of any investigation in your management system and improved operations.

Sufficient competent persons, resources and training

You must have enough trained and competent staff or an appropriate maintenance contract, to manage and operate your site to ensure you comply with your permit. Any contractors working on your site must also have the skills and knowledge they need. This must be written into your management system. All staff working on permitted activities must be trained on what your management system means. It must be easily available to staff and contractors.

Your management system may contain the following information on staff capability if relevant to your activities and where the relevant records are held:

- evidence you have enough staff to run the site
- list the roles and responsibilities of all your staff
- a list of the skills and training your staff need
- a general training record for each staff member
- evidence staff are trained in aspects that can lead to pollution and the measures to be taken to prevent that pollution
- evidence staff are trained to deal with accidents
- evidence staff are aware of your responsibilities under your permit
- records of staff training for key equipment and plant
- who is qualified and competent to operate machinery and provide them with safe operating instructions for that equipment or activity
- appropriate induction training for site visitors or temporary contractors.

For waste operations this includes technical competence requirements. Find out more about this on page 36.

For small water discharge activities evidence of maintenance contracts with the treatment plant supplier will cover this.

Emissions and monitoring

Emissions can be anything that leaves your site and can pollute the air, land or water or affect the human population or other receptors such as designated habitat sites. Your management system will need to include information about these emissions, the receptors and the appropriate measures to control these emissions. For stand-alone water discharge and point source groundwater activities this means that your management system will need to include information about each of the permitted discharges and how the discharges could affect receptors such as designated habitat sites and downstream water users.

There is more general information about emissions under the emissions conditions on page 26.

The appropriate control measures will be site specific but examples are available in your activities section of this document, the H1 guidance and in the generic risk assessment provided alongside your permit application form, or you can refer to the management systems template for more help.

Except in the case of stand-alone water discharge and point source groundwater activities, if your operation has the potential to be noisy, odorous, dusty or cause pests and is close to sensitive receptors we may require you to complete a specific management plan to address the specific issue, for example an odour management plan, which will then form part of your management system.

If your permit includes monitoring conditions you need to explain your monitoring arrangements in your management system

Records

You must keep records to demonstrate that you are operating and managing the activities in compliance with your management system. Use your management system to explain what records you are going to keep and where they will be held. Then make sure you keep the relevant records up to date.

For example your management system may say you are going to check your site boundary every six months and that you will record this in your site diary. Then your detailed record of those checks will be in your diary.

We expect you to record the changes you make to your management system and the dates they happen, including as a result of relevant notifications to us or following a permit variation.

Access to your permit

Staff and contractors must be aware of the permit requirements, have convenient access to the permit and management system, any relevant standard rules, and understand how the site management system works. It is not always practical to have the permit at the site of the activity but the relevant documents must be readily available to anyone responsible for the operation of the activity. For large organisations this could be at one or more central locations with electronic access.

All activities

Operations

Permitted activities

Typical standard permit condition or rule 2.1

The operator is only authorised to carry out the activities specified in Schedule 1 table S1.1 (the “activities”).

Typical bespoke permit condition or rule 2.3.1

- the activities shall, subject to the conditions of this permit, be operated using the techniques and in the manner described in the documentation specified in Schedule 1 table S1.2 unless otherwise agreed in writing by the Environment Agency.
- If notified by the Environment Agency that the activities are giving rise to pollution, the operator shall submit to the Environment Agency for approval within the period specified, a revision of any plan or other documentation (“plan”) specified in schedule 1, table S1.2 or otherwise required under this permit which identifies and minimises the risks of pollution relevant to that plan , and shall implement the approved revised plan in place of the original from the date of approval, unless otherwise agreed in writing by the Environment Agency.

When you apply for a standard rules permit you confirm that your management system meets the conditions and measures set out in our guidance. This is legally binding and so you must follow these measures you signed up to in your permit application. The activities you are permitted to carry out are listed in table 2.1 of the standard rules set.

Bespoke permits reference the documents, measures and operating techniques you outlined in your application and agreed to follow. The activities you are permitted to carry out are listed in Schedule 1 of your permit.

We may list key appropriate measures in the permit, for example waste operations may contain “all bulking, transfer or treatment of waste shall be carried out inside a building”.

We expect you to operate your site in line with the measures. If you wish to change how you operate you must tell us. We may agree that you can change your operating technique or you may have to apply for a variation. Update your management system to reflect changes in operating techniques.

If a pollution problem arises, we may require you to revise your plans and procedures.

You may carry out other activities on the site if:

- they do not need a permit under any legislation
- they are exempt from the requirement to have a permit
- you have a separate permit issued by the Environment Agency or by another regulator such as the local authority.

Any exemptions or other permits that apply to the site must be referenced in the site management system. We expect you to keep exempt activities separate from permitted activities.

All activities

Emissions and monitoring

Point source emissions to air, water and land

This section applies if you have point source emissions. Also see your activity section. Some activities, for example many small waste activities, may not have point source emissions.

Typical permit condition or rule 3.1.1

There shall be no point source emissions to air, water or land, except from the sources and emission points listed in Schedule x.

The limits given in Schedule x, tables y.y, and z.z. shall not be exceeded.

A point source emission is localised in origin for example:

- exhaust gas from a boiler stack
- waste water from an effluent plant outlet pipe
- the discharge of sewage effluent to surface water or ground/groundwater from a pipe.

The sources and emission points are listed in a table in your permit. An emission point may have one type of emission or a number of emissions from the same point.

You must not make any hazardous or non-hazardous emissions that could result in the direct or indirect release of polluting substances to land and/or groundwater unless they are permitted and meet the requirements of Schedule 22 to the *Environmental Permitting Regulations*.

You must comply with the emission limits listed in your permit. You need to identify all control measures you use to manage emissions from your activities. You must list these measures and contingency plans in your management system or procedures.

Emissions of substances not controlled by emission limits

Typical permit condition or rule 3.2.1

Emissions of substances not controlled by emission limits (excluding odour) shall not cause pollution. The operator shall not be taken to have breached this condition if appropriate measures, including but not limited to, those specified in table y below and in any approved emissions management plan, have been taken to prevent or, where that is not practicable, to minimise, those emissions.

Typical permit condition or rule 3.2.2

The operator shall:

- if notified by the Environment Agency that the activities are giving rise to pollution, submit to the Environment Agency for approval within the period specified, an emissions management plan which identifies and minimises the risks of pollution from emissions of substances not controlled by emission limits;
- Implement the approved emissions management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

For stand-alone water discharge and point source groundwater activities this is limited to the emissions of substances without limits from the permitted discharge. See parts 5 and 6.

All activities

For other activities these may be emissions to air, water or land from your activities from a localised or diffuse source, not controlled by an emission or background limit in your permit. They are sometimes referred to as fugitive emissions of substances in older permits and sector technical guidance.

Emissions may be listed in a table within your permit but no limits set. This condition will also be used to control those emissions.

Such emissions may include dust, fumes, volatile organic compounds, bioaerosols, flies, vermin, mud, litter and substances. They can cause nuisance to neighbours or lead to serious health impacts. Scavenging animals, birds and other pests, including flies, can introduce substances into the environment that may spread disease. Similarly, emissions from waste or other materials stored on site can attract pests.

Leaks to ground or underlying groundwaters can have serious impacts on the potential for sustainable use of the water environment for other purposes for example for use for water abstraction and as support for surface waters and other aquatic ecosystems.

If there is potential for a significant pollution beyond your site boundary or to the receiving surface water or groundwater, you must have a written emissions management plan. This must show what appropriate measures you will use and how you will respond to prevent or minimise the emissions. The easiest way to do this is to follow the risk assessment for emissions not controlled by emission limits in part 1 of H1 Environmental risk assessment and describe how you will manage the risks.

If a serious pollution occurs that you cannot immediately control, you may have to reduce or stop your activities until satisfactory controls are in place or the pollution stopped.

If an emissions management plan has not been incorporated under condition 3.2.1 and we come to the view that the activities are giving rise to pollution, condition 3.2.2 allows us to require the operator to submit an emissions management plan, for our approval and require them to operate in accordance with the approved plan.

Releases from liquids in containers

Typical permit condition or rule 3.2.3

All liquids in containers, whose emission to water or land could cause pollution, shall be provided with secondary containment, unless the operator has used other appropriate measures to prevent or, where that is not practicable, to minimise, leakage and spillage from the primary container.

This condition includes your measures to prevent any leaks or accidental releases from tanks, sumps, bunds and containers. All above-ground tanks containing liquids whose spillage could be harmful to the environment must be bunded.

If secondary containment (bunding) is not practicable or structures are designed to work without secondary containment (such as lagoons and concrete effluent treatment plants) then appropriate measures to prevent or minimise leakage would include:

- regular maintenance and inspections to a written procedure
- ensuring that any leakage is detected for example by monitoring boreholes or sampling adjacent watercourses.

If you have any of the following infrastructure on your site you need to follow the guidance listed below.

All activities

Subsurface structures

- establish and record the routing of all site drains and subsurface pipework
- identify all sub-surface sumps and storage vessels
- engineer systems to minimise leakages from pipes and ensure swift detection if they do occur, particularly where hazardous substances or non-hazardous pollutants (as defined by the Environment Permitting Regulations) are involved
- fit oil separators where appropriate to surface water drainage systems to protect them from contamination by oil
- provide secondary/ tertiary containment and/or leakage detection for sub-surface pipework, sumps and storage vessels.

Sumps (other than those within bunds – see below) must be:

- impermeable and resistant to stored materials
- looked at regularly and any contents removed after checking for contamination
- where not frequently inspected, fitted with a high level probe and alarm
- regularly inspected for their condition (normally visual, but extending to hydraulic testing where structural integrity is in doubt).

Bunds must:

- be impermeable and resistant to the stored materials
- have no outlet (no drains or taps) and drain to a blind collection point
- have pipework routed within bunded areas with no penetration of contained surfaces
- be designed to catch leaks from tanks or fittings
- have a capacity greater than 110 percent of the largest tank or 25 percent of the total tankage, whichever is the larger. When you calculate this do not use the design capacity of the tank or tanks, instead use the maximum physical capacity of the tank or tanks – assuming it is/they are over-filled to the point of spillage
- be looked at regularly and any contents removed after checking for contamination
- be fitted with a high-level probe and an alarm, where not frequently inspected
- have tanker connection points within the bund where possible (otherwise adequate containment should be provided at the connection point)
- be regularly inspected for their condition (normally visual, but extending to hydraulic testing where structural integrity is in doubt).

Make sure all above-ground tanks containing liquids whose spillage could be harmful to the environment are bunded.

Storage areas for intermediate bulk containers (IBCs), drums, bags, and so on, must be designed and operated to minimise the risk of releases to the environment. In particular:

- where spillage of any stored substance could be harmful to the environment, the area needs appropriate kerbing or bund
- provide appropriate storage facilities for substances with special requirements for example, flammable, sensitive to heat or light, and formal arrangements should be in hand to keep separate packages containing incompatible substances (both “pure” and waste). Do not use plastic IBCs to store flammable materials
- locate storage areas away from watercourses, unprotected drainage systems and sensitive boundaries, (for example those with public access) and protect them against vandalism

- consider undercover storage / weatherproof covering where pollution can be significantly reduced by so doing
- storage areas should have appropriate signs and notices and be clearly marked-out, and all containers and packages should be clearly labelled
- state the maximum storage capacity of storage areas and do not exceed this, and specify and adhere to the maximum storage period for containers
- store containers with lids, caps and valves secured and in place - and this also applies to emptied containers
- regularly inspect all stocks of containers, drums and small packages (at least weekly)
- have procedures in place to deal with damaged or leaking containers.

Monitoring

This section applies if you have a monitoring condition. Also see your activity section. Some activities, for example many small waste activities, do not have this condition.

Typical permit condition or rule 3.3.1

The operator shall, unless otherwise agreed in writing by the Environment Agency, undertake monitoring specified in the following tables in Schedule x to this permit:

- point source emissions specified in tables Sxx, Sxx and Sxx
- surface water or groundwater specified in table Sxx
- noise specified in table Sxx
- ambient air monitoring specified in table Sxx
- process monitoring specified in table Sxx
- land specified in table Sxx.

Typical permit condition or rule 3.3.2

The operator shall maintain records of all monitoring required by this permit including records of the taking and analysis of samples, instrument measurements (periodic and continual), calibrations, examinations, tests and surveys and any assessment or evaluation made on the basis of such data.

Typical permit condition or rule 3.3.3

Permanent means of access shall be provided to enable sampling/monitoring to be carried out <in relation to the emission points/at the monitoring points> specified in schedule 3 tables S3.1, S3.2 [,S3.3 etc] unless otherwise agreed in writing by the Environment Agency.

Monitoring may be required if:

- The permit allows ongoing releases to the environment;
- There is a particular risk of release to which we need to be alerted; or
- To check that the effect of the activities on the environment is as predicted.

Tables in the permit specify the point source emissions and monitoring point locations.

Keep records of the monitoring you have done and the maintenance and calibration of all equipment used. Your management system must contain information on the standards or monitoring methods you use, equipment, maintenance requirements and the frequency. As monitoring standards change and improve, we will agree any changes required with you.

All activities

We have a monitoring certification scheme (MCERTS) for product certification of monitoring systems (for example, instruments, analysers and equipment), the competency certification of personnel, the accreditation of laboratories and organisations involved in sampling. You must use MCERTS certified equipment, staff and laboratories where practicable. See our monitoring guidance linked from part 7, page 93.

Where monitoring shows that substances are not emitted in significant quantities, it may be reasonable to reduce the monitoring frequency.

Your permit may contain other monitoring points that are not point sources, for example the monitoring of particulate matter.

For some activities, monitoring may be necessary prior to development, during commissioning, start-up, normal operation, shutting-down and aftercare.

Continuous monitoring and recording (or at least sampling in the case of water) is likely to be required:

- where the potential environmental impact is significant or the concentration of substance varies widely
- where there is an emission limit on a point source emission
- where a substance is abated, continuous monitoring of the substance will normally be required to show the performance of the abatement plant. For example continuous monitoring of dust is needed after a fabric filter, to show the effectiveness of the filter and indicate when maintenance is needed.

Unless we agree otherwise in writing, you must provide permanent means of access to monitoring points. This includes making sure manhole covers can be removed. Use lightweight covers where possible. If you need a heavy duty cover consider what options you have to make monitoring access easier. For example use a sliding cover or provide an accessible monitoring window in the cover.

Environmental monitoring

Environmental monitoring may be required when:

- there are vulnerable receptors
- the emissions are a significant contributor to an environmental quality standard (EQS) that may be at risk
- the emissions (to ground and/or underlying groundwater) are a contributing factor to risk of Water Framework Objectives failures, such as “prevent or limit”
- you are looking for departures from standards based on lack of effect on the environment
- you need to validate modelling work.

Consider whether you need environmental monitoring to assess the effects of emissions to controlled water, groundwater, air or land, or emissions of noise or odour from your site. Consider environmental monitoring for:

- groundwater to characterise quality and flow, taking account of short and long-term variations, using an appropriate level of monitoring up-gradient and down-gradient of the site
- surface water, looking at upstream and downstream quality of the controlled water
- air, including odour
- land contamination, including sampling vegetation, crops and soils
- assessment of health impacts
- noise.

All activities

We may require you to carry out environmental monitoring if there is a risk of pollution from your site or to investigate an incident. Follow the relevant monitoring guidance in your activity specific information.

Where we already carry out monitoring of surface waters or groundwater, operators of water discharge, groundwater activities and mining waste operations generally will not need to carry out ongoing monitoring of these waters.

Information

Records

Typical permit condition or rule 4.1.1
All records required to be made by this permit shall:

- be legible
- be made as soon as reasonably practicable
- if amended, be amended in such a way that the original and any subsequent amendments remain legible, or are capable of retrieval; and
- be retained, unless otherwise agreed in writing by the Environment Agency, for at least 6 years from the date when the records were made.

Records are an essential part of your management system and permit compliance. They must be **clear, legible, accessible and consistent:**

- you can store your records electronically or in paper format
- record times using the 24-hour clock, for example 17:49
- make a record as soon as possible after any event or activity that needs recording.

Your staff must be aware of what records you need to produce, how to make and store them. Any amendments to records need to be made so that the original is still accessible, for the required period of time (minimum six years) and legible if directly amended by hand.

You need to keep records that are related to environmental protection. They do not have to include administrative records themselves, for example a work order or requisition note, but they should be able to tell us that something has been done.

Keeping records for six years makes sure that there will be sufficient information if we have to investigate an environmental incident. The records may also be used when we carry out a formal periodic review of all permits. This may happen once every four to eight years.

Reporting and notification

The following condition does not apply to installations. Instead see page 68.

Typical permit condition or rule 4.2.1

The operator shall send all reports and notifications required by these standards rules to the Environment Agency using the contact details supplied in writing by the Environment Agency.

Typical permit condition or rule 4.3.1

The Environment Agency shall be notified without delay following the detection of:

- any malfunction, breakdown or failure of equipment or techniques, accident or emission of a substance not controlled by an emission limit which has caused, is causing or may cause significant pollution
- the breach of a limit specified in the permit
- any significant adverse environmental effects.

Typical permit condition or rule 4.3.2

Any information provided under condition 4.3.1 shall be confirmed by sending the information listed in Schedule xx to this permit within the time period specified in that schedule.

Without delay means that you must notify us as a priority as soon as is practicable (you may do this by telephone)

May cause means near misses from causing significant pollution and ongoing incidents (arising from malfunction, breakdown etc) which you may be dealing with but which have the potential to cause significant pollution.

If you need to notify us during normal working hours you can contact your regulatory officer or the local Environment Agency office. Alternatively or out of hours use our free 24 hour incident hotline 0800 80 70 60. If you are unsure if you need to notify us or not contact your regulatory officer.

Significant adverse environmental effects include harm to any sensitive receptors and significant impacts on properties. We consider significant pollution to be something that would cause a category 1 or 2 non-compliance as described in our Common Incident Classification System (CICS).

If, during monitoring, you discover any breaches of the limits specified in your permit, we expect you to notify us as soon as the results have passed any laboratory quality assurance checks.

You must keep a record of the incident or accident, investigate it and take the required actions. Keep a record of the information you sent to us until we are satisfied with your response to the incident.

Part 2 - Waste operations

This section covers general measures that are important for operators running relevant waste operations defined in Schedule 9 of the *Environmental Permitting Regulations*. You also need to read part 1. You may need to implement further measures in addition to those in this section such as those that are recognised as industry good practice and are in industry guidance. See part 7 page 94 for links to other guidance. It includes links to guidance mentioned below.

Operators with permits for installations carrying out specified waste management activities must read this section and part 3 - installations.

General management

Typical permit condition or rule 1.1.1

The operator shall manage and operate the activities:

(a) in accordance with a written management system that identifies and minimises risks of pollution, including those arising from operations, maintenance, accidents, incidents, non-conformances, closure and those drawn to the attention of the operator as a result of complaints; and

(b) using sufficient competent persons and resources.

Typical permit condition or rule 1.1.2 on the permit

Records demonstrating compliance with condition 1.1.1 shall be maintained.

Typical permit condition or rule 1.1.3

Any person having duties that are or may be affected by the matters set out in this permit shall have convenient access to a copy of it kept at or near the place where those duties are carried out.

Waste storage

If you store waste pending its disposal or recovery elsewhere, your management system must include:

- storage times and procedures to ensure that these times are not exceeded
- maximum storage capacities for specified storage areas and the facility as a whole and procedures to ensure that these capacities are not exceeded
- maximum storage heights to prevent or minimise the emission of dust, litter and throughput management
- a procedure to identify the specific waste types stored at your facility
- procedures to segregate incompatible wastes for example use of appropriate separation distances and or suitable engineering measures.

Site condition report and closure

Your management system must include information about the condition of the land before you start operations, and how you have protected it during the life of the permit and site closure.

If you apply for a bespoke permit you need to submit a site condition report describing the condition of the land and groundwater with your application. If you apply for a standard rules permit we recommend that you produce a site condition report when you get your permit.

When you come to apply to surrender your permit, you will need to be able to show you have taken the necessary measures to avoid any pollution risk resulting from your activities and the site has been returned to a satisfactory state. Keeping your site condition up to date during the life of your permit will help you demonstrate this.

When you apply to surrender you complete the surrender parts of the sites condition report and submit it to us. This will describe what condition the land and groundwater are in at the time of surrender. If the land and groundwater are not in a satisfactory state, we will not accept your application to surrender your environmental permit.

The section on Site condition records on site conditions, page 49, explains more about what records you need to keep.

Regulatory guidance note 9 Surrender explains more about what we mean by satisfactory state and the legal tests for surrender.

Incidents and non-conformances

You must have a complaints system and do whatever is necessary to prevent or minimise, the causes of pollution unless there are overriding national security reasons for not doing so. Display a notice at or near the site entrance telling the public about the nature of the site and who they can contact for further information or who to notify if they have a concern. It needs to be easily readable from outside the site in daylight hours and must include:

- the permit holder's name (company name at least)
- the operator's name if different (company name at least)
- an emergency contact name and the operator's telephone number
- a statement that the site is permitted by the Environment Agency
- the permit number
- environment Agency national numbers, 03708 506506 and 0800 807060 (incident hotline), or any other number we subsequently notify you about in writing.

Fires are a key issue at waste operation sites and you must ensure you have measures to prevent fires such as fire breaks and maximum storage quantities. Your accident plan must clearly cover what you will do in the event of a fire; PPG 21 can help you. As a minimum we expect:

- identification of any sites/organisations that may need to be informed such as local receptors, highways, utility companies
- liaison with the fire brigade to ensure they are aware of the risk from your site.

Severe weather (for example wind, flooding, drought, snow) can have serious implications for waste operations. If the ability to operate your business or manage your waste can be effected then you must ensure you have a written contingency plan as part of your management system.

Sufficient competent persons

Make sure your staff have clearly defined roles and responsibilities. Write down the skills required for each post and keep records of how each individual in that post has gained those skills and how they keep their skills up to date, for example by receiving refresher training. Where appropriate, keep written instructions for the work they do. We will refer to these records and instructions if we need to investigate an incident.

You can demonstrate competence in various ways:

- academic qualifications for example a relevant degree
- professional qualifications for example membership of an appropriate institution

- vocational qualifications for example National Vocational Qualifications (NVQs)
- external training qualification/certification for example certificate of technical competence
- attendance at external or in-house training courses
- those with approved training to cascade that training to other staff
- mentoring as part of on the job training
- experience (as long as there is evidence that it is kept up to date).

Technical competence schemes

Typical permit condition or rule 1.1.4

The operator shall comply with the requirements of an approved competence scheme.

You must have a technically competent person to direct activities on your site and they must attend the site for a minimum period of time each week. (See site attendance section below.) The technically competent person demonstrates their competence by satisfying one of the accepted industry schemes approved by Defra.

All technically competent people must demonstrate continuing competence by passing a periodic assessment which tests the candidate's understanding of recent developments within the waste industry.

If you already hold a certificate of technical competence, or have previously successfully completed an Environment Agency assessment which is still valid, or have been previously "deemed competent" you will not be expected to get further qualifications. You will need to demonstrate continuing competence by passing a periodic assessment.

All new technically competent candidates have two years in which to pass an assessment. Failure to do so within the deadline will result in loss of technical competence status.

Site attendance guide for technically competent managers

The technically competent manager must be in a position to direct activities on the site. This will be reflected in the operators management system and operational procedures.

There is a minimum site attendance of one hour a week on all operational sites. This includes in-house facilities taking their own waste. A week runs from Sunday at midnight and ends on the following Sunday at midnight.

We consider that a site is operational when it is either accepting or removing waste, or undertaking any process or activity involving waste that should be under the day-to-day control of a technically competent manager.

If the facility is non-operational (zero operational hours) site attendance is not required.

You must keep a record in the site diary or a separate log of weekly operational hours and site attendance. Record start and finish times of operations and arrival and departure times of the technically competent manager. The records must be available for us to inspect.

We apply a maximum cap of 48 hours per week for site attendance for all facility types.

Minimum site attendance standards for technically competent managers are shown in the table below. You must meet these standards if:

- you have been operating for less than six months
- you have been carrying out an activity for less than six months
- you do not have a settled management system i.e. a lack of accredited, written and adhered to procedures

- you have not agreed alternative minimum attendance with us in writing
- your Compliance Rating score is over 16 in any quarter, which shows that activities appear to be running beyond the control of the management.

The Compliance Rating score is calculated by the number and category of non-compliances assessed by our Compliance Classification Scheme. A score of 16 or more in any quarter equates to more than 4 category 3 breaches or a category 2 non-compliance.

When we consider agreeing an alternative standard of attendance with you we will look at the activity authorised and carried out on site, the waste types you handle, and the past compliance record.

Where the minimum site attendance standard is met for a particular facility we will view this as evidence that there is adequate management control unless the compliance record indicates otherwise. If the minimum attendance time is insufficient to ensure compliance, the technically competent manager must bring this to the attention of the operator and record the fact in the site diary.

If you operate two or more separately authorised facilities which share a common boundary, the site attendance requirements are those for the facility with the higher attendance percentage. The appropriate technical competence qualification will be necessary for each type of facility. For example where there is a separately authorised civic amenity site on a landfill site, the attendance requirements of the landfill will satisfy the attendance requirements for both facilities by a technically competent manager holding both the relevant awards.

For landfill sites in post closure phase, where waste input has been completed and the only continuing authorised activities are likely to be the management of surface water and stability, you do not need a technically competent manager to attend the site to demonstrate technical competent management. One technically competent manager can demonstrate technically competent management for any number of closed sites.

Calculating attendance

Add up attendance points for complexity, location and emissions bands then refer to the table on total attendance points to see how what percentage of time the technically competent manager needs to be on site.

Waste operations

Opra attribute bands				
Attribute	**Low**	**Medium**	**High**	**Highest**
Complexity band	A	BC	D	E and double letters
Location band	A	BC	D	E
Emissions band	A	B	C	DE
Attendance points	1	2	3	4

Installations

Opra attribute bands				
Attribute	**Low**	**Medium**	**High**	**Highest**
Complexity band	-	A	BC	DE
Location band	A	BC	D	E
Emissions band	A	B	C	DE
Attendance points	1	2	3	4

Waste operations

If your Opra profile details different waste activities (rather than multiple plant), include a score for each complexity band. For tier 2 permits (this includes standard rules permits), we expect a minimum attendance of 20% unless you agree an alternative with us.

Total attendance points	Attendance
3	5%
4	10%
5	15%
6	20%
7	25%
8	30%
9	35%
10	40%
11	45%
12	50%
Over 12	55%

Avoidance, recovery and disposal of wastes

Typical permit condition or rule 1.4.1

The operator shall take appropriate measures to ensure that:

(a) the waste hierarchy referred to in Article 4 of the Waste Framework Directive is applied to the generation of waste by the activities; and

(b) any waste generated by the activities is treated in accordance with the waste hierarchy referred to in Article 4 of the Waste Framework Directive; and

(c) where disposal is necessary, this is undertaken in a manner which minimises its impact on the environment.

The operator shall review and record at least every four years whether changes to those measures should be made and take any further appropriate measures identified by a review.

You must demonstrate waste avoidance or reduction measures. Where waste is produced you must consider recycling and recovery options rather than automatically choosing the cheapest waste disposal option. Think about the impact on the environment of all the available options and select the option which is best for the environment.

This is the waste hierarchy. Use this when making decisions about what you do with your waste.

You must:

- comprehensively characterise and quantify each waste stream arising from the regulated facility
- use government guidance to decide how each waste stream is to be recycled, recovered or disposed of
- be capable of justifying decisions that deviate from best practice.

If you propose any disposal:

- explain why recycling or recovery is technically and economically impossible
- describe the measures planned to avoid or reduce any impact on the environment.

Waste operations

Operations

Permitted activities

The following condition only applies to mobile plant permits.

Typical permit condition or rule 2.1

Treatment activities under this permit shall not begin at any site until the Environment Agency has agreed a deployment form in writing for that particular site.

All process plant and equipment shall be commissioned, operated and maintained, and shall be fully documented and recorded, in accordance with the agreed deployment form.

Once we have approved the deployment you must comply with your permit condition and the information agreed in your form which includes things like the amount of waste you can use and how long the deployment will last.

If you start a deployment and then want to change what you are doing, for example increase the amount of waste, then you must contact us before you implement the proposed changes. Depending on the magnitude of the change we may need to re-assess your deployment to ensure that potential risks that may result from your new activities are adequately considered and will be controlled during your operations.

Waste acceptance

Typical permit condition or rule 2.3.2
Waste shall only be accepted if:

- it is of a type and quantity listed in Schedule X Table X1, X2 and so on; and
- it conforms to the description in the documentation supplied by the producer and holder.

The following guidance applies for acceptance of low risk non-hazardous waste. If you also accept higher risk waste, including any form of hazardous waste, you must follow and meet the standards in *S5.06 Guidance for the recovery and disposal of hazardous and non-hazardous waste*. This explains waste pre-acceptance, acceptance and storage.

Check wastes when they arrive on your site and accept them only if your permit allows them and if they meet the description given in the waste transfer note.

If you are transferring non-hazardous waste between your own sites and there is no change in ownership, you must keep a record which is of the same standard as a duty of care waste transfer note. For hazardous wastes the notification, consignment, records and returns requirements of the *Hazardous Waste Regulations* must be met for all movements, including internal movements.

The table will use the waste descriptions and codes given in the *List of Waste Regulations*. You must not accept any wastes not listed in your permit. We may restrict permitted wastes by, for example, limiting the quantity received, stored or treated or their composition.

Waste operations

Your procedures for checking the wastes must be written into your management system and include:

- the location where checking will be carried out
- the extent of visual checks and any sampling and analysis required
- quarantining unacceptable waste.

If the waste is not as described your procedures should be proportionate to the environmental risk caused. The whole load may be something different or is mostly what it should be, but contains a small proportion of material you are not permitted to take. You need to check all wastes because such material is a common cause of environmental incidents. For example small amounts of asbestos in skip waste at a non-hazardous waste transfer station.

If you find non-permitted material in a delivery that has already been accepted onto site identify and quarantine this before sending it to an authorised site as soon as practicable. You must be prepared for this situation and investigate the cause. Think about how to stop it happening again. For example contact and work with the producer to prevent reoccurrence or send the material back to the producer.

You must keep records of all waste received at the site, including the quantity, characteristics, List of Waste Code, origin, delivery date and the identity of the producer. Where the waste may give rise to odour also record the date the waste was first produced. You must keep a record of any quarantined materials and what you did with them.

Section 4 of the permit describes how to keep records. See Records, page 49.

Emissions and monitoring

Emissions of substances not controlled by emission limits

Typical permit condition or rule 3.2.1

Emissions of substances not controlled by emission limits (excluding odour) shall not cause pollution. The operator shall not be taken to have breached this condition if appropriate measures, including, but not limited to, those specified in table y below and in any approved emissions management plan, have been taken to prevent or, where that is not practicable, to minimise, those emissions.

Typical permit condition or rule 3.2.2

The operator shall:

- if notified by the Environment Agency that the activities are giving rise to pollution, submit to the Environment Agency for approval within the period specified, an emissions management plan which identifies and minimises the risks of pollution from emissions of substances not controlled by emission limits;
- implement the approved emissions management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

The following sections outline potential types of emissions and identify some appropriate control measures. You need to consider what control measures are necessary and include them in your management system. You may need measures that are not listed here. Part 7 page 94, gives references to more detailed guidance.

You do not have the right to cause pollution due to your activities. See page 9 for the definition of pollution.

Your neighbours have a right to expect that your activities will not detract from their quality of life. They have a right to expect that their environment will be free from emissions caused by your activities on either a continuous basis, frequent intervals or serious one-off incidents. You need to prevent or minimise these, no matter how near or far people or other receptors may be.

You must identify any such emissions from your site and describe them and the control measures in your management system. We expect you to consider the options by balancing the costs and environmental benefits. The measures you decide to use are up to you, but they will have to meet the objective of the condition.

While there may be no problem at the moment, if circumstances change, for example development occurs around your site such that your activities then affect people outside the site, you will have to take action to prevent or minimise those problems.

Emissions to surface water and groundwater

For surfaces on your site:

- make sure that surfaces and containment or drainage facilities are adequate for all operational areas, taking into consideration collection capacities, surface thicknesses, strength/reinforcement, falls, materials of construction, permeability
- ensure there is adequate resistance to chemical attack
- have an inspection and maintenance programme for impervious surfaces and containment facilities.

Waste operations

Unless the risk is negligible, have improvement plans in place where operational areas do not already have:

- an impervious surface
- spill containment kerbs
- sealed construction joints
- connection to a sealed drainage system.

A **sealed drainage system** is a drainage system with impermeable components which does not leak and which will ensure that no liquids will run off a surfaced area other than via the system. Except where they are lawfully discharged, all liquids entering the system should be collected in a sealed sump.

Dust, mud and litter

The following control measures may be appropriate but you may need to consider additional or other controls:

- carry out operations inside buildings
- avoid outdoor or uncovered stockpiles
- where you must use outdoor stockpiles, control them by means of sprays, binders, windbreaks, careful siting in relation to sensitive receptors, controlling the moisture content of the material delivered and orientation of long stockpiles in the direction of the prevailing wind
- design to minimise handling operations
- erect litter fences around the site
- enclose conveyors and minimise drops or use pneumatic or screw conveying
- install filters to vents on silos, building extractors and conveying systems
- surface roadways
- plant grass or trees on open ground where appropriate, hydro-seeding can rapidly establish vegetation on waste tips, slag heaps or other apparently infertile ground
- cover vehicles, skips and vessels
- have rigorous maintenance standards
- minimise points of access from the public highway
- make sure vehicles stay on paved areas
- regularly clean and dampen roadways and vehicle wheels
- use water-filled troughs to slow trucks, wash wheels and keep roadways damp
- clean spillages with vacuum cleaners rather than washing down
- avoid certain activities when there are high winds
- clear litter and mud at the end of each working day, unless it is impractical or unsafe to do so.

Fine particulate and fumes

Controls for fine particulate and fumes, particularly from combustion processes, are given in activity specific guidance where relevant.

Volatile organic compounds (VOCs)

The following control measures may be appropriate but you may need to consider additional or other controls:

- enclose open vessels and fit abatement equipment to vents
- install sealed transfer (vapour balance) systems

- use sub-surface filling via (anti-syphon) filling pipes extended to the bottom of the container
- use floating roof tanks and bladder roof tanks
- treat specific releases by techniques such as adsorption or condensation
- use tank vent systems that minimise breathing losses, for example the use of pressure/vacuum valves, and fit knock-out pots and appropriate abatement equipment where necessary
- inventory management
- reduce leakage from pipework or fluid transport systems;
- use white paint, insulation and active temperature control to reduce the temperature in storage tanks.

Substances introduced into the environment by pests

The following control measures may be appropriate but you may need to consider additional or other controls:

- regular inspections by nominated personnel
- isolation and securing/removal of wastes that are attracting scavengers
- employing professional pest controllers, either directly or by contract
- effective scaring or other deterrent methods
- netting.

Odour

Typical conditions or rules 3.3.1

Emissions from the activities shall be free from odour at levels likely to cause pollution outside the site, as perceived by an authorised officer of the Environment Agency, unless the operator has used appropriate measures, including, but not limited to, those specified in any approved odour management plan, to prevent or where that is not practicable, to minimise, the odour.

Typical conditions or rules 3.3.2

The operator shall:

- if notified by the Environment Agency that the activities are giving rise to pollution outside the site due to odour, submit to the Environment Agency for approval within the period specified, an odour management plan which identifies and minimises the risks of pollution from odour;
- implement the approved odour management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

This condition requires you to take appropriate measures to prevent or minimise odour. The measures required need to be what are reasonable, good practice and balances the costs and benefits to prevent or minimise odour. We expect any standards of industry good practice to be met along with any recommendations in our guidance. If there is an odour problem at your site, and you have already implemented some measures, there may be a case to justify further measures or restriction of the activity, depending on the severity of the problem and the cost. Even if you are following normal standards and guidance but the impact is unreasonable, then

you will have put in place further measures and we will judge with you what is reasonable and to what extent further measures are possible, required or justified.

Activities for which odour is a key issue

The following are activities where odour can frequently be a problem. If you operate one of these you must have an odour management plan unless otherwise agreed, in writing, by the Environment Agency. If you are applying for a bespoke permit you submit the plan with your application. If you hold a standard permit you do not need to submit it. We will look at it during inspections or if an odour problem arises. If your activities are not on the list but you know you have an odour problem you should also have an odour management plan.

- landfilling of biodegradable waste
- household, commercial and industrial waste transfer station (available as standard rules)
- composting in open windrows (available as standard rules)
- composting in vessels (available as standard rules)
- mechanical biological treatment (available as standard rules)
- sewage sludge treatment (available as standard rules)
- clinical waste treatment (available as standard rules)
- animal carcass incineration (available as standard rules)
- pet cemetery (available as standard rules)
- mobile plant for landspreading, the treatment of land for land reclamation, restoration or improvement and landspreading of sewage sludge (available as standard rules)
- anaerobic digestion (available as standard rules)
- mobile plant for the treatment of waste soils and contaminated material, substances or products (available as standard rules).

The mobile plant set of rules does not contain a rule requiring the operator to maintain and implement an odour management plan as odour control would normally be addressed within the agreed deployment form.

Odour management plan

You must have an odour management plan if you activity is in the list ‘activities for which odour is a key issue’. In other cases if there is a significant possibility that odour from your activities may cause offence beyond your site boundary, you should have a written odour management plan. Use this to show what the sources and risk to receptors are, the measures you will employ and how you will respond to prevent or minimise the odour. The guidance H4 Odour management explains more about the plan. Having an odour management plan that sets out a number of measures you will take will not necessarily mean you will comply with this condition. Your obligation is to prevent an odour or use all appropriate measure to prevent an odour from your activities. You may need to update your odour management plan with further measures as necessary to ensure that the condition continues to be met.

There are a number of options available to control odour. We will expect you to balance the costs and environmental benefits. The measures you decide to use will have to meet the objective of the condition.

Appropriate measures to reduce odour problems include:

- managing the receipt, storage and handling of materials, for example by choosing raw materials that are less likely to cause odour problems and cutting the quantities and storage times of biodegradable materials

- avoiding operations that give rise to smells, for example avoiding conditions which encourage anaerobic breakdown and reducing temperatures and exposed surface areas
- enclosing smelly materials and activities in a building or vessels
- engaging with your neighbours and responding to their concerns or complaints
- reducing or stopping your activities that are causing the odour until either the circumstances have changed or other appropriate measures have been put in place to allow the operations to re-commence without causing offence.

These and other measures are described in H4 Odour management.

We may impose the condition 'The emission from point x shall not exceed Y odour units'. This sets a quantitative limit on an odorous emission from a specified source. It does not remove your responsibility for controlling odours from all other sources.

Noise and vibration

Typical permit condition or rule 3.4.1

Emissions from the activities shall be free from noise and vibration at levels likely to cause pollution outside the site, as perceived by an authorised officer of the Environment Agency, unless the operator has used appropriate measures, including, but not limited to, those specified in any approved noise and vibration management plan to prevent or where that is not practicable, to minimise, the noise and vibration;

or

The (rating) level of noise emitted from the site (during normal operations/annual shutdown and maintenance) shall not exceed (X) dB, expressed as an LAeqT, between (hhmm) and (hhmm) Mon to Fri and (X) dB at any other time, as measured or assessed on the (specified boundary/boundaries/location) of the site at (locations x,y,z) on plan reference Y attached to this permit. The locations shall be chosen and the measurements and assessment made according to BS4142:1997.

Typical permit condition or rule 3.4.2

The operator shall:

(a) if notified by the Environment Agency that the activities are giving rise to pollution outside the site due to noise and vibration, submit to the Environment Agency for approval within the period specified, a noise and vibration management plan which identifies and minimises the risks of pollution from noise and vibration;

(b) implement the approved noise and vibration management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

This condition requires you to take appropriate measures to prevent or minimise noise. The measures required need to be what are reasonable, good practice and balances the costs and benefits to prevent or minimise noise. We expect any standards of industry good practice to be met along with any recommendations in our guidance. If there is an noise problem at your site, and you have already implemented some measures, there may be a case to justify further measures or restriction of the activity, depending on the severity of the problem and the cost. Even if you are following normal standards and guidance but the impact is unreasonable, then

you will have put in place further measures and we will judge with you what is reasonable and to what extent further measures are possible, required or justified.
If you are likely to cause any significant noise beyond your site boundary, you should have a written noise management plan. Use this to show what the sources and the risks to receptors are, the measures you will employ and how you will respond to prevent or minimise the noise. The guidance H3 Noise assessment and control and some of the activity-specific guidance notes give more guidance on noise assessment and control and how to draw up a noise management plan.

Having a noise management plan that sets out a number of measures you will take will not necessarily mean you will comply with this condition. Your obligation is to prevent the noise or use all appropriate measure to prevent a noise that amounts to pollution from your activities. You may need to update this plan with further measures to ensure that the condition continues to be met. The situation and your responsibilities for controlling noise are very similar to those for controlling odour (see the previous section).

Appropriate measures to reduce/control noise include:

- monitoring noise levels at different places and times to find where the problem is coming from
- maintaining equipment specifically to reduce noise levels, for example balancing fans and fixing loose covers
- enclosure or abatement, for example acoustic enclosures, silencers, keeping doors and other openings in buildings closed
- timing, for example avoiding noisy work during evenings and weekends
- siting away from sensitive receptors, for example of delivery or vehicle routes or noisy plant
- switching off plant, vehicles and ventilation units when not in use
- reducing or stopping your activities that are causing the noise until either the circumstances have changed or other appropriate measures have been put in place to allow the operations to re-commence without significant noise.

Where we place a numerical limit it applies only at the designated measurement points. It does not remove your responsibility for controlling noise from your activities at all other points outside the site boundary.

Where very low background levels prevail, site noise levels should not be significantly above the background and, if practicable, should be well below.

Sometimes ambient noise increases over time (creeping background). This increases the environmental value of noise abatement measures. Where this has been identified in discussions with us or previously with the local authority, you must consider it when planning noise control techniques to maintain acceptable noise levels.

You may need to carry out noise surveys, measurements, investigations, for example on sound power levels of individual items of plant, or modelling to resolve more difficult problems.

It is sometimes necessary to carry out temporary works, such as alterations or major maintenance programmes, which will cause more noise than normal. Tell us and your neighbours if you intend to do this. Take reasonable steps to minimise the duration and impact of any such works, for example by carrying out the work only between the hours of 09.00 and 17.00 Monday to Friday excluding bank holidays.

Waste operations

Pests

Typical permit condition or rule 3.6.1

The activities shall not give rise to the presence of pests which are likely to cause pollution, hazard or annoyance outside the boundary of the site. The operator shall not be taken to have breached this condition if appropriate measures, including, but not limited to, those specified in any approved pests management plan, have been taken to prevent or where that is not practicable, to minimise the presence of pests on the site.

Typical permit condition or rule 3.6.2

The operator shall:

- if notified by the Environment Agency, submit to the Environment Agency for approval within the period specified, a pests management plan which identifies and minimises risks of pollution from pests;
- implement the pests management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

This condition requires you to take appropriate measures to prevent or minimise pests. The measures required need to be what are reasonable, good practice and balances the costs and benefits to prevent or minimise pests. We expect any standards of industry good practice to be met along with any recommendations in our guidance. If there is pest problem at your site, and you have already implemented some measures, there may be a case to justify further measures or restriction of the activity, depending on the severity of the problem and the cost. Having a pest management plan that sets out a number of measures you will take will not necessarily mean you will comply with this condition. Your obligation is to prevent pests or use all appropriate measure to prevent pests that amount to pollution from your activities. You may need to update this plan with further measures to ensure that the condition continues to be met.

Appropriate measures to reduce pest problems are:

- regular inspections by nominated personnel
- isolation and securing removal of wastes that are attracting scavengers or flies
- employing professional pest controllers, either directly or by contract
- effective scaring or other deterrent methods
- netting.

Information

Records

Typical permit condition or rule 4.1.1

All records required to be made by this permit shall:

- be legible
- be made as soon as reasonably practicable
- if amended, be amended in such a way that the original and any subsequent amendments remain legible, or are capable of retrieval; and
- be retained, unless otherwise agreed in writing by the Environment Agency, for at least 6 years from the date when the records were made.

Waste records

Keep Duty of Care records for two years.

If you manage hazardous waste you need to comply with the site record and return requirements from part 7 of the Hazardous Waste Regulations.

Site condition records

You need to record the state of the site before you begin operations. If the land was contaminated before your permit began, record details of this contamination.

A good management system and good compliance history will help you demonstrate that the correct precautions and actions were taken to minimise or prevent contamination of land.

Keep records about:

- design, construction, inspection, monitoring and maintenance and failure records for pollution prevention
- the appropriate measures you use to protect the land and groundwater, for example impermeable surfacing and leak tight drains
- spills and incidents and what you have done to deal with them
- action you have taken if we identify relevant non-conformances or failures
- off-site impacts such as pollution incidents that caused, or are alleged to have caused, harm or health effects, these enable us to investigate in future any cumulative effects of the activities.

For landfills and waste recovery operations that involve the permanent deposit of waste, your records must focus on either:

- compliance with the waste acceptance procedures at the site for operations that involved the acceptance of waste that was inert or suitably low risk
- or demonstrating that you have complied with relevant closure procedures, and the waste has stabilised so that pollution control measures are no longer necessary and that the deposits of waste will not cause pollution.

The guidance *H5 Site condition report* provides more advice about what records to keep about the condition of the land.

We will look at your records during compliance checks to make sure you are collating them properly. We will consider these records when you apply to surrender your permit.

Waste operations

Reporting and notification

This condition does not apply to standard rules

Typical permit condition 4.3.5

Where the operator proposes to make a change in the nature or functioning, or an extension of the activities, which may have consequences for the environment and the change is not otherwise the subject of an application for approval under the Regulations or this permit:

- the Environment Agency shall be notified at least 14 days before making the change; and
- the notification shall contain a description of the proposed change in operation.

Change in operation

If you want to change your operation, but the change is acceptable under your permit conditions, then you do not have to vary your permit.

When the proposed change in operation falls within the criteria explained below, you must notify us at least 14 days in advance of making the change and the notification must contain a detailed description of the change.

A change in the **nature** of the activities is a change in what is being done (for example a significant change in the wastes accepted at the site but within your permitted wastes as this may cause odour).

A change in the **functioning** of the activities is a change in how the activities are carried out (for example a change from manual sorting to automated sorting as this may cause noise).

An **extension** is a change in size affecting the capacity of the facility to carry out the activities (for example amending a type of treatment).

Once the change is agreed you must review your management system to reflect the changes.

You cannot make changes to your operations under this condition that would require a permit variation for example increasing your permitted area or adding waste types.

Part 3 – Installations

This section covers general measures that are important for operators running Part A (1) activities listed in Schedule 1 of the *Environmental Permitting Regulations*. You also need to read Part 1 of this document and any guidance that relates to your sector including the BAT (best available technique) conclusion document or BAT reference notes (BREF). See Part 7, page 94, for links to other guidance. It includes links to guidance mentioned below.

If you are carrying out a specified waste management activity you also need to read the following sections in Part 2 on waste operations: technical competence and site attendance, waste acceptance.

For any Part B activities you must refer to the Defra guidance for local authorities.

General management

Typical permit condition or rule 1.1.1

The operator shall manage and operate the activities:

a) in accordance with a written management system that identifies and minimises risks of pollution, including those arising from operations, maintenance, accidents, incidents, non-conformances, closure and those drawn to the attention of the operator as a result of complaints; and
b) using sufficient competent persons and resources.

Typical permit condition or rule 1.1.2

Records demonstrating compliance with condition 1.1.1 shall be maintained.

Typical permit condition or rule 1.1.3

Any person having duties that are or may be affected by the matters set out in this permit shall have convenient access to a copy of it kept at or near the place where those duties are carried out.

Site condition report and closure

Your management system must include information about the condition of the land before you start operations, and how you have protected it during the life of the permit and site closure.

If you apply for a bespoke permit you need to submit a site condition report describing the condition of the land and groundwater with your application. If you apply for a standard rules permit we recommend that you produce a site condition report when you get your permit.

When you come to apply to surrender your permit, you will need to be able to show you have taken the necessary measures to avoid any pollution risk resulting from your activities and the site has been returned to a satisfactory state. Keeping your site condition up to date during the life of your permit will help you demonstrate this.

When you apply to surrender you complete the surrender parts of the sites condition report and submit it to us. This will describe what condition the land and groundwater are in at the time of surrender. If the land and groundwater are not in a satisfactory state, we will not accept your application to surrender your environmental permit.

Records on site conditions, page 67, explains more about what records you need to keep.

Regulatory guidance note 9 Surrender explains more about what we mean by satisfactory state and the legal tests for surrender.

Incidents and non-conformances

You must have a complaints system and do whatever is necessary to prevent, or where that is not possible to minimise, the causes unless there are overriding security reasons for not doing so.

Display a notice at or near the site entrance telling the public about the nature of the site and who they can contact for further information or who to notify if they have a concern. It needs to be easily readable from outside the site in daylight hours and must include:

- the permit holder's name (company name at least)
- the operator's name if different (company name at least)
- an emergency contact name and the operator's telephone number
- a statement that the site is permitted by the Environment Agency
- the permit number
- Environment Agency national numbers, 03708 506506 and 0800 807060 (incident hotline), (or any other number we subsequently notify you about in writing).

Sufficient competent persons

Make sure your staff have clearly defined roles and responsibilities. Write down the skills required for each post and keep records of how each individual in that post has gained those skills and how they keep their skills up to date, for example by receiving refresher training. Where appropriate, keep written instructions for the work they do. We will refer to these records and instructions if we need to investigate an incident.
You can demonstrate competence in various ways:

- academic qualifications for example a relevant degree
- professional qualifications for example membership of an appropriate institution
- vocational qualifications for example National Vocational Qualifications (NVQs)
- external training qualification/certification for example certificate of technical competence
- attendance at external or in-house training courses
- those with approved training to cascade that training to other staff
- mentoring as part of "on the job" training
- experience (as long as there is evidence that it is kept up to date).

If you are carrying out a specified waste management activity you also need to read the information about Technical competence schemes in Part 2 page 36.

Energy efficiency

Typical permit condition or rule 1.2.1

The operator shall:

- take appropriate measures to ensure that energy is used efficiently in the activities

or

- take appropriate measures to ensure that energy is recovered with a high level of energy efficiency and energy is used efficiently in the activities (we use the second option for plants that incinerate waste)
- review and record at least every 4 years whether there are suitable opportunities to improve the energy efficiency of the activities; and
- take any further appropriate measures identified by a review.

This section provides basic information. You also need to look at the guidance H2 Energy efficiency and any information on energy efficiency in sector guidance.

You will satisfy the requirements if you meet either:

- the basic energy requirements below and are a participant to a Climate Change Agreement (CCA); or
- the basic energy requirements and energy supply techniques below.

Even where a Climate Change Agreement is in place, you need to consider whether your decisions on energy efficiency may impact on the production of other pollutants as part of your integrated environmental assessment. For example:

- where the choice of fuel impacts upon emissions other than carbon, for example sulphur in fuel;
- where the minimisation of waste by waste-to-energy does not maximise energy efficiency, for example by Combined Heat and Power (CHP);
- where the most energy-intensive abatement leads to the greatest reduction in other emissions.

If you hold an EU Emissions Trading Scheme (EU ETS) permit we will not impose, through your environmental permit, any requirements to reduce CO_2 emissions directly from those activities covered by your EU ETS permit.

Installations

Basic energy requirements

1. Prepare a list/diagram of where the energy is used in your process.
2. Provide the information in Table 1.2.1 below, annually.

Table 1.2.1 – Example breakdown of delivered and primary energy consumption		
Energy Source delivered	Energy Consumption Primary MWh	MWh% of total
Electricity*		
Gas		
Oil		
Other (operator to specify)		
Exported energy	MWh	Source

*Specify source. Multiply delivered energy by 2.4 to obtain primary energy if the electricity is supplied from the national grid. If your electricity is from another source you may be able to justify using a different factor, to reflect the efficiency of generating and supplying the power.

3. Provide the Specific Energy Consumption (SEC) for your main activity or activities based on primary energy consumption for the products or raw material inputs that most closely match the main purpose or production capacity of the installation. For example MWh/tonne of product. Compare this against any benchmarks for your sector.
4. Regularly review your energy use and provide an energy efficiency plan that identifies CO_2 savings of each potential measure.
   We ask for the energy efficiency plan to ensure that you have considered all relevant techniques. Where a CCA is in place we will only enforce implementation of measures 1-3 above. If you are not in a CCA turn this into an action plan.
   An example format for the energy efficiency plan is shown in Table 1.2.2 below.

Table 1.2.2 – Example format for energy efficiency plan				
All applicants		Only applicants without CCA		
Energy efficiency measure	CO_2 savings (tonnes)	Equivalent Annual Cost (EAC) £k	EAC/CO_2 saved £/tonne	Date for implementation

H2 Energy efficiency provides an appraisal methodology. If you use a different methodology you must explain in your application how you have done the appraisal, and provide evidence that you have used appropriate discount rates, asset life and expenditure (£/t) criteria.

5. Use operating, maintenance and housekeeping measures in the following areas, wherever this will have a significant impact on the efficient use of energy at the installation: *H2* describes measures in section 2.7.2 and gives indicative checklists of appropriate measures in Appendix 2.
6. Use energy-efficient building services to deliver the requirements of the Building Services section of *H2*.
7. Monitor energy flows and target areas for reductions.

Energy supply techniques

You need to show that you have considered alternative, more efficient forms of generating electricity and heat where a cost/benefit appraisal shows them to be appropriate. Use the methodology in *H2 Energy efficiency* for your cost/benefit appraisal and refer to the sector guidance notes for indicative energy recovery efficiencies.

Efficient use of raw materials and water

Typical permit condition or rule 1.3.1

The operator shall:

- take appropriate measures to ensure that raw materials and water are used efficiently in the activities
- maintain records of raw materials and water used in the activities
- review and record at least every 4 years whether there are suitable alternative materials that could reduce environmental impact or opportunities to improve the efficiency of raw material and water use; and
- take any further appropriate measures identified by a review.

Thinking about raw materials and process techniques gives you an opportunity to control emissions at source by reducing usage or substituting materials that are less harmful or which can be more readily abated. Consider the impact of the materials you use on the environment and what alternatives you have to reduce this impact. Have procedures for controlling the impurity content of raw materials. Consider whether changes to the process could make savings on raw materials or water use. Review your raw materials and process techniques regularly.

If you think you need to continue using any substance for which there is a less hazardous alternative, you need to justify this, for example on the basis of impact on product quality or costs versus environmental benefits.

Carry out a waste minimisation audit at least every four years. The first audit shall take place within two years of the issue of your permit unless your application has included details of a satisfactory audit carried out in the two years prior to submission of the application. Submit the methodology used for the audit and an action plan for reducing the use of raw materials within two months of completing of the audit.

Carry out a review of water use (a water efficiency audit) at least every four years. The first audit shall take place within two years of the issue of your permit unless your application has included details of a satisfactory audit carried out in the two years prior to submission of the application.

Look at your sector guidance note for more information about how to consider these things.

Avoidance, recovery and disposal of wastes

Typical permit condition or rule 1.4.1
The operator shall take appropriate measures to ensure that:

a) the waste hierarchy referred to in Article 4 of the Waste Framework Directive is applied to the generation of waste by the activities; and
b) any waste generated by the activities is treated in accordance with the waste hierarchy referred to in Article 4 of the Waste Framework Directive; and
c) where disposal is necessary, this is undertaken in a manner which minimises its impact on the environment.

The operator shall review and record at least every four years whether changes to those measures should be made and take any further appropriate measures identified by a review.

You must demonstrate waste avoidance or reduction measures. Where waste is produced you must consider recycling and recovery options rather than automatically choosing the cheapest waste disposal option. It requires you to think about the impact on the environment of all the available options and select the option which is best for the environment.

You must:

- comprehensively characterise and quantify each waste stream arising from the regulated facility
- use government guidance to decide how each waste stream is to be recycled, recovered or disposed of
- be capable of justifying decisions that deviate from best practice.

If you propose any disposal:

- explain why recycling or recovery is technically and economically impossible; and
- describe the measures planned to avoid or reduce any impact on the environment.

Emissions and monitoring

Point source emissions to air, water and land

Typical permit condition or rule 3.1.1

There shall be no point source emissions to air, water or land, except from the sources and emission points listed in Schedule x, tables y.y, and z.z.

The limits given in Schedule x, tables y.y, and z.z. shall not be exceeded

Point source emissions to air

Identify the main chemical constituents of your emissions, including the separate compounds that make up your emissions of volatile organic compounds (VOCs) where practicable.

Assess the dispersion capability of your vent and chimney heights and make an assessment of the fate of the substances emitted to the environment.

Aim to avoid visible emissions even where you already meet particulate benchmarks. However, because plume visibility is extremely dependent on the particle size and reflectivity, the angle of the light, and the sky background, we accept that, even when BAT is employed and very low emissions are being achieved, some plumes may still be visible under particular conditions.

Minimise water vapour plumes wherever practicable. However we do not consider using primary energy to reduce a plume simply because it is visible to be a best available technique. It may be appropriate to use waste or recovered heat to reduce a plume. For example, heat from a gas stream prior to wet scrubbing can be used to re-heat the same exhaust stream after scrubbing by means of a gas-gas heat exchanger. The use of energy for exhaust gas re-heat should be balanced against the benefits gained.

The emissions benchmarks in the relevant activity-specific guidance describe levels that are achievable using best available techniques. If you cannot prevent an emission, you should use the appropriate techniques to ensure the emission limits in your permit are met.

Point source emissions to water

Prevent releases of harmful substances to the aquatic environment where practicable, whether releases are direct or via the sewage treatment works. You must use appropriate measures, as defined in *H1 Risk assessment*, to prevent the input of hazardous substances to groundwater. Similarly, you must limit the input of non-hazardous pollutants to groundwater to ensure that they do not cause pollution of groundwater. Prevent releases to surface water and groundwater completely where this is practicable.

Apply the following general principles in sequence to control emissions to water:

- minimise water use and reuse or recycle wastewater
- minimise the risk of contaminating process water, surface water or groundwater
- wherever possible use closed loop cooling systems and use procedures to ensure blow down is minimised
- if you use any potentially harmful materials prevent them from entering the water circuit.

Consider using filtration/osmosis or other techniques which allow the effluent water to be cleaned for release or, preferably, for return to the process. If you use such a technique consider particularly how you dispose of the concentrated residues. These can often be

returned to furnaces, evaporated, solidified, sent for incineration and so on. Tankering of such residues off the site as waste simply transfers the problem to another place, unless they are sent to a facility with the genuine ability to recycle the materials.
If the pollutants in the waste water are all readily biodegradable or the effluent contains only materials which are naturally occurring in much larger quantities in the receiving water, you may be able to justify not using filtration/osmosis or similar techniques. The emissions benchmarks in the relevant activity guidance describe levels that are achievable using best available techniques (BAT). If you cannot prevent an emission, use the appropriate techniques to ensure the emission limits in your permit are met.

Where effluent is treated off-site at a sewage treatment works the above factors still apply. You must demonstrate that the treatment provided at the sewage treatment works is as good as would be achieved if the emission were treated on-site, based on reduction of load (not concentration) of each substance to the receiving water. The H1 software tool will help you assess this.

Ensure action plans are appropriate to prevent direct discharge of the waste-waters in the event of sewer bypass via storm/emergency overflows or at intermediate sewage pumping stations. Where your discharges are significant, make arrangements with the sewerage undertaker to know when bypass is occurring, and reschedule activities such as cleaning, or even shut down the process entirely if that is necessary to prevent discharge of untreated effluent direct to controlled water.

Put in place a suitable monitoring programme is in place for emissions to sewer.

Ensure that you know the identity of the main chemical constituents of the treated effluent (including the make-up of the chemical oxygen demand (COD) and the presence of any substances of particular concern to the aqueous environment. Assess the fate of these chemicals in the environment.

The concept of BAT requires prevention or minimisation of releases where it is cost effective to do so. In some cases, this may not be sufficient to achieve the water quality standards, meaning that you will need to use techniques which are more environmentally effective than BAT (even if not cost effective) or we may not be able to permit continued operation of the installation.

Emissions of substances not controlled by emission limits

Typical permit condition or rule 3.2.1

Emissions of substances not controlled by emission limits (excluding odour) shall not cause pollution. The operator shall not be taken to have breached this condition if appropriate measures, including, but not limited to, those specified in table y below and in any approved emissions management plan, have been taken to prevent or, where that is not practicable, to minimise, those emissions.

Typical permit condition or rule 3.2.2

The operator shall:

- if notified by the Environment Agency that the activities are giving rise to pollution, submit to the Environment Agency for approval within the period specified, an emissions management plan which identifies and minimises the risks of pollution from emissions of substances not controlled by emission limits;
- implement the approved emissions management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

The following sections outline potential types of emissions and appropriate control measures. You need to consider what control measures are necessary and include them in your management system. You may need measures that are not listed here. See part 7, page 94 for links to other guidance.

You do not have the right to cause pollution due to your activities. See page 9 for the definition of pollution.

Your neighbours have a right to expect that your activities will not detract from their quality of life. They have a right to expect that their environment will be free from emissions caused by your activities either on a continuous basis, frequent intervals or serious one-off incidents. You need to prevent or minimise these, no matter how near or far people or other receptors may be.

You must identify any such emissions from your site and describe them and the control measures in your management system. We expect you to consider the options by balancing the costs and environmental benefits. The measures you decide to use are up to you, but they will have to meet the objective of the condition.

While there may be no problem at the moment, if circumstances change, for example development occurs around your site such that your activities then affect people outside the site, you will have to take action to prevent or minimise those problems.

Emissions to surface water and groundwater

For surfaces on your site:

- make sure that surfaces and containment or drainage facilities are adequate for all operational areas, taking into consideration collection capacities, surface thicknesses, strength/reinforcement, falls, materials of construction, permeability
- ensure there is adequate resistance to chemical attack
- have an inspection and maintenance programme for impervious surfaces and containment facilities.

Installations

Unless the risk is negligible, have improvement plans in place where operational areas do not already have:

- an impervious surface
- spill containment kerbs
- sealed construction joints
- connection to a sealed drainage system.

A **sealed drainage system** is a drainage system with impermeable components which does not leak and which will ensure that no liquids will run off a surfaced area other than via the system. Except where they are lawfully discharged, all liquids entering the system should be collected in a sealed sump.

Fine particulate and fumes

Controls for fine particulate and fumes, particularly from combustion processes, are given in activity specific guidance where relevant.

Volatile organic compounds (VOCs)

The following control measures may be appropriate:

- enclose open vessels and fit abatement equipment to vents
- install sealed transfer (vapour balance) systems
- use sub-surface filling via (anti-syphon) filling pipes extended to the bottom of the container
- use floating roof tanks and bladder roof tanks
- treat specific releases by techniques such as adsorption or condensation
- use tank vent systems that minimise breathing losses, for example the use of pressure/vacuum valves, and fit knock-out pots and appropriate abatement equipment where necessary
- inventory management
- reduce leakage from pipework or fluid transport systems
- use white paint, insulation and active temperature control to reduce the temperature in storage tanks.

Substances introduced into the environment by pests

The following control measures may be appropriate, but you may need to consider additional or other controls:

- regular inspections by nominated personnel
- isolation and securing/removal of materials that are attracting scavengers
- employing professional pest controllers, either directly or by contract
- effective scaring or other deterrent methods.

Odour

Typical conditions or rules 3.3.1

Emissions from the activities shall be free from odour at levels likely to cause pollution outside the site, as perceived by an authorised officer of the Environment Agency, unless the operator has used appropriate measures, including, but not limited to, those specified in any approved odour management plan, to prevent or where that is not practicable, to minimise, the odour.

Typical conditions or rules 3.3.2

The operator shall:

- if notified by the Environment Agency that the activities are giving rise to pollution outside the site due to odour, submit to the Environment Agency for approval within the period specified, an odour management plan which identifies and minimises the risks of pollution from odour;
- implement the approved odour management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

This condition requires you to take appropriate measures to prevent or minimise odour. The measures required need to be what are reasonable, good practice and balances the costs and benefits to prevent or minimise odour. We expect any standards of industry good practice to be met along with any recommendations in our guidance. If there is an odour problem at your site, and you have already implemented some measures, there may be a case to justify further measures or restriction of the activity, depending on the severity of the problem and the cost. Even if you are following normal standards and guidance but the impact is unreasonable, then you will have put in place further measures and we will judge with you what is reasonable and to what extent further measures are possible, required or justified.

Activities for which odour is a key issue

The following are activities where odour can frequently be a problem. If you operate one of these you must have an odour management plan unless otherwise agreed, in writing, by the Environment Agency. If you are applying for a bespoke permit you submit the plan with your application. If you hold a standard permit you do not need to submit it. We will look at it during inspections or if an odour problem arises. If your activities are not on the list but you know you have an odour problem you should also have an odour management plan.

- waste activities listed on page 45.
- manufacture, use or recovery of compounds containing sulphur, ammonia, amines and amides, aromatic compounds, styrene, pyridine and esters
- abattoirs and Renderers
- food production involving any form of cooking or heating and brewing
- refineries
- distilling or heating tar or bitumen.

Odour management plan

You must have an odour management plan if you activity is in the list 'activities for which odour is a key issue'. In other cases if there is a significant possibility that odour from your activities may cause offence beyond your site boundary, you should have a written odour management plan. Use this to show what the sources and risk to receptors are, the measures you will employ and how you will respond to prevent or minimise the odour. The guidance *H4 Odour management* explains more about the plan. Having an odour management plan that sets out a number of measures you will take will not necessarily mean you will comply with this condition. Your obligation is to prevent an odour or use all appropriate measure to prevent an odour from your activities. You may need to update your odour management plan with further measures as necessary to ensure that the condition continues to be met.

There are a number of options available to control odour. We will expect you to balance the costs and environmental benefits. The measures you decide to use will have to meet the objective of the condition.

Appropriate measures to reduce odour problems include:

- managing the receipt, storage and handling of materials, for example by choosing raw materials that are less likely to cause odour problems and cutting the quantities and storage times of biodegradable materials
- avoiding operations that give rise to smells, for example avoiding conditions which encourage anaerobic breakdown and reducing temperatures and exposed surface areas
- enclosing smelly materials and activities in a building or vessels
- engaging with your neighbours and responding to their concerns or complaints
- reducing or stopping your activities that are causing the odour until either the circumstances have changed or other appropriate measures have been put in place to allow the operations to re-commence without causing offence.

These and other measures are described in H4 Odour management.

Noise and vibration

Typical permit condition or rule 3.4.1
Emissions from the activities shall be free from noise and vibration at levels likely to cause pollution outside the site, as perceived by an authorised officer of the Environment Agency, unless the operator has used appropriate measures, including, but not limited to, those specified in any approved noise and vibration management plan to prevent or where that is not practicable, to minimise, the noise and vibration;
or
The (rating) level of noise emitted from the site (during normal operations/annual shutdown and maintenance) shall not exceed (X) dB, expressed as an LAeqT, between (hhmm) and (hhmm) Mon to Fri and (Y) dB at any other time, as measured or assessed on the (specified boundary/boundaries/location) of the site at (locations x,y,z) on plan reference Y attached to this permit. The locations shall be chosen and the measurements and assessment made according to BS4142:1997.

Typical permit condition or rule 3.4.2

The operator shall:

- if notified by the Environment Agency that the activities are giving rise to pollution outside the site due to noise and vibration, submit to the Environment Agency for approval within the period specified, a noise and vibration management plan which identifies and minimises the risks of pollution from noise and vibration;
- implement the approved noise and vibration management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

This condition requires you to take appropriate measures to prevent or minimise noise. The measures required need to be what are reasonable, good practice and balances the costs and benefits to prevent or minimise noise. We expect any standards of industry good practice to be met along with any recommendations in our guidance. If there is an noise problem at your site, and you have already implemented some measures, there may be a case to justify further measures or restriction of the activity, depending on the severity of the problem and the cost. Even if you are following normal standards and guidance but the impact is unreasonable, then you will have put in place further measures and we will judge with you what is reasonable and to what extent further measures are possible, required or justified.

If you are likely to cause any significant noise beyond your site boundary, you should have a written noise management plan. Use this to show what the sources and the risks to receptors are, the measures you will employ and how you will respond to prevent or minimise the noise. The guidance *H3 Noise assessment and control* and some of the activity-specific guidance notes give more guidance on noise assessment and control and how to draw up a noise management plan.

Having a noise management plan that sets out a number of measures you will take will not necessarily mean you will comply with this condition. Your obligation is to prevent or use all appropriate measure to prevent a noise that amounts to pollution from your activities.

You may need to update this plan with further measures to ensure that the condition continues to be met.

Appropriate measures to reduce/control noise include:

- monitoring noise levels at different places and times to find where the problem is coming from
- maintaining equipment specifically to reduce noise levels, for example balancing fans and fixing loose covers
- enclosure or abatement, for example acoustic enclosures, silencers, keeping doors and other openings in buildings closed
- timing, for example avoiding noisy work during evenings and weekends
- siting away from sensitive receptors, for example of delivery or vehicle routes or noisy plant
- switching off plant, vehicles and ventilation units when not in use
- reducing or stopping your activities that are causing the noise until either the circumstances have changed or other appropriate measures have been put in place to allow the operations to re-commence without significant noise.

Where we place a numerical limit, it applies only at the designated measurement points. It does not remove your responsibility for controlling noise from your activities at all other points outside the site boundary.

Where very low background levels prevail, site noise levels should not be significantly above the background and, if practicable, should be well below.

Sometimes ambient noise increases over time (creeping background). This increases the environmental value of noise abatement measures. Where this has been identified in discussions with us or previously with the local authority, you must consider it when planning noise control techniques to maintain acceptable noise levels.

You may need to carry out noise surveys, measurements, investigations, for example on sound power levels of individual items of plant, or modelling to resolve more difficult problems.

It is sometimes necessary to carry out temporary works, such as alterations or major maintenance programmes, which will cause more noise than normal. Tell us and your neighbours if you intend to do this. Take reasonable steps to minimise the duration and impact of any such works, for example by carrying out the work only between the hours of 09.00 and 17.00 Monday to Friday excluding bank holidays.

Monitoring

Typical permit condition or rule 3.5.1 to 3.5.4
The operator shall, unless otherwise agreed in writing by the Environment Agency, undertake monitoring specified in the following tables in Schedule x to this permit:

- Point source emissions specified in tables Sxx, Sxx and Sxx;
- Surface water and groundwater specified in table Sxx;
- Noise specified in table Sxx;
- Ambient air monitoring specified in table Sxx;
- Process monitoring specified in table Sxx;
- Land specified in table Sxx.

Monitoring of emissions to water and sewer

If effluent flow monitoring is included as part of the permit and there is a numeric value such as total daily volume then the MCERTS: self monitoring of effluent flow scheme will apply. This will include all effluent emissions including those to public sewer. An inspection of the flow monitoring arrangements and the associated management system will have to be carried out.

Your permit specifies the parameters to be monitored and the frequency of monitoring. Even if no parameters are specified in your permit, it is good practice to monitor flow rate, pH, temperature, COD, turbidity, and oil content. The frequency of monitoring depends upon the sensitivity of the receiving water and should be proportionate to the scale of your operations.

See our monitoring guidance for more information about analysing substances from your activity.

Monitoring of emissions to air

Your permit will specify the parameters to be monitored and the frequency of monitoring.

Where appropriate, undertake periodic visual and olfactory assessment of releases to ensure that all final releases to air are essentially colourless, free from persistent trailing mist or fume and free from droplets and odour.

Look at our monitoring guidance for more information about what you need to do depending on your activity.

Monitoring of process variables

Some process variables may affect the environment. Identify and monitor these as appropriate. Examples are:

- monitoring raw materials for contaminants where contaminants are likely and there is inadequate supplier information
- plant efficiency where it has an environmental relevance
- energy consumption across the plant and at individual points of use in accordance with the energy plan
- monitoring pressure drop across a bag filter or the temperature of a process where these confirm that the emissions will be under control.

Periodic monitoring

Typical permit condition or rule 3.5.1 to 3.5.4
Periodic monitoring shall be carried out at least once every 5 years for groundwater and 10 years for soil, unless such monitoring is based on a systematic appraisal of the risk of contamination.

This condition is included to meet the requirements of the Industrial Emissions Directive.

This systematic appraisal would need to be revisited periodically to ensure that risks had not changed. However, it is reasonable to assume that if baseline monitoring had not been originally required as part of the baseline/site condition report submitted as part of the application, and all risks remain the same, such on-going monitoring would not be required.

Pests

Typical permit condition or rule 3.6.1

The activities shall not give rise to the presence of pests which are likely to cause pollution, hazard or annoyance outside the boundary of the site. The operator shall not be taken to have breached this condition if appropriate measures, including, but not limited to, those specified in any approved pests management plan, have been taken to prevent or where that is not practicable, to minimise the presence of pests on the site.

Typical permit condition or rule 3.6.2
The operator shall:

- if notified by the Environment Agency, submit to the Environment Agency for approval within the period specified, a pests management plan which identifies and minimises risks of pollution from pests;
- implement the pests management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

This condition requires you to take appropriate measures to prevent or minimise pests. The measures required need to be what are reasonable, good practice and balances the costs and benefits to prevent or minimise pests. We expect any standards of industry good practice to be met along with any recommendations in our guidance. If there is pest problem at your site, and you have already implemented some measures, there may be a case to justify further measures or restriction of the activity, depending on the severity of the problem and the cost.

Installations

Having a pest management plan that sets out a number of measures you will take will not necessarily mean you will comply with this condition. Your obligation is to prevent pests or use all appropriate measure to prevent pests that amount to pollution from your activities. You may need to update this plan with further measures to ensure that the condition continues to be met.

Appropriate measures should to reduce pest problems are:

- regular inspections by nominated personnel
- isolation and securing/removal of wastes that are attracting scavengers or flies
- employing professional pest controllers, either directly or by contract
- effective scaring or other deterrent methods
- netting.

Installations

Information

Records

Typical permit condition or rule 4.1.1

All records required to be made by this permit shall:

- be legible
- be made as soon as reasonably practicable
- if amended, be amended in such a way that the original and any subsequent amendments remain legible, or are capable of retrieval; and
- be retained, unless otherwise agreed in writing by the Environment Agency, for at least 6 years from the date when the records were made or in the case of the following records until permit surrender:
    - off-site environmental effects
- matters which affect the condition of land and groundwater.

Waste records

Keep Duty of Care records for two years.

If you manage hazardous waste you need to comply with the site record and return requirements arising from part 7 of the *Hazardous Waste Regulations*.

Site condition records

You need to record the state of the site before you begin operations. If the land was contaminated before your permit began, record details of this contamination.

A good management system and good compliance history will help you demonstrate that the correct precautions and actions were taken to minimise or prevent contamination of land.

Keep records about:

- design, construction, inspection, monitoring and maintenance and failure records for pollution prevention
- the appropriate measures you use to protect the land and groundwater, for example impermeable surfacing and leak tight drains
- spills and incidents and what you have done to deal with them
- action you have taken if we identify relevant non-conformances or failures
- off site impacts such as pollution incidents that caused, or are alleged to have caused, harm or health effects, these enable us to investigate in future any cumulative effects of the activities.

For landfills and waste recovery operations that involve the permanent deposit of waste, your records must focus on either:

- compliance with the waste acceptance procedures at the site for operations that involved the acceptance of waste that was inert or suitably low risk
- or demonstrating that you have complied with relevant closure procedures, and the waste has stabilised so that pollution control measures are no longer necessary and that the deposits of waste will not cause pollution.

The guidance H5 Site condition report provides more advice about what records to keep about the condition of the land.

Notification

Typical permit condition or rule 4.3.1

(a) In the event that the operation of the activities gives rise to an incident or accident which significantly affects or may significantly affect the environment, the operator must immediately—

- (i) inform the Environment Agency,
- (ii) take the measures necessary to limit the environmental consequences of such an incident or accident, and
- (iii) take the measures necessary to prevent further possible incidents or accidents;

(b) in the event of a breach of any permit condition the operator must immediately—

- (i) inform the Environment Agency, and
- (ii) take the measures necessary to ensure that compliance is restored within the shortest possible time;

(c) in the event of a breach of permit condition which poses an immediate danger to human health or threatens to cause an immediate significant adverse effect on the environment, the operator must immediately suspend the operation of the activities or the relevant part of it until compliance with the permit conditions has been restored.

Typical permit condition or rule 4.3.2

Any information provided under condition 4.3.1 [(a)(i), or 4.3.1 (b)(i) where the information relates to the breach of a limit specified in the permit,] shall be confirmed by sending the information listed in schedule 5 to this permit within the time period specified in that schedule.

The notifications condition for installations is written to meet the requirements of the Industrial Emissions Directive.

Change in operation

This condition does not apply to standard rules.

Typical permit condition or rule 4.3.5

Where the operator proposes to make a change in the nature or functioning, or an extension of the activities, which may have consequences for the environment and the change is not otherwise the subject of an application for approval under the Regulations or this permit:

- the Environment Agency shall be notified at least 14 days before making the change; and
- the notification shall contain a description of the proposed change in operation.

If you want to change your operation, but the change is not contrary to your permit conditions, or would require you to submit an application such as a partial transfer or surrender of your permit, then you do not have to vary your permit.

When the proposed change in operation falls within the criteria set out in the condition, and explained below, you must notify us at least 14 days in advance of making the proposed change and the notification must describe the change.

A change in the **nature** of the activities is a change in what is being done (for example a change in feedstock or by products and so on).

A change in the **functioning** of the activities is a change in how the activities are carried out (for example moving to a batch treatment process from a continuous treatment process).

An **extension** is a change in size affecting the capacity of the facility to carry out the activities (for example removing treatment or storage capacity at the facility within the installation threshold).

Once the change is agreed you must review your management system to reflect the changes.

Part 4 - Mining waste operations

This section covers information relevant to mining waste operations defined in Schedule 20 of the *Environmental Permitting Regulations*. You also need to read Part 1 and refer to the technical guidance *6.14 Mining waste operations*. See part 7, page 92, for links to guidance mentioned below.

General management

Typical permit condition or rule 1.1.1
The operator shall manage and operate the activities:
(a) in accordance with a written management system that identifies and minimises risks of pollution, including those arising from operations, maintenance, accidents, incidents, non-conformances, closure and those drawn to the attention of the operator as a result of complaints; and
(b) using sufficient competent persons and resources.

Typical permit condition or rule 1.1.2

Records demonstrating compliance with condition 1.1.1 shall be maintained

Typical permit condition or rule 1.1.3

Any person having duties that are or may be affected by the matters set out in this permit shall have convenient access to a copy of it kept at or near the place where those duties are carried out.

Waste management plan

If you apply for a bespoke permit for a mining waste operation you must submit a waste management plan as part of an application. If you apply for a standard permit you do not send a plan in with your application but you must have one in place when you begin operations. The technical guidance *6.14 Mining waste* covers what you need to include and provides an example plan.

Emergency plan

If your permit is for a Category A mining waste operation you must have an emergency plan. If you consider your site to be Category A, contact your local regulatory officer before you apply for a permit.

Site condition and closure

Your management system must include information about the condition of the land before you start operations, and how you have protected it during the life of the permit and site closure. When you come to apply to surrender your permit, you will need to be able to show that you have taken the necessary measures to avoid any pollution risk resulting from your activities and that the site has been returned to a satisfactory state. *Regulatory guidance note 9 Surrender* explains more about what we mean by satisfactory state and the legal tests for surrender.

See the section on Records page 77 for more about what records you need to keep.

Mining waste operations

Sufficient competent persons

The following training requirements do not apply to mining waste facilities for inert waste, unpolluted soils, non-hazardous waste generated from the prospecting of mineral resources (except oil and evaporates other than gypsum and anhydrite) or waste resulting from the extraction, treatment and storage of peat and mining waste operations that do not include a facility.

They do apply if your mining waste operation includes a Category A mining waste facility, a mining waste facility for hazardous waste, or non-hazardous non-inert waste. You must demonstrate that you have appropriate technical management in place for the facility and that technical development and training of staff are provided.

Make sure your staff have clearly defined roles and responsibilities. Write down the skills required for each post and keep records of how each individual in that post has gained those skills and how they keep their skills up to date, for example by receiving refresher training. Where appropriate, keep written instructions for the work they do. We will refer to these records and instructions if we need to investigate an incident.

You can demonstrate competence in various ways:

- academic qualifications for example a relevant degree
- professional qualifications for example membership of an appropriate institution
- vocational qualifications for example National Vocational Qualifications (NVQs)
- external training qualification/certification for example certificate of technical competence
- attendance at external or in-house training courses
- those with approved training to cascade that training to other staff
- mentoring as part of on the job training
- experience (as long as there is evidence that it is kept up to date).

Emissions and monitoring

Emissions of substances not controlled by emission limits

Typical permit condition or rule 3.2.1

Emissions of substances not controlled by emission limits (excluding odour) shall not cause pollution. The operator shall not be taken to have breached this condition if appropriate measures, including, but not limited to, those specified in table y below and in any approved emissions management plan, have been taken to prevent or, where that is not practicable, to minimise, those emissions.

Typical permit condition or rule 3.2.2

The operator shall:

- if notified by the Environment Agency that the activities are giving rise to pollution, submit to the Environment Agency for approval within the period specified, an emissions management plan which identifies and minimises the risks of pollution from emissions of substances not controlled by emission limits
- implement the approved emissions management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

The following sections outline potential types of emissions and appropriate control measures. You need to consider what control measures are necessary and include them in your management system. You may need measures that are not listed here. See part 7, page 92 for links to other guidance.

Emissions to surface water and groundwater

For surfaces on your site:

- make sure that surfaces and containment or drainage facilities are adequate for all operational areas, taking into consideration collection capacities, surface thicknesses, strength/reinforcement, falls, materials of construction, permeability
- ensure there is adequate resistance to chemical attack
- have an inspection and maintenance programme for impervious surfaces and containment facilities.

Unless the risk is negligible, have improvement plans in place where operational areas do not already have:

- an impervious surface
- spill containment kerbs
- sealed construction joints
- connection to a sealed drainage system.

A **sealed drainage system** is a drainage system with impermeable components which does not leak and which will ensure that no liquids will run off a surfaced area other than via the system. Except where they are lawfully discharged, all liquids entering the system should be collected in a sealed sump.

Mining waste operations

Dust and mud

The following control measures may be appropriate but you may need to consider additional or other controls:

- carry out operations inside buildings
- avoid outdoor or uncovered stockpiles
- where you must use outdoor stockpiles, control them by means of sprays, binders, windbreaks, careful siting in relation to sensitive receptors, controlling the moisture
- content of material and orientation of long stockpiles in the direction of the prevailing wind
- design to minimise handling operations
- enclose conveyors and minimise drops, or use pneumatic or screw conveying
- install filters to vents on silos, building extractors and conveying systems
- surface roadways
- plant grass or trees on open ground where appropriate, hydro-seeding can rapidly establish vegetation on waste tips, slag heaps or other apparently infertile ground
- cover vehicles, skips and vessels
- have rigorous maintenance standards
- minimise points of access from the public highway
- make sure vehicles stay on paved areas
- regularly clean and dampen roadways and vehicle wheels
- use water-filled troughs to slow trucks, wash wheels and keep roadways damp
- clean spillages with vacuum cleaners rather than washing down
- avoid certain activities when there are high winds
- clear mud on highways at the end of each working day, unless it is impractical or unsafe to do so.

Odour

This condition only applies to bespoke permits for the management of extractive waste which is hazardous or for Category A facilities.

Typical conditions or rules 3.3.1

Emissions from the activities shall be free from odour at levels likely to cause pollution outside the site, as perceived by an authorised officer of the Environment Agency, unless the operator has used appropriate measures, including, but not limited to, those specified in any approved odour management plan, to prevent or where that is not practicable, to minimise the odour.

Typical conditions or rules 3.3.2

The operator shall:

- if notified by the Environment Agency that the activities are giving rise to pollution outside the site due to odour, submit to the Environment Agency for approval within the period specified, an odour management plan which identifies and minimises the risks of pollution from odour;
- implement the approved odour management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

Mining waste operations

This condition requires you to take appropriate measures to prevent or minimise odour. The measures required need to be what are reasonable, good practice and balances the costs and benefits to prevent or minimise odour. We expect any standards of industry good practice to be met along with any recommendations in our guidance. If there is an odour problem at your site, and you have already implemented some measures, there may be a case to justify further measures or restriction of the activity, depending on the severity of the problem and the cost. Even if you are following normal standards and guidance but the impact is unreasonable, then you will have put in place further measures and we will judge with you what is reasonable and to what extent further measures are possible, required or justified.

If there is a significant possibility that odour from your activities may cause offence beyond your site boundary, you should have a written odour management plan. Use this to show what the sources and risk to receptors are, the measures you will employ and how you will respond to prevent or minimise the odour. The guidance H4 *Odour management* explains more about the plan. Having an odour management plan that sets out a number of measures you will take will not necessarily mean you will comply with this condition. Your obligation is to prevent an odour or use all appropriate measures to prevent an odour from your activities. You may need to update this plan with further measures as necessary to ensure that the condition continues to be met.

There are a number of options available to control odour. We will expect you to balance the costs and environmental benefits. The measures you decide to use will have to meet the objective of the condition.

Appropriate measures to reduce odour problems include:

- managing the receipt, storage and handling of materials, for example by choosing raw materials that are less likely to cause odour problems and cutting the quantities and storage times of biodegradable materials
- avoiding operations that give rise to smells, for example avoiding conditions which encourage anaerobic breakdown and reducing temperatures and exposed surface areas
- enclosing smelly materials and activities in a building or vessels
- engaging with your neighbours and responding to their concerns or complaints
- reducing or stopping your activities that are causing the odour until either the circumstances have changed or other appropriate measures have been put in place to allow the operations to re-commence without causing offence.

These and other measures are described in H4 Odour Management.

In exceptional circumstances we may impose the condition ‘The emission from point x shall not exceed Y odour units’. This sets a quantitative limit on an odorous emission from a specified source. It does not remove your responsibility for controlling odours from all other sources.

Mining waste operations

Noise and vibration

Typical permit condition or rule 3.4.1

Emissions from the activities shall be free from noise and vibration at levels likely to cause pollution outside the site, as perceived by an authorised officer of the Environment Agency, unless the operator has used appropriate measures, including, but not limited to, those specified in any approved noise and vibration management plan to prevent or where that is not practicable, to minimise, the noise and vibration;

or

The (rating) level of noise emitted from the site (during normal operations/annual shutdown and maintenance) shall not exceed (X) dB, expressed as an LAeqT, between (hhmm) and (hhmm) Mon to Fri and (Y) dB at any other time, as measured or assessed on the (specified boundary/boundaries/location) of the site at (locations x,y,z) on plan reference Y attached to this permit. The locations shall be chosen and the measurements and assessment made according to BS4142:1997.

Typical permit condition or rule 3.4.2

The operator shall:

(a) if notified by the Environment Agency that the activities are giving rise to pollution outside the site due to noise and vibration, submit to the Environment Agency for approval within the period specified, a noise and vibration management plan which identifies and minimises the risks of pollution from noise and vibration;

(b) implement the approved noise and vibration management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

This condition requires you to take appropriate measures to prevent or minimise noise. The measures required need to be what are reasonable, good practice and balances the costs and benefits to prevent or minimise noise. We expect any standards of industry good practice to be met along with any recommendations in our guidance. If there is an noise problem at your site, and you have already implemented some measures, there may be a case to justify further measures or restriction of the activity, depending on the severity of the problem and the cost. Even if you are following normal standards and guidance but the impact is unreasonable, then you will have put in place further measures and we will judge with you what is reasonable and to what extent further measures are possible, required or justified.

If you are likely to cause any significant noise beyond your site boundary, you should have a written noise management plan. Use this to show what the sources and the risks to receptors are, the measures you will employ and how you will respond to prevent or minimise the noise. The guidance H3 Noise assessment and control and some of the activity-specific guidance notes give more guidance on noise assessment and control and how to draw up a noise management plan.

Having a noise management plan that sets out a number of measures you will take will not necessarily mean you will comply with this condition. Your obligation is to prevent or use all appropriate measure to prevent a noise that amounts to pollution from your activities. You may need to update this plan with further measures to ensure that the condition continues to be met. The situation and your responsibilities for controlling noise are very similar to those for controlling odour (see the previous section).

Appropriate measures to reduce/control noise include:

- monitoring noise levels at different places and times to find where the problem is coming from
- maintaining equipment specifically to reduce noise levels, for example balancing fans and fixing loose covers
- enclosure or abatement – for example acoustic enclosures, silencers, keeping doors and other openings in buildings closed
- timing – for example avoiding noisy work during evenings and weekends
- siting away from sensitive receptors – for example of delivery or vehicle routes or noisy plant
- switching off plant, vehicles and ventilation units when not in use
- reducing or stopping your activities that are causing the noise until either the circumstances have changed or other appropriate measures have been put in place to allow the operations to re-commence without significant noise.

Where we place a numerical limit, it applies only at the designated measurement points. It does not remove your responsibility for controlling noise from your activities at all other points outside the site boundary.

Where very low background levels prevail, site noise levels should not be significantly above the background and, if practicable, should be well below.

Sometimes ambient noise increases over time (creeping background). This increases the environmental value of noise abatement measures. Where this has been identified in discussions with us or previously with the local authority, you must consider it when planning noise control techniques to maintain acceptable noise levels.

You may need to carry out noise surveys, measurements, investigations (for example on sound power levels of individual items of plant) or modelling to resolve more difficult problems.

It is sometimes necessary to carry out temporary works, such as alterations or major maintenance programmes, which will cause more noise than normal. Tell us and your neighbours if you intend to do this. Take reasonable steps to minimise the duration and impact of any such works, for example by carrying out the work only between the hours of 09.00 and 17.00 Monday to Friday excluding bank holidays.

Mining waste operations

Information

Records

Typical permit condition or rule 4.1.1

All records required to be made by this permit shall:

- be legible
- be made as soon as reasonably practicable
- if amended, be amended in such a way that the original and any subsequent amendments remain legible, or are capable of retrieval; and
- be retained, unless otherwise agreed in writing by the Environment Agency, for at least 6 years from the date when the records were made or in the case of the following records until permit surrender:
    - off-site environmental effects
    - matters which affect the condition of land and groundwater.

Waste records

Keep duty of care records for two years.

If you manage hazardous waste you need to comply with the site record and return requirements arising from part 7 of the *Hazardous Waste Regulations.*

Records on site condition

Keep records about the condition of your land. Record the state of the site before you begin operations. If the land was contaminated before your permit began, record details of this contamination. The amount of information you need to provide when you surrender will depend on the risk of your mining waste operation. RGN 9 Surrender explains about this.

Keep records about:

- design, construction, inspection, monitoring and maintenance and failure records for pollution prevention
- the appropriate measures you use to protect the land and groundwater for example impermeable surfacing and leak tight drains
- spills and incidents and what you have done to deal with them
- action you have taken if we identify relevant non-conformances or failures
- off-site impacts such as pollution incidents that caused, or are alleged to have caused, harm or health effects. This enables us to investigate in future any cumulative effects of the activities.

For operations that involve permanent deposits of extractive wastes your records must focus on waste characterisation, which show that the extractive waste was inert or sufficiently low risk; or to demonstrate that emissions are shown to meet the risk-based closure or completion criteria for your operation.

The guidance *H5 Site condition report* provides more advice about what records to keep about the condition of the land.

We will look at your records during compliance checks to make sure you are collating them properly. We will consider these records when you apply to surrender your permit.

Discharge of sewage or trade effluent

Part 5 – Discharge of sewage or trade effluent

This section covers general measures that are important for operators carrying out water discharge activities defined in Schedule 21 and groundwater water activities in Schedule 22 of the *Environmental Permitting Regulations*.

You also need to read Part 1 of this document. You may need to implement further measures in addition to those in this section, such as those that are recognised as industry good practice and are in industry guidance. See part 7, page 94 for links to other guidance. It includes links to guidance mentioned below.

If you are also carrying out a waste operation, for example combustion of biogas at a sewage treatment works, then you also need to read Part 2 of this document.

General management

Typical permit condition or rule 1.1.1

The operator shall manage and operate the activities:

(a) in accordance with a written management system that identifies and minimises risks of pollution, including those arising from operations, maintenance, accidents, incidents, non-conformances and those drawn to the attention of the operator as a result of complaints; and

(b) using sufficient competent persons and resources.

Typical permit condition or rule 1.1.2

Records demonstrating compliance with condition 1.1.1 shall be maintained

The management system condition requires the operator to manage the activities to minimise the risk of pollution. However, if the permit specifies an emission limit or a treatment process, the operator is not required to achieve a higher standard or change the treatment process from that specified. The requirement to have a written management system applies to all types of water discharge activities, but the complexity of the management system depends on the type and size of the regulated activity and environmental impact. Low risk activities such as small sewage treatment works will require a management system of relatively low complexity, such as the template we have produced for these types of discharges and available on our website. More complex water discharge activities such as municipal sewage treatment works require a more complex written management system, but the basic requirement to understand the activity and its impact on the environment and mitigate identified risks is the same.

For a simple combined sewer overflow (CSO) the operator's management system may include the inspection and maintenance of an individual CSO in an inspection and maintenance schedule that covers many CSOs.

We expect that water company management systems will ensure that trade effluent discharges are effectively controlled and where necessary numeric limits are set in trade effluent consents to prevent water company discharges downstream of the trade input causing pollution. Companies will also have an effective trade effluent monitoring programme.

Discharge of sewage or trade effluent

Site security

Any need for security and signage at sites must take account of the:

- environmental risk that could follow a security breach or accident/incident
- practicalities of providing security measures and display notices at sites, and scale of the operation.

For example, many storm water overflow sites are underground and have restricted access in built up urban areas where fencing and signage is impractical. The discharge may also be remote from the main body of the site. Small private rural sewage treatment plants may be within the boundary of houses or businesses, or remote and of low environmental risk and so will not require signage or fencing.

Many large or high impact sites such as municipal sewage works already show the name of the operator, the site and an emergency contact number at the entrance to the site. For existing water discharge and groundwater activities there will be no need for existing signs to be replaced or additional information to be added to them.

Discharge of sewage or trade effluent

Emissions and monitoring

Point source emissions to air, water and land

Typical permit condition or rule 3.1.1

There shall be no point source emissions to air, water or land, except from the sources and emission points listed in Schedule x.

The limits given in Schedule x, tables y.y, and z.z. shall not be exceeded.

Your permit will specify emission limit values and the compliance method that will be used to assess compliance with the limit.

For storm sewage discharges a separate condition and table in Schedule 3 will provide storm sewage discharge settings such as overflow setting, screening arrangements and storm storage requirements.

Emissions of substances not controlled by emission limits

Typical permit condition or rule 3.2.1

Emissions of substances not controlled by emission limits (excluding odour) shall not cause pollution. The operator shall not be taken to have breached this condition if appropriate measures, including, but not limited to, those specified in table y below and in any approved emissions management plan, have been taken to prevent or, where that is not practicable, to minimise, those emissions.

Typical permit condition or rule 3.2.2

The operator shall:

- if notified by the Environment Agency that the activities are giving rise to pollution, submit to the Environment Agency for approval within the period specified, an emissions management plan which identifies and minimises the risks of pollution from emissions of substances not controlled by emission limits
- implement the approved emissions management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

Substances within the permitted discharge that do not have specific emission limits are considered as emissions of substances not controlled by emission limits.

If there are substances in your permitted discharge that could result in a significant environmental impact, as described in and assessed using H1 Environmental risk assessment annex (e) surface water discharges (complex), we will specify emission limits, unless we agree that they can be adequately controlled by using the emissions of substances not controlled by emission limits condition.

Similarly, specific emission limits and / or the above conditions will apply to groundwater activities if your discharge could result in the input into groundwater of hazardous substances or non-hazardous pollutants as described in H1 annex (j).

Discharge of sewage or trade effluent

The operator will not have breached this condition if they have caused pollution by substances without emission limits where they have taken appropriate measures. See page 9 for the definition of pollution.

For water discharge activities, we may choose not to set specific emission limits for some substances from the permitted discharge. Examples include:

- polymer dosing is used to enhance a treatment process and we do not set a limit for the polymer
- fish farm with an emissions management plan covering the use of prophylactic chemicals
- where a continuous discharge is liable to contain a substance but at levels which do not require a numeric limit when we apply our hazardous pollutants tests of significance.
- storm sewage discharges where the impact of the discharge is controlled by overflow settings such as pass forward flow, screen arrangements and other requirements such as storage
- emergency overflows at sewage pumping stations where the impact of the discharge is minimised by a management system and mitigation measures to deal with electrical or mechanical failure
- small sewage treatment works where effluent quality is wholly controlled by descriptive conditions.

We expect operators to consider appropriate measures on the basis of balancing costs and environmental benefits, but they will still have to meet the objective of the condition. The appropriate measures defence means that a pollution caused by the permitted discharge may not constitute a breach of the condition, for example where it is not reasonable to expect a fully competent operator to manage the emission of the substance, though this will depend on the measures used by the operator to mitigate impact.

We will not require an emissions management plan to be submitted to support applications for new water discharge activity or point source groundwater activity permits or applications to vary existing ones, except in exceptional circumstances.

Emissions management plans are not required if your discharge causes pollution by substances without emission limits unless we confirm to you in writing that we require you to provide one by a specified date.

Groundwater activities

Typical permit condition or rule 3.X

Appropriate measures shall be taken to prevent the input of hazardous substances to groundwater by avoiding the entry of those substances into groundwater and by avoiding any significant increase in their concentration in groundwater.

The Groundwater Daughter Directive (2006/118/EC) requires “all necessary measures” to prevent and limit the input to groundwater of hazardous substances and non-hazardous pollutants. *H1 risk assessment annex (j)* describes this in detail. It considers the extent to which measures also need to be reasonable. Provided this guidance is followed, this will satisfy the “appropriate measures” required by the above condition.

Discharge of sewage or trade effluent

Monitoring

Typical permit condition or rule 3.3.1 to 3.3.4

The operator shall, unless otherwise agreed in writing by the Environment Agency, undertake monitoring specified in the following tables in Schedule x to this permit:

- point source emissions specified in tables Sxx, Sxx and Sxx
- surface water or groundwater specified in table Sxx
- noise specified in table Sxx
- ambient air monitoring specified in table Sxx
- process monitoring specified in table Sxx
- land specified in table Sxx.

The operator shall maintain records of all monitoring required by this permit including records of the taking and analysis of samples, instrument measurements (periodic and continual), calibrations, examinations, tests and surveys and any assessment or evaluation made on the basis of such data.

Your permit will specify what, if anything, you will need to monitor and how often.

Unless operators have been required to monitor their own discharges in the permit, we will retain the responsibility for monitoring them.

We have the responsibility for monitoring surface water and groundwater quality, however in some exceptional circumstances it may still be necessary for an operator to carry out some surface water or groundwater environmental impact monitoring.

If you operate a groundwater activity and your permit requires you to install monitoring boreholes these must be completed in a manner that prevents contamination from the surface and as far as practicable made secure from interference or accidental damage. You must restore or replace any monitoring borehole that becomes inaccessible at the surface or blocked or ceases to function.

Information

Reporting and notification

Typical permit condition or rule 4.3 1

The Environment Agency shall be notified without delay following the detection of:

- any malfunction, breakdown or failure of equipment or techniques, accident, or emission of a substance not controlled by an emission limit which has caused, is causing or may cause significant pollution
- the breach of a limit specified in the permit
- any significant adverse environmental effects.

Typical permit condition or rule 4.3 2

Any information provided under condition 4.3.1 shall be confirmed by sending the information listed in Schedule xx to this permit within the time period specified in that schedule.

For discharges subject to ultra violet disinfection, flow measurement, operator self monitoring or Urban Waste Water Treatment Directive (UWWTD) self monitoring we have specified how notifications of when limits are exceeded and of failures must be made to us and how soon. See technical guidance for water discharge activities referred to in part 7, page 92.

This includes all discharges from storm sewage overflows caused by a blockage or other equipment failure, but not in the case of the permitted operation of a storm overflow caused by wet weather.

You must notify us in the event of a significant pollution incident from a regulated site as soon as reasonably practicable. This will normally be within 24 hours of the operator becoming aware of the incident.

You can notify us by calling our incident hotline and/or by sending us a copy of the notification form provided in Schedule 5 of your permit or your own similar version. You may choose to agree specific notification arrangements in writing with us.

In the event of an equipment failure or malfunction which does not result in a release to the environment we do not normally expect to be notified unless the impact on the receiving water could have been severe, or the future operation of the facility is compromised and there is a significantly increased risk of a severe impact.

Discharge of sewage or trade effluent

Change in operation

Typical permit condition (does not apply to standard rules) 4.3.5

Where the operator proposes to make a change in the nature or functioning, or an extension of the activities, which may have consequences for the environment and the change is not otherwise the subject of an application for approval under the Regulations or this permit:

- The Environment Agency shall be notified at least 14 days before making the change, and
- The notification shall contain a description of the proposed change in operation.

If you want to make a material change to your operation and the change will have a significant adverse impact on the receiving water body, but the change is not contrary to your permit conditions, then you do not have to vary your permit.

If the proposed change in operation falls within the criteria set out in the condition, and explained below, you must notify us at least 14 days in advance of making the proposed change and the notification must contain a description of the change.

A change in the **nature** of the activities is a change in what is being done, for example a new trade effluent input of a hazardous pollutant into the sewerage network upstream of a water discharge activity.

A change in the **functioning** of the activities is a change in how the activities are carried out, for example moving to a batch treatment process from a continuous treatment process.

An **extension** is a change in size affecting the capacity of the facility to carry out the activities (for example removing treatment or storage capacity at the facility).

Once the change is agreed you must review your management system to reflect the changes.

Part 6 - Groundwater discharges (land spreading activities)

This section covers general measures that are important for operators carrying out groundwater activities involving permitted discharges containing hazardous substances as defined in Schedule 22 of the *Environmental Permitting Regulations*, such as the land spreading waste sheep dip, other pesticides and pesticides washings. It also applies to land spreading activities for non-hazardous pollutants, such as some biocides / disinfectants, etc. You also need to read Part 1 of this document.

General management

Typical permit condition or rule 1.1.1

The operator shall manage and operate the activities:

(a) in accordance with a written management system that identifies and minimises risks of pollution, including those arising from operations, maintenance, accidents, incidents, non-conformances and those drawn to the attention of the operator as a result of complaints; and

(b) using sufficient competent persons and resources.

Typical permit condition or rule 1.1.2

Records demonstrating compliance with condition 1.1.1 shall be maintained.

Typical permit condition or rule 1.1.3

Any person having duties that are or may be affected by the matters set out in this permit shall have convenient access to a copy of it kept at or near the place where those duties are carried out.

We encourage you to follow the good practice guidelines and advice that are contained in the groundwater protection codes of practice. Following such guidance and adopting good practice will help you prevent pollution on your farm and ultimately save you money. See part 7 for the list of groundwater documents.

To comply with your permit you must keep good records so we know what you are discharging, how much and where. We provide simple management system templates you can use to help you keep good records. There is more information about what records to keep in the following sections. See the horizontal guidance section in part 7 for a link to the templates.

Groundwater activities – waste sheep dip and other pesticides

Operations

Typical permit condition 2.3.2

The discharge shall be made by application onto an area of land (optional <with an established vegetation cover>) of minimal wildlife value. The area of land shall not include hedgerows, woodlands or wildflower meadows, or land that is bare as part of a crop rotation. (Optional <The spreading shall be conducted in strips across the discharge area such that there are strips at least ## metres (for example 2 metres) wide between the strips on which the discharge has taken place.)

Typical permit condition 2.3.3

No discharge shall take place within:

(a) 10 metres of the nearest watercourse (which includes ditches and open land drains which may run dry for part of the year) <(optional) or 30 metres <or other distance> of a river designated as a European Site or a Site of Special Scientific Interest (SSSI)>
(b) 50 metres of any well, spring or borehole, irrespective of its current use
(a) (c) 500 metres <or other distance> of any well, spring or borehole where the water is intended for human consumption
(c) (optional) 25 metres of an identified swallow hole.

Typical permit condition 2.3.4

No discharge shall be made within 2 metres <or other distance> of any field boundary or footpath.

Typical permit condition 2.3.5

No discharge shall take place on land which:

(a) is under drained <(optional) has been under drained or mole drained within 12 months> prior to any discharge operation, or is cracked down to the drain or any backfill
(b) has a slope greater than 11 degrees (approximately 1 in 5)
(c) is frozen hard or snow covered
(d) is liable to flooding
(e) is severely compacted or waterlogged.

Typical permit condition or rule 2.3.6

Discharge equipment and / or methods shall be designed and operated such that the requirements of Conditions 2.3.7 and 2.3.11 (or 2.3.10 for pesticide washings) are met.

Groundwater is vulnerable to contamination and very difficult to clean up (remediate) if it occurs. Therefore it is important that specified distances are maintained from other water features such as abstraction wells, springs and boreholes. You must adhere to the dilution rates and application rates and employ appropriate methods of disposal so that the soil is not overloaded either chemically or hydraulically.

Groundwater activities – waste sheep dip and other pesticides

Volume

Typical permit condition or rule 2.3.7

The maximum volume of used / waste sheep dip (or working strength pesticide solution) before any dilution to assist safe spreading, shall not exceed xx cubic metres per day and xx cubic metres per annum discharged to the land identified in Schedule 7.

The determination of your permit will have been based partially on the quantity of waste product which you wish to discharge / dispose. Therefore it is a condition of your permit not to discharge more waste substance than is stated.

Discharge period

Typical permit condition or rule 2.3.8

The discharge of used sheep dip (or pesticide washings) shall **only** be carried out **between** the dates of AA BB and XX YY each year inclusive.

Typically a permit is issued for use all year but in some situations it is necessary to limit the discharge period for environmental reasons, for example, to avoid a particular nesting time.

Typical permit condition or rule (waste pesticide washings only) 2.3.9

Washing of spray equipment and vehicles after use shall take place in an area selected for the purpose, which can not drain into drains, ditches and surface watercourses;

Contaminated wash water should be stored and re-used later as make-up water for a further batch of pesticide spray solution;

Where re-use is impractical, pesticide washings should be applied to the treated crop if this is within the terms of the product approval. The maximum dose must not be exceeded;

Where application to the treated crop is either not practicable or not possible, discharge shall be to an area of land specified in Schedule 7 and shall comply with the Conditions set out in this Permit.

Following a pesticide application to crops you can, in some situations including those identified above, minimise or eliminate waste pesticide washings. This will reduce your waste disposal problems and save you money. However, in other situations you may not always be able to avoid having dilute pesticide left over at the end of the treatment. You must dispose of all dilute pesticide waste (including any leftover pesticides and all sprayer washings) safely and legally to protect humans, wildlife and the environment, especially groundwater and surface water.

Typical permit condition or rule (used sheep dip disposal only) 2.3.9

The discharge of used / waste sheep dip shall not be made to land on which crops are currently being grown for human consumption

Groundwater activities – waste sheep dip and other pesticides

Do not discharge waste sheep dip onto land that is being used to grow crops for human consumption.

Typical permit condition or rule (used sheep dip disposal only) 2.3.10

The discharge to the land identified in Schedule 7 shall not be undertaken more frequently than once per year

or

The discharge to the same individual area of land within the overall disposal site identified in Schedule 7 shall not be undertaken more frequently than once per year. A maximum of xx discharges may be made per year, but the area of land used must be rotated within the overall disposal site. The site plan identified in Schedule 7 shall clearly show sub-divisions highlighting individual areas for each discharge.

The Landfill Directive prohibits the disposal of liquid waste to landfill. An environmental permit can be used to regulate the discharge or disposal of waste sheep dip providing that the manner in which the discharge is carried out does not bring the activity within the remit of Landfill Directive. Applying these principles the basic requirements are that the total area of land identified in your permit is authorised for use not more than once a year; or any individual plots within this area are used no more than once per year. You must keep a record of such discharges to show you are complying with this requirement.

Application rate

Typical permit condition or rule (for use when discharge is of working strength sheep dip) 2.3.11

The maximum daily application rate of used / waste working strength sheep dip shall not exceed xx cubic metres spread evenly on a minimum of xx hectares of the land identified in Schedule 7.

Typical permit condition or rule (for use when dip is diluted before discharge) 2.3.11

The maximum daily application rate of used / waste working strength sheep dip further diluted in the ratio of 1 part(s) dip to 3 parts slurry or water shall not exceed AAA cubic metres spread evenly on a minimum of BBB hectares of the land identified in Schedule 7.

Typical permit condition or rule (for use when waste pesticides are diluted before discharge) 2.3.10

The maximum daily application rate of working strength pesticide further diluted with slurry or shall not exceed xx cubic metres spread evenly on a minimum of xx hectares of the land identified in Schedule 7.

Groundwater activities – waste sheep dip and other pesticides

Working strength used/waste sheep dip must not be spread at rates greater than 5m^3/ha. Although you may have a reliable method of spreading at this rate, in many cases, a vacuum tanker will be used. Most vacuum tankers have a fixed application rate of approximately 20m^3/ha. This is four times higher than that proposed for safe spreading. Therefore the dip must be diluted with at least three parts slurry or water in order to maintain the recommended discharge rate.

For pesticide washings there is potentially a far wider range of substances and concentrations involved than for sheep dip. The Code of good agricultural practice - protecting our water, soil and air (Defra or Welsh Government version) allows for various spreading rates. Therefore, for pesticide washings **only,** higher spreading rates (that is, above 30 m^3/ha/day) are potentially acceptable, but would be subject to more rigorous and detailed site specific assessment.

It is government policy to keep pesticide use to the lowest possible level while making sure that pests, diseases and weeds are effectively controlled in a way which protects the health of people, plants or creatures you do not intend to treat and the environment. Using pesticides when you do not need to is not just a waste of money, it can also contribute to pests building up a resistance to products which then become less effective in the future.

Typical permit condition or rule (waste pesticides washings only) 2.3.12

The operator of the spray equipment shall take appropriate measures to eliminate or minimise the amount of working strength pesticide solution requiring discharge.

Always:

- use a pesticide in a carefully planned way
- use the correct pesticide at the right time and in the right way
- know the principles of using pesticides over the long term; and consider the long-term implications whenever you use a pesticide.

Emissions and monitoring

Emissions of substances not controlled by emission limits

Typical permit condition or rule 3.2.4

Appropriate measures shall be taken to prevent the input of hazardous substances to groundwater by avoiding the entry of those substances into groundwater and by avoiding any significant increase in their concentration in groundwater.

The Groundwater Daughter Directive (2006/118/EC) requires “all necessary measures” to prevent and limit the input to groundwater of hazardous substances and non-hazardous pollutants. This is described in detail in *H1 risk assessment annex (j)* which considers the extent to which measures also need to be reasonable. Provided this guidance is followed, this will satisfy the “appropriate measures” required by the above condition.

Groundwater activities-waste sheep dip and other pesticides

Information

Records

Typical permit condition or rule 4.1.3

Records for discharges of waste sheep dip (or waste pesticides) shall include :

- daily volumes of undiluted waste sheep dip discharged (or the estimated volumes of working strength pesticide solution discharged)
- rates of discharge
- location and area of discharge
- nature of used dip (marketing authorisation name will suffice); (or the pesticides present in any discharge (brand names will suffice)
- any materials added to dilute or treat the waste sheep dip, including water or slurry
- for multiple discharges (sheep dip only), clear records demonstrating compliance with only one permitted discharge per designated area of land per year shall be kept.

Accurate record keeping is a condition of your permit and is fundamental in demonstrating compliance. You must make sure records are available for inspection by us or the Rural Payments Agency where applicable. The objective of this condition is to quantify the rate of discharge and the quality of the discharge as well as indicating that the conditions of the permit are being met.

Change in operation

Typical permit condition (does not apply to standard rules) 4.3.5

Where the operator proposes to make a change in the nature or functioning, or an extension of the activities, which may have consequences for the environment and the change is not otherwise the subject of an application for approval under the Regulations or this permit:

- The Environment Agency shall be notified at least 14 days before making the change; and
- The notification shall contain a description of the proposed change in operation.

If you want to change your operation, but the change is not contrary to your permit conditions, then you do not have to vary your permit.

When the proposed change in operation falls within the criteria set out in the condition, and explained below, you must notify us at least 14 days in advance of making the proposed change and the notification must contain a description of the change.

A change in the **nature** of the activities is a change in what is being done, for example a change in the brand of sheep dip.

A change in the **functioning** of the activities is a change in how the activities are carried out, for example using a mobile dipping contractor rather than a static dip or vice versa.

An **extension** is a change in size affecting the capacity of the facility to carry out the activities for example removing treatment or storage capacity at the facility.

Once the change is agreed you must review your management system to reflect the changes.

Part 7 – Where to find more information

Our website www.environment-agency.gov.uk provides:

- cross cutting and industry or sector technical guidance;
- information about how to apply for permits and how we charge for them;
- information about pollution prevention;
- guidance on monitoring techniques;
- regulatory guidance which explains legal interpretations of aspects of the Environmental Permitting Regulations for example the meaning of operator.

The Environmental permitting home page summarises what is available.

The 'What's new' page http://www.environment-agency.gov.uk/business/topics/permitting/default.aspx highlights when we publish new or updated documents and changes to the Regulations.

We have listed the titles of the main documents we provide below. If you are not sure what you need to look at ask your local site officer. If you do not have internet access you can phone us on 03708 506506 to get copies of the documents you need or speak to you local site officer.

For information on how to apply for permits and pre-application discussion see http://www.environment-agency.gov.uk/business/topics/permitting/32318.aspx

For information about enforcement see

http://www.environment-agency.gov.uk/business/regulation/31851.aspx

Environmental management systems guidance

Our website: including toolkits: http://www.environment-agency.gov.uk/business/144678.aspx

- Find details at ISO 14000 - Environmental management - ISO
- Details can be found at http://www.iema.net/ems/emas
- EMAS EasyDetails can be found at http://ec.europa.eu/environment/emas/toolkit/
- UKAS Accredited Bodies - http://www.ukas.com/about-accreditation/accredited-bodies/

Our cross cutting (horizontal) guidance

See http://www.environment-agency.gov.uk/business/topics/permitting/36414.aspx
H1 Environmental risk assessment
H2 Energy efficiency
H3 Noise
H4 Odour
H5 Site condition report guidance
For the management system templates see
http://www.environment-agency.gov.uk/business/topics/pollution/113738.aspx
How to comply with your landspreading permit - https://publications.environment-agency.gov.uk/ms/DFxgy1

Our sector based guidance

See http://www.environment-agency.gov.uk/business/sectors/default.aspx

EPR 1.01 Combustion
EPR 1.02 Oil, gas, coke and coal
EPR 2.01 Coke, iron and steel
EPR 2.03 Non-ferrous metals and the production of carbon and graphite
EPR 2.04 Hot rolling of ferrous metals
EPR 2.07 Surface treatment of metals and plastics

More information

EPR 3.01 Cement and lime
EPR 3.03 Glass manufacturing
EPR 4.01 Large volume organic chemicals
EPR 4.02 Speciality organic chemicals
EPR 4.03 Inorganic chemicals
EPR 5.01 Incineration of waste and fuel made from waste
EPR 5.02 Landfill
EPR 5.03 Parts 1 and 2 Treatment of landfill leachate
EPR 5.07 Clinical waste
EPR 6.01 Pulp and paper
EPR 6.05 Textiles
EPR 6.08 Tanning of hides and skins
EPR 6.09 Intensive farming
EPR 6.10 Food and Drink general
EPR 6.11 Poultry processing
EPR 6.12 Red meat processing
EPR 6.13 Dairy and milk products
EPR 6.14 Mining waste operations
EPR 6.15 The use on land of compost-like outputs from the mechanical-biological treatment of mixed municipal solid wastes
S5.06 Guidance for the Recovery and Disposal of Hazardous and Non Hazardous waste
EPR 7.01 Surface water and groundwater point source discharge activities

Pollution prevention guidance

We provide guides on pollution prevention for different issue which can help you with appropriate measures. You can find them here: http://www.environment-agency.gov.uk/business/topics/pollution/39083.aspx
The most relevant titles are listed below.
PPG2 Above-ground oil storage tanks, gives information on tanks and bunding which have general relevance beyond just oil
PPG 3 Use and design of oil separators in surface water drainage systems
PPG 6 Working at Construction and Demolition-sites
PPG 8 Safe storage and disposal of used oil
PPG 18 Managing Fire-water and major spillages
PPG 21 Pollution incident response planning
PPG 22 Dealing with spills
PPG26 Storage and handling of drums and intermediate bulk containers (IBCs)
PPG 28 Controlled burn
CIRIA/Environment Agency joint guidelines:
- Concrete Bunds for Oil Storage Tanks
- Masonry Bunds for Oil Storage Tanks

The Control of Pollution (Oil Storage) (England) Regulations 2001. SI 2001 No 2954 – are generally applicable to the storage of any potentially polluting liquid

Monitoring

For information about monitoring see
http://www.environment-agency.gov.uk/business/regulation/31829.aspx
For monitoring technical guidance notes see
http://www.environment-agency.gov.uk/business/regulation/31831.aspx

More information

Releases to land and groundwater

See http://www.environment-agency.gov.uk/business/topics/water/117529.aspx

Groundwater Protection Policy and Practice (GP3)

Protecting our Water Soil and Air: A Code of Good Agricultural Practice for Farmers, Growers and Land Managers

Groundwater Protection Code: Use and disposal of sheep dip compounds

Pesticides: Code of Practice for Using Plant Protection Products

Groundwater Protection Code: Solvent use and storage

Groundwater Protection Code: Petrol stations and other fuel dispensing facilities involving underground storage tanks

EU Emissions Trading Scheme (EU ETS)

See http://www.environment-agency.gov.uk/business/topics/pollution/32232.aspx

Regulations

The Environmental Permitting (England and Wales) Regulations 2010 SI 675
Environmental Permitting Core Guidance
see http://www.defra.gov.uk/environment/quality/permitting/

Other organisations' information about appropriate measures

Installations

Best available techniques reference notes BREF see http://eippcb.jrc.es/reference/
BS 5908 Code of practice for fire precautions in the chemical and allied industries
CIRIA 164 Design of containment systems for the prevention of water pollution from industrial incidents – CIRIA Report 164
COMAH guides – www.hse.gov.uk/pubns
Guidance on the Trading Scheme for the National Emission Reduction Pan (NERP)

Waste treatment and recovery

The Composting Industry code of practice: Industry guide for the prevention and control of odours at biowaste processing facilities available at www.organics-recycling.org.uk/dmdocuments/Composting_Industry_Code_of_Practice.pdf

Guidance on the evaluation of bioaerosol risk assessments for composting facilities available at http://publications.environment-agency.gov.uk/PDF/GEHO0809BQUO-E-E.pdf

Storing hazardous wastes at household waste recycling centres available at http://www.hse.gov.uk/pubns/waste12.pdf

Depolluting end-of-life vehicles guidance for authorised treatment facilities available at http://www.bis.gov.uk/files/file30651.pdf

Depollution guidance for end-of-life vehicles over 3.5 tonnes

Available at http://archive.defra.gov.uk/environment/waste/producer/vehicles/documents/elv-depollution.pdf

Guidance on best available treatment recovery and recycling techniques (BATRRT) and treatment of Waste Electrical and Electronic Equipment (WEEE). Available at http://archive.defra.gov.uk/environment/waste/producer/electrical/documents/weee-batrrt-guidance.pdf

Record of changes

Record of changes

Version	Date	Change
1.0	April 2010	Issued for launch of EPR 2010
2.0	June 2010	Corrections to tables of site attendance for technically competent managers on pages 50 and 64. Correction to odour management plan requirements for mobile plant standard facilities on page 101.
3.0	November 2010	Guidance on how to comply with the 'permitted activities' and 'emissions of substances not controlled by emission limits' conditions has been clarified for water discharge activities. Guidance on how to comply with the 'change in operation' condition has been clarified for water discharge and groundwater activities. References to guidance on bioaerosols at composting facilities added to Part 3.
4.0	April 2011	New information to cover changes to conditions to take account of the Waste Framework Directive. Edits to energy efficiency, pages 31 and 33; waste avoidance and recovery, pages
5.0	28 August 2012	No change to standards. Edits to improve layout, language, content and signposting to other guidance. Improved information: • explaining how the application, permit and guidance together; • explaining what we expect in management systems; • explaining what we expect for noise and odour issues; • to take account of changing weather patterns in accident management; • on what we mean by means of access to monitoring points.
6.0		Added content on management systems to replace H6 management systems guidance. Edits to include • new pests condition • new conditions added due to implementing the Industrial Emissions Directive • improved information on management system for stand alone water discharge activities • improvements layout, language, content and signposting to other guidance.

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