

# National Environmental Management Certificate

## SAMPLE RESOURCES

This RMS sample resources pack contains a selection of powerpoint slides together with a supporting lesson plan and are representative of the full set of RMS trainer materials for the NEBOSH Environmental Management Certificate qualification.

### **RMS Publishing Ltd**

Suite 3, Victoria House,  
Lower High Street, Stourbridge, West Midlands DY8 1TA  
Tel: +44 (0) 1384 447927 Email: [sales@rmspublishing.co.uk](mailto:sales@rmspublishing.co.uk)



The background features a close-up of green leaves with visible veins, overlaid with a pattern of hexagons in various shades of green and white. The text is positioned on the left side of the image.

# NEBOSH

Environmental  
Management  
Certificate



# Foundations in environmental management

---

RMS SAMPLE

# Learning outcomes

---

- Justify environmental management in the workplace using ethical, legal and financial arguments, linking these to wider environmental issues including sustainable development.
- Recognise workplace activities which may be subject to environmental legislation or enforcement.

# Assessment criteria

---

- Explain the scope and nature of environmental management and key environmental issues.
- Discuss the ethical, legal and financial reasons for maintaining and promoting environmental management.
- Summarise sustainability, its importance, and its relationship with corporate social responsibility.

# Contents

---

- The scope and nature of environmental management
- Key environmental issues
- The ethical, legal and financial reasons for maintaining and promoting environmental management
- Supporting sustainable development
- The legal framework for the regulation of environmental management

# Contents

---

The scope and nature of environmental management

## Key environmental issues

The ethical, legal and financial reasons for maintaining and promoting environmental management

Supporting sustainable development

The legal framework for the regulation of environmental management

# Definitions

---

## Pollution

Introduction of substances or energy into air, water or land which is capable of causing harm to a living organism.

## Resources

Use and depletion of the materials we use.

## Environmental Damage

Damage to the places in which nature live (habitats).

# How pollution affects the environment

To enter the environment, three aspects must be in place.

- **Source** – a substance or energy which has the potential to cause harm to the environment e.g. a leaking oil drum, emissions from a vehicle exhaust or chimney, waste in a landfill.
- **Pathway** - the means or route by which the source can travel to a receptor.
- **Receptor** - something which could be harmed by the source  
- land, air, water quality, plants and animals, human health.

# Direct Impacts

---

Direct impacts are concerned with the immediate effects, such as:

- The contamination of a watercourse leading directly to the loss of fish stocks.
- The burning of petrol / diesel in a vehicle causing local air pollution, or regionally acid rain.
- The burning of gas on site producing greenhouse gases which affects global climate change.

# Indirect impacts

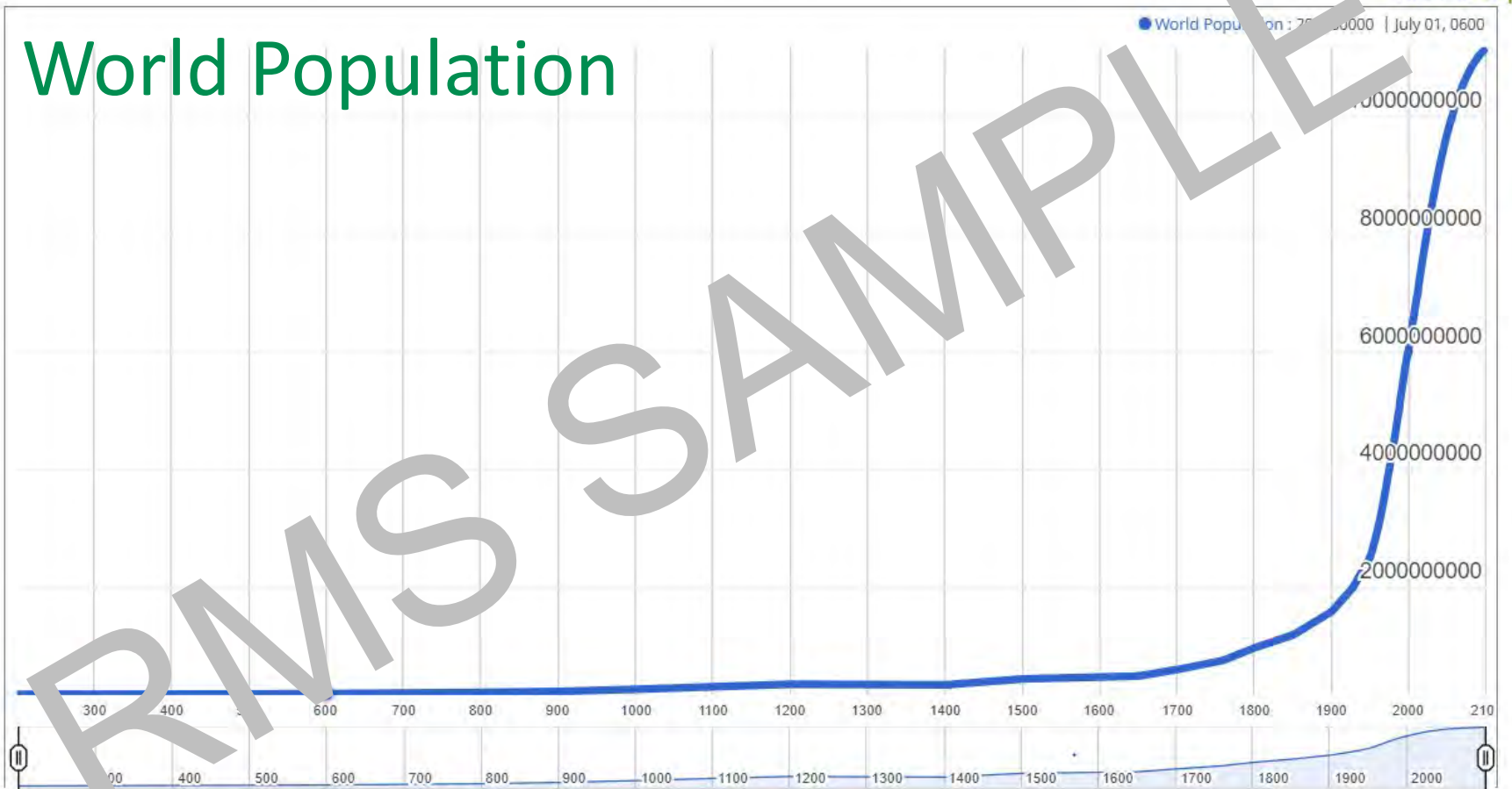
---

Indirect effects are those which are caused by the initial action but the effect is distance from the initial cause

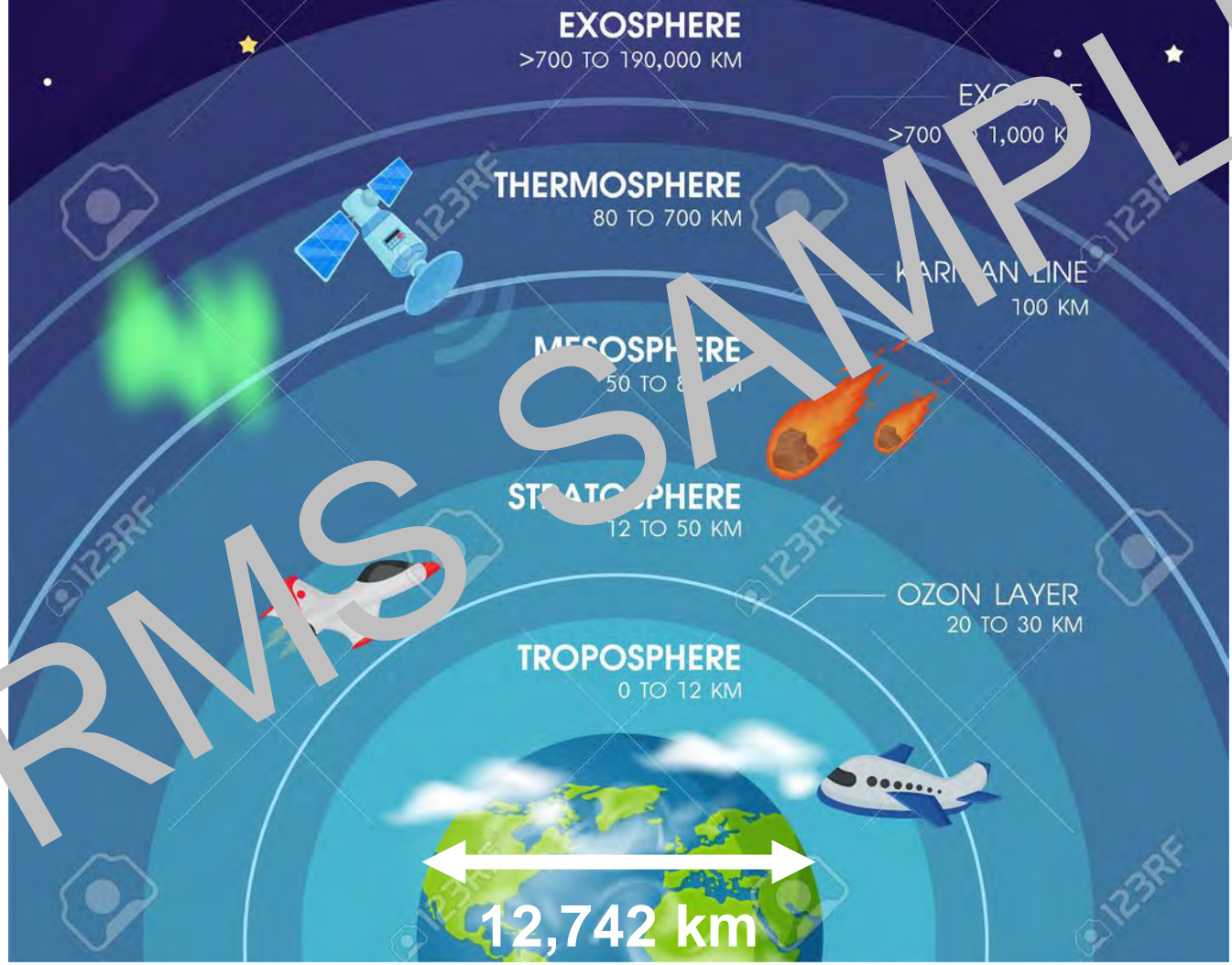
- Use of electricity – a distant power station uses fossil fuels (Resource depletion) and emits greenhouse gases (climate change).
- Bioaccumulation – pesticides used on crops work their way up the food chain, affecting top level predators.

# The Principal Cause of Environmental Impact

## World Population



# THE EARTH'S ATMOSPHERE



# Air Pollution - Local

- Air pollution is a major environmental health problem which affects both developed and developing countries
- (WHO) has found that about 750,000 people die prematurely each year from respiratory problems in China.
- In London 2013 a 9 year old child Ella, who lived near the South Circular Road in Lewisham, south-east London, died in with the inquest had finding that air pollution "made a material contribution" to her death.



# Air Pollution - Local

---

## Particulate Matter

- Particulate Matter (PM) are small particles.
- PM<sub>2.5</sub> (particles with diameter less than 2.5µm) are particular concern to human health and causes respiratory disease and lung cancer.
- Human sources - fuel combustion, coal & wood burning, tyre wear; mining, quarrying and construction & demolition.
- Natural sources – sea spray, soil and dust.

# Air Pollution – Local: Ground Level Ozone

---

- In the lower atmosphere, pollution from human sources produces the gas ozone and a photochemical smog which is harmful.

RMS SAMPLE

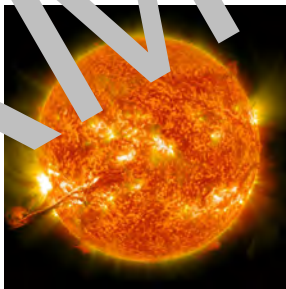
# Air Pollution – Local: Ground Level Ozone



VOCs



Nitrous  
Oxides



Photochemical Smog:  
Peroxy Acetyl Nitrates  
(PANs) and Ozone



High air pressure  
and calm conditions  
in valleys trap the  
smog.

# Air Pollution – Local: Photochemical Smog

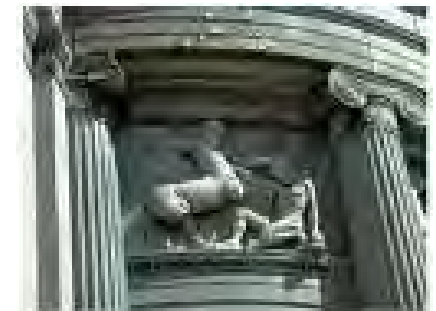
Beijing air on a day after rain (left) and a sunny but smoggy day (right)



Source: Bobak Ha'eri.

# Air Pollution – Local: Ground Level Ozone

- In very small concentrations it causes irritation to the human respiratory channels.
- Exposure can have a long-term effect on health – asthma and emphysema (a chronic lung disease) – both due to narrowing of the airways.
- Local effects on buildings vegetation.
- Pollution rarely stays local – causes remote effects on the acid and nutrient status of soils and waters of upland lakes and rivers.



# Foundations in environmental management

---

RMS SAMPLE

# NEBOSH Certificate in Environmental Management

---

RMS SAMPLE

# NEBOSH Environmental Management Certificate

## Lesson Plan – Day 1

TIME	ELEMENT/TOPIC	CONTENT	RESOURCE/TASK
08.45	Welcome	Provide emergency and welfare (toilets, meals, smoking, mobile phones etc.) arrangements.	Complete attendance sheet
	Introduction	Introduce Company. Introduce tutor Ice breaker: Learner's name, job, background, experience. Learner to explain: What the environment means to them personally. What the environment means to them in a work context.	Name tags/marker pens
	Course plan	Course content, course materials Syllabus and assessment / assessment structure / arrangements Explain the use of AI to learners for during study and assessment Progression onto other qualifications (if applicable)	Complete paperwork if necessary
	Programme for the day	Topics to be covered, summarising including the EMC1 Scenario-based Assessment (SBA) and EMC2 Practical Assessment	Slides
09.00	<b>FOUNDATIONS IN ENVIRONMENTAL MANAGEMENT</b>	<b>Learning outcomes:</b> Justify environmental management in the workplace using ethical, legal and financial arguments, linking these to wider environmental issues including sustainable development Recognise workplace activities which may be subject to environmental legislation or enforcement	Tutor summarises slides Introduction to element
		<b>Assessment criteria:</b> Explain the scope and nature of environmental management and key environmental issues Discuss the ethical, legal and financial reasons for maintaining and promoting environmental management Summarise sustainability, its importance, and its relationship with corporate social responsibility Understand the influence of international agreements on national environmental laws and standards, and the potential consequences of non-compliance	
	<b>The scope and nature</b>	Definition of the environment as “the surroundings in which an organism operates, including air,	Tutor summarises slides

# NEBOSH Environmental Management Certificate

TIME	ELEMENT/TOPIC	CONTENT	RESOURCE/TASK
	<b>of environmental management</b>	water, land, natural resources, flora, fauna, humans and their interrelation". 'Surroundings' can extend from within an organisation to the global system.	Include interactive polling or short case study
		The multi-disciplinary nature of environmental management and the barriers to good standards of environmental management within an organisation (complexity, competing and conflicting demands, behavioural issues)	Tutor summarises slides
		The size of the environmental 'problem' in terms of the key environmental issues: > local effects of pollution (air quality, noise, waste, lighting, odour) > carbon emissions and the greenhouse effect/global warming > water resources and ocean pollution > deforestation, soil erosion and land quality > material resources, land despoliation, supply chain, inequal distribution of impacts > energy supplies, innovations in food and fuel > waste disposal and international waste trade > agricultural issues arising from global trade > climate change and extreme weather events > biodiversity loss.	Learners to explain their current understanding of the problems / issues and discussion to be held with the tutor whilst summarising slides.  <a href="https://www.discoverwildlife.com/animal-facts/facts-about-uk-invasive-species">https://www.discoverwildlife.com/animal-facts/facts-about-uk-invasive-species</a>
		Exercise: split class into groups of 2 – 4 and discuss the learner's workplaces to identify how the chosen organisation influences the above problems / issues.	Exercise and feedback discussion  Exercise: note paper and flip chart to summarise findings
10.45	<b>Break</b>		
11.00	<b>The ethical, legal and financial reasons for maintaining and promoting environmental management</b>	The rights and expectations of interested parties (internal and external, including local residents, supply chain, regulators, customers and workers) <ul style="list-style-type: none"> <li>• Outcomes of incidents in terms of environmental and human harm</li> <li>• The actions and implications of pressure groups and campaigning; growing public awareness of environmental issues</li> <li>• Overview of compliance issues including breaches of local or national law, breaching individuals' legal rights, agreements with NGOs, agreements with public authorities, voluntary codes of practice</li> </ul>	Tutor summarises slides  Groups to discuss who their organisation's Interested Parties are, and what their needs and expectations are.  Discuss mini case examples of breaches (e.g. pollution fines)