



IEMA Associate Certificate in Environmental Management

Introduction

This Supplement has been prepared to advise you of updates to your study material for the IEMA Associate Certificate in Environmental Management. You should study it carefully.

Element 2: Background to Environmental Law

Influence of European Union Law

European Legal Framework

The second paragraph under the subheading Directives now reads:

“EU environmental Directives include:

- **Packaging and Packaging Waste Directive (94/62/EC).**
- **Waste Electrical and Electronic Equipment Directive (2012/19/EU).**
- **Control of Major-Accident Hazards Directive (96/82/EC).**
- **Industrial Emissions Directive (2010/75/EU).”**

Element 4: Waste Management

Waste Policies and Law

UK Policy on Waste

In the **More** box at the end of this subsection, the following text has been added:

“The Waste Prevention Programme for England can be viewed at:

[https://www.gov.uk/government/publications/waste-prevention-programme-for-england.](https://www.gov.uk/government/publications/waste-prevention-programme-for-england)”

Site Waste Management Plans (SWMPs)

The original text under this subheading has been deleted and replaced by the following new text:

“**The Site Waste Management Plans Regulations 2008** aimed to reduce the amount of waste produced on construction sites and prevent fly-tipping. The legal requirement to develop an SWMP for certain construction projects has now been removed by the **Environmental Noise, Site Waste Management Plans and Spreadable Fats etc. (Revocations and Amendments) Regulations 2013**, although many relevant companies have stated that they will still develop an SWMP for construction projects.”

The **More** box at the end of the subsection has been deleted.



Element 5: The Water Environment

Water Management Laws

Key European Directives

Water Discharge Activity Permits

The first five paragraphs below the **Case Study** in this subsection have been amended and now read as follows:

“The **Water Industry Act 1991** requires that water companies and regional water authorities provide sewage services, in addition to safe drinking water.

Under the Act, therefore, it is an offence for any trade premises to discharge any trade effluent into a public sewer unless authorised by the sewerage undertaker. This takes the form of discharge consent. Consent to discharge to the sewer is generally required from the local water company if more than 5m³ per day is produced. Consents tend to cover conditions relating to:

- Maximum permitted flow rate (daily and hourly).
- Temperature.
- Maximum Chemical Oxygen Demand (COD) or maximum Biological (or Biochemical) Oxygen Demand (BOD).
- Maximum concentration of suspended solids.

Consent to discharge conditions may also cover (and can affect operation of sewage treatment works):

- Limits of amounts of dissolved oil, metals (e.g. Cu, Zn), organic chemicals (e.g. phenols).

And (due to constraints set by EA/SEPA/NRW for final discharge, such applications being referred to EA/SEPA/NRW for approval):

- Limits on priority substances (e.g. cadmium, mercury).

Consent conditions will alter depending on the characteristics of the discharge and the ability of the sewage treatment plant to deal with the discharge.”

Protection of Groundwater

In the third paragraph under this subheading, the second sentence has been amended to read:

“As part of its Groundwater Protection Policy it has produced aquifer designation maps for England and Wales, identifying principal and secondary aquifers.”

In the fourth paragraph, the fifth sentence now reads:

“Under the **Nitrate Pollution Prevention Regulations 2008** the EA has designated a number of Nitrate Vulnerable Zones (NVZs) in England.”

The map of Nitrate Vulnerable Zones in England has been deleted.



Element 6: Planning and Contaminated Land

Framework for Planning

Statutory Designations

In the table in this subsection, the information on Sites of National Importance has been amended and is now as shown below.

Sites of National Importance	National Nature Reserves (NNRs) declared under Section 19 of the National Parks and Access to the Countryside Act 1949 or Section 35 of the Wildlife and Countryside Act 1981.	SSSI; NNR
	Marine Conservation Zones designated under Part 5 of the Marine and Coastal Access Act 2009.	MCZ
	Sites of Special Scientific Interest (SSSIs) notified under Section 28 of the Wildlife and Countryside Act 1981.	SSSI

Biodiversity

In the first paragraph under this subheading, the last sentence now reads:

“It establishes Natural England, as well as implementing a number of improvements to wildlife, habitat, national parks and rights of way legislation.”

Land Contamination

In the **Key Information** box at the beginning of this main section, the fifth bullet point now reads:

- “Land contamination is assessed by a three-phase process:
 - Phase I – preliminary investigation (desk study and site reconnaissance).
 - Phase II - site investigation.
 - Phase III - remediation (if required).”

In the second paragraph of this main section, the second sentence has been amended to read as follows:

“The Environment Agency, Natural Resources Wales, SEPA and the Northern Ireland Environment Agency are **statutory consultees** and contaminated land is a **material consideration** in the planning process.”

Assessment of Contaminated Land

In the second paragraph under this subheading, the first sentence now reads:

“**BS 10175:2011 + A1:2013** *Investigation of potentially contaminated sites* (this standard was amended in 2013) is a code of practice that is often followed by those who are involved in the investigation of potentially contaminated sites.”

The subsection entitled Phase I - Desk Study and Walk Over has been replaced by the following revised subsection:

- “**Phase I – Preliminary Investigation (Desk Study and Site Reconnaissance)**

This phase comprises the gathering of factual information from a range of sources in order to consider the **potential contamination** at the site and potential **source-pathway-receptor/target** (as discussed in Element 1). Information reviewed at this stage (the Environmental Records Search or ERS) typically includes details on the historic site uses, ground conditions, water bodies, landfill sites in the vicinity of the site, presence of groundwater and abstraction points.

This is followed by a walk-over survey (Site Reconnaissance or SR) of the site to observe the site layout, conditions, structures, buildings, obvious signs of contamination, drainage system, neighbouring uses and so on. Interviews with site occupiers and viewing of records and plans may also take place.

A conceptual site model can then be developed, which would include potentially contaminating activities associated with the site history and contaminants which may be present, i.e. source; potential pathways, i.e. ground conditions; and potential receptors, i.e. end-users and adjacent rivers.



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The information is gathered and a preliminary risk assessment carried out to provide a risk rating, i.e. high, medium or low, according to the issues considered. Phase I assessments are often undertaken as a pre-purchase survey to identify potential liabilities which might arise from that site. If the risk is acceptable, i.e. low, then it may be considered unnecessary to proceed to Phase II. However, potential contamination issues highlighted by Phase I may require investigation in order to establish the actual contamination.”

In the subsection entitled **Phase II - Site Investigation**, the first two paragraphs of the text have been deleted and replaced by the following new paragraphs:

“The Phase II assessment generally comprises an investigation to assess ground conditions and obtain samples, laboratory analysis and subsequent evaluation of nature, extent and risk posed by contamination present.

The scope of Phase II and associated costs are site-specific and depend on the complexity of the site setting and proposed end use. The findings of Phase I will be used in designing Phase II. As with Phase I, clear objectives have to be established in order to design the investigation. At the planning stage it is also necessary to consider the proposed method of investigation, to ensure it is suitable for the ground conditions expected, will obtain the appropriate type, quality and quantity of samples, and is practical and applicable for use on the site. In some cases an exploratory investigation will be carried out prior to the main investigation to reduce uncertainty of the site and to help design the main investigation.”

The third paragraph has also been deleted and replaced by the following new text:

“The investigation can be both intrusive and non-intrusive. Non-intrusive techniques largely entail geophysics such as ground-penetrating radar, seismic refraction or conductivity surveys. These are generally used to understand below ground structures and other features of a site. Examples include:

- Presence and location of foundations.
- Underground pipelines and tanks.
- Changes in the condition of the ground and groundwater.

The intrusive part of the investigation generally entails some form of boring or digging in the subsoil. This is necessary to establish the ground conditions, obtain samples of soil/groundwater for subsequent laboratory analysis and for the installation of monitoring wells, as required. Typical samples would comprise soil, water and gas.

If buildings are present on a site and are to be refurbished or demolished, a building materials survey may form part of the investigation. This would locate, identify and record asbestos, for example.

Samples are taken for laboratory analysis. The analysis tends to reflect the findings of the Phase I survey and will test for the potential contaminants suspected at the site. It is accepted practice to refer to existing guidelines in the form of BS 10175. This guidance lists a range of contaminants, e.g. metals, oils, etc. which often form the minimum level of testing in an investigation. It can then be supplemented by additional specific analysis. For example, samples may be tested for solvents if they are suspected on site. Monitoring groundwater or landfill gas may also be an integral part of an investigation and is often carried out for a period after the main investigation has been completed.”

Summary

In this main section, the penultimate bullet point now reads:

- “Land contamination is assessed by a three-stage process: Phase I – preliminary investigation (desk study and site reconnaissance), Phase II - site investigation and Phase III - remediation (if required).”



Element 10: Producer Responsibility

Waste Electrical and Electronic Equipment (WEEE)

In the **Key Information** box at the beginning of this main section, the first bullet point now reads:

- “The main element of the **Waste Electrical and Electronic Equipment (WEEE) Regulations 2013** is that all producers who put Electrical and Electronic Equipment (EEE) on the market in the UK in a compliance period will be responsible for financing the costs of collection, treatment, recovery and environmentally sound disposal.”

WEEE Directive/Regulations

The content of this subsection has been revised and is now as follows:

“Directive 2012/19/EU of 4 July 2012 on Waste Electrical and Electronic Equipment (WEEE)

This Directive has been implemented in the UK through the **Waste Electrical and Electronic Equipment Regulations 2013 (S.I. 2013 No. 3113)**. The Regulations have a phased implementation from 1 January 2014.

The objectives of the **WEEE Directive** are ideally the prevention of WEEE, and in addition the reuse, recycling and other forms of recovery of such wastes so as to reduce the disposal of waste. (Reuse of WEEE as whole appliances is favoured over treatment, recycling and recovery.) Ultimately the aim is to minimise the quantity of such items ending up in landfill. The target is for member states to collect 20 kg per person per year, on average, to be separately collected by 2019.

Waste Electrical and Electronic Equipment Regulations 2013

There are ten categories of WEEE, defined in Schedule 1 of the Regulations:

1. Large household appliances.
2. Small household appliances.
3. IT and telecommunications equipment.
4. Consumer equipment.
5. Lighting equipment.
6. Electrical and electronic tools.
7. Toys, leisure and sports equipment.
8. Medical devices.
9. Monitoring and control equipment.
10. Automatic dispensers.

The **WEEE Regulations** apply to electrical and electronic equipment (EEE) in the above categories with a voltage of up to 1,000 volts AC or up to 1,500 volts DC.

Schedule 2 of the **WEEE Regulations** provides a list of products falling within these categories. For example, Category 2 (small household appliances) includes items such as:

- Vacuum cleaners.
- Carpet sweepers.
- Irons.
- Toasters.
- Fryers.
- Electric knives.
- Clocks, watches.
- Scales.



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Schedule 3 consists of a list of categories that will be covered by the Regulations from 1 January 2019, namely:

- Temperature exchange equipment.
- Screens, monitors and equipment containing screens having a surface area greater than 100 cm².
- Lamps.
- Large equipment (any external dimension more than 50 cm).
- Small equipment (no external dimension more than 50 cm).
- Small IT and telecommunication equipment (no external dimension more than 50 cm).

- **Producers**

The main element of WEEE is that all producers who put electrical and electronic equipment (EEE) on the market in the UK in a compliance period will be responsible for financing the costs of collection, treatment, recovery and environmentally sound disposal of:

- WEEE from private households that is deposited at Designated Collection Facilities.
- WEEE that arises from users other than private households (unless registered as a small producer).

This obligation will be met through the producer joining an approved Producer Compliance Scheme (PCS), which gets the producer registered, and paying the appropriate annual fee. Each year the producer must provide a declaration of compliance, together with supporting evidence, to the appropriate authority. The appropriate authority is the EA in England, NRW in Wales, SEPA in Scotland and the Department of the Environment in Northern Ireland.

The producer must mark all EEE that he puts on the market with a crossed-out wheelie-bin symbol and a date mark. He must also provide information on reuse and environmentally sound disposal for each new type of EEE he puts on the market within one year; this information is of particular value to waste treatment facilities. In particular, information on the location of any dangerous substances and mixtures in the EEE should be provided.

The producer must keep records showing the amount of EEE he has put on the market during any compliance period in each of the categories in Schedule 1, broken down by that for use by private households, and for users other than private households. Details of EEE put on the market intended for use by private households are reported quarterly; details of other EEE put on the market are reported annually. Records must be kept for four years. Producers of household WEEE will be notified, via their PCS, of their financial obligations at the end of each compliance period.

- **Distributors**

There are also obligations on distributors of WEEE, i.e. retailers or wholesalers of new EEE. Their main obligation is to provide a take-back service to householders, enabling them to return their WEEE free of charge. This obligation must be discharged either through in-store take-back, or participation in the National Distributor Take-Back Scheme, or an alternative free take-back system. Equipment must be accepted on a like for like basis. Distributors must make a range of information available to users of EEE in private households such as collection and take-back arrangements.

- **Consumers**

The WEEE Regulations do not place any obligations on consumers who use EEE and discard EEE as waste, but they encourage consumers to play their part in the separate collection of WEEE when it is discarded as waste. The key objective is that WEEE puts in place the means for household consumers to discard their EEE separately from other streams of household waste. Consumers have the ability to deposit WEEE in specific areas at civic amenity sites across the UK.

- **Collection and Treatment**

Local authorities are encouraged to register their civic amenity sites as 'Designated Collection Facilities' (DCFs). WEEE will be collected free from DCFs. Approved Authorised Treatment Facilities (AATFs) and Approved Exporters have been established to deal with separately collected household and non-household WEEE and WEEE collected on behalf of PCSs. They will provide evidence that the WEEE has been treated to the requirements of the Regulations. AATFs will generally have an environmental permit. A reprocessor is a facility that carries out recovery and recycling, and holds a permit or registered exemption. Reprocessors will work with AATFs and PCSs to ensure that treated WEEE is subsequently recycled and/or recovered to the target levels set out in the WEEE Regulations.

The first compliance period runs from 1 January 2014 to 31 December 2014. Each subsequent compliance period will run from 1 January to 31 December each year. Producers must join a suitable scheme before its commencement, and settlement and declaration of compliance takes place following the end of each compliance period.

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Recovery targets are set out in the **WEEE Directive** and these are implemented through the **WEEE Regulations**. For example, for WEEE in Category 1 (large household appliances), the target for AATFs is at least 80% recovery by average weight in tonnes of the equipment and at least 75% reuse and recycling of components, materials and substances by the average weight of the equipment in tonnes. This means that producers will have to obtain evidence of recovery of at least 80% by weight of Category 1 equipment entering an AATF, 75% of which must be achieved through reuse and recycling.”

The **More** box at the end of the original subsection has been deleted.

Summary

In this main section, the fourth bullet point now reads:

- “The **Waste Electrical and Electronic Equipment (WEEE) Regulations 2013** require that producers join a compliance scheme, mark equipment and keep relevant records.”