



# INDUSTRIAL EMISSIONS DIRECTIVE

Overview of IED and Management of  
Compliance

global **environmental** and **advisory** solutions

**IEMA**

Transforming the world  
to sustainability

**SLR** 

# INTRODUCING THE TRAINER

---



**Paul Wright**  
**Technical Discipline Manager – EMPC Europe**

Paul has nine year's continuous experience as an environmental Regulator with Natural Resources Wales and its predecessor bodies. Prior to joining SLR in September 2018, he held the role of Industry Regulation Team Leader for North and Mid Wales for six years, where he was responsible for the regulation of approximately 120 industrial sites under various regulatory regimes, including Environmental Permitting, COMAH and Radioactive Substances Regulations. Paul's regulatory experience gives him superb insight into the requirements of environmental permitting and compliance and in particular, knowledge of how the approach to engagement and improvement can influence the nature and timing of Regulator actions.

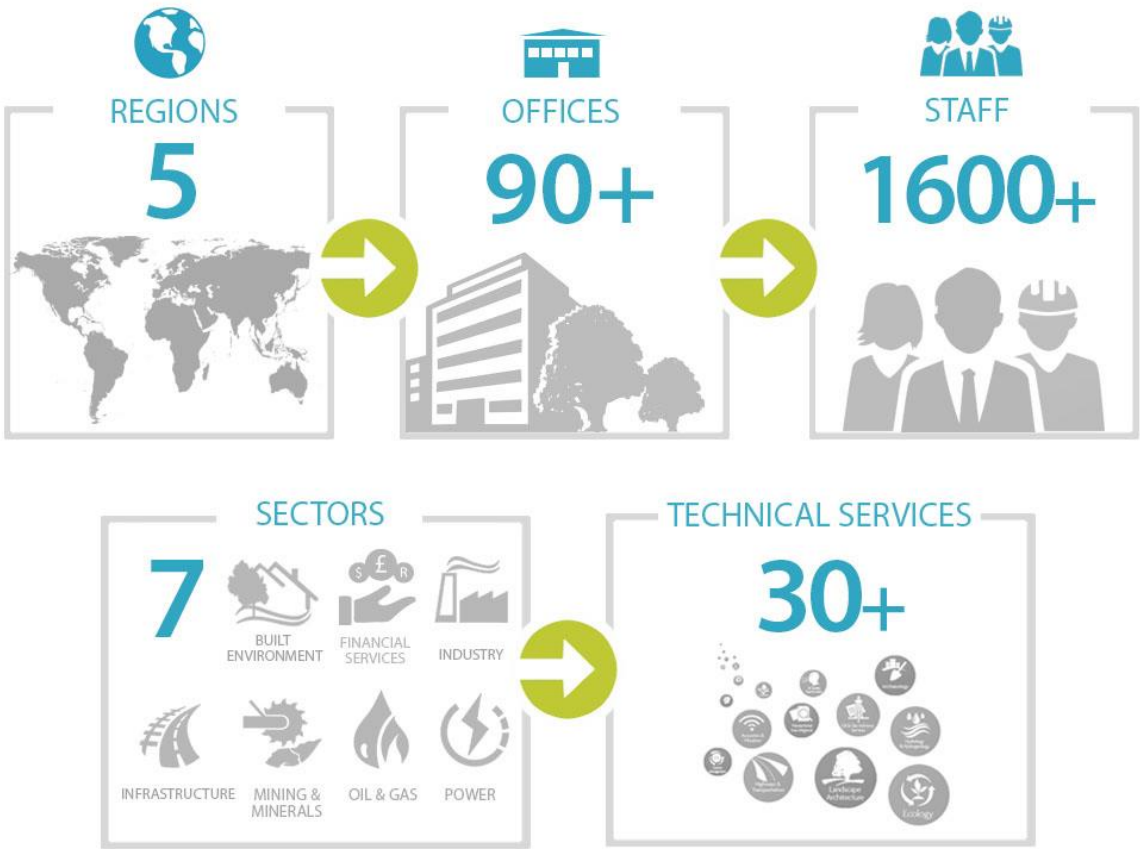
This knowledge is complemented by a detailed understanding of industrial business operations, which has been gained through 20 plus years supervising new build and operational management of a variety of industrial sites. Paul is a Chartered Environmentalist and a Chartered Engineer.

# SLR TODAY



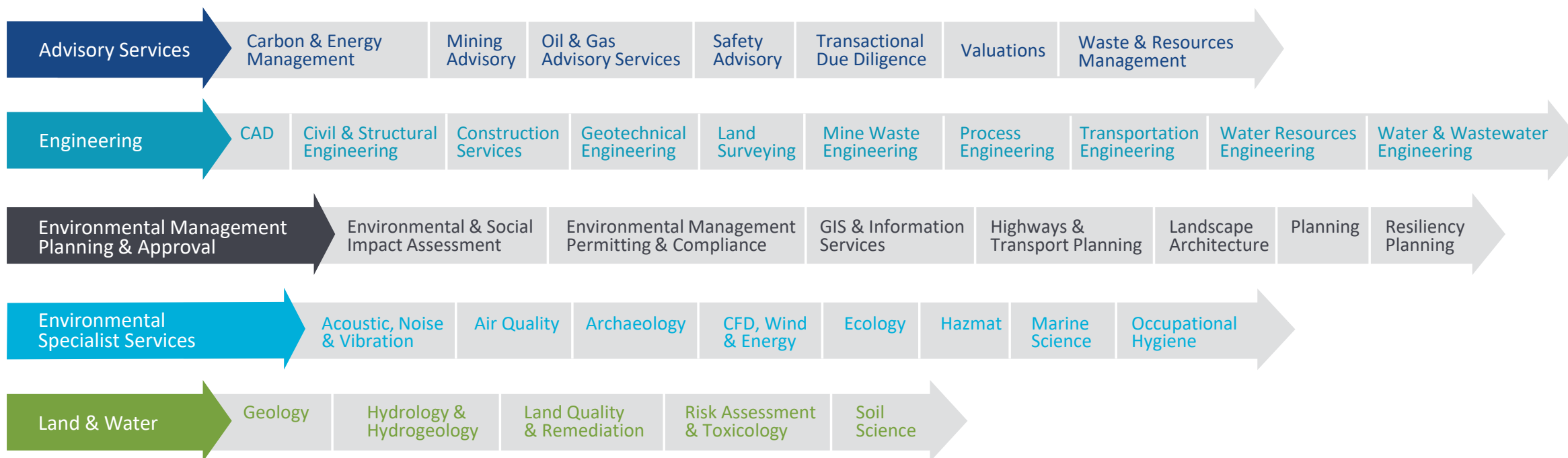
SLR delivers global **environmental** and **advisory** solutions

We provide advice and services to clients in the oil and gas, mining and minerals, infrastructure, built environment, industry, financial and power sectors.



# SLR SERVICES

We offer our clients strength in depth with an extensive range and considerable expertise in more than 30 environmental and advisory services.



# SESSION OVERVIEW

This 'Introduction to IED' webinar will provide you with an overview of the IED, how it is implemented in the UK, the requirements to comply with Articles 13, 14 and 15 of IED and how to minimise the environmental impact of your operations.



AN OVERVIEW OF IED



# OVERVIEW OF IED & EPR

global **environmental** and **advisory** solutions

**IEMA**

Transforming the world  
to sustainability

**SLR** 

# OVERVIEW OF IED

The IED is Directive 2010/75/EU of the European Parliament adopted on 24 November 2010. It is the main instrument regulating pollutant emissions from industrial installations and recasts 7 previous EU directives:

- Integrated Pollution Prevention & Control (IPPC)
- Large Combustion Plant (LCP)
- Waste Incineration (WID)
- Solvent Emissions (SED)
- x3 Titanium Dioxide





# FUNDAMENTALS OF IED

The IED was based upon the following fundamentals:

1. An **integrated** approach – permit must consider the performance of the whole plant, e.g. emissions to air, water, land, generation of waste, use of raw materials, energy efficiency, noise prevention of accidents and restoration of the site upon closure. [[Permit conditions](#)]
2. Permit conditions must be based on **BAT**. BAT is set at EU level by a group of experts from member states. This is co-ordinated by the European IPPC Bureau at the joint EU Research Centre in Seville. This process results in BAT Reference Documents (BREFs), the BAT conclusions (BATc) contained within the BREF are adopted by the Commission as Implementing Decisions, IED requires that these BATc are the reference for setting permit conditions. [[BREFs](#)]

For certain activities, the IED also sets EU wide emission limit values (ELVs) for certain pollutants.





# FUNDAMENTALS OF IED CONTINUED

The IED was based upon the following fundamentals:

3. Allows **flexibility** for competent authorities (CA) to set less strict ELVs. Only possible in strict cases where an assessment shows that achieving the ELV associated with BAT would lead to disproportionately higher costs compared to the environmental benefits due to the geographical location/local environmental conditions/technical characteristics of the installation.

The CA must document its justification for granting a derogation. [[Derogations](#)]

4. Mandatory requirements for **environmental inspections**. Member States shall set up a system of environmental inspections and draw up inspection plans accordingly. The IED requires a site visit to take place at least every 1 to 3 years using a risk-based criteria. [[Compliance](#)]



# FUNDAMENTALS OF IED CONTINUED

The IED was based upon the following fundamentals:

5. IED ensures the **public has a right to participate** in the decision-making process and to be informed of its consequences, by having access to permit applications, permits and the results of monitoring. [[Public Register](#)]

Also, through the European Pollutant Release and Transfer Register (E-PRTR) emissions data reported by Member States are made accessible in a public register, which is intended to provide environmental information on major industrial activities.

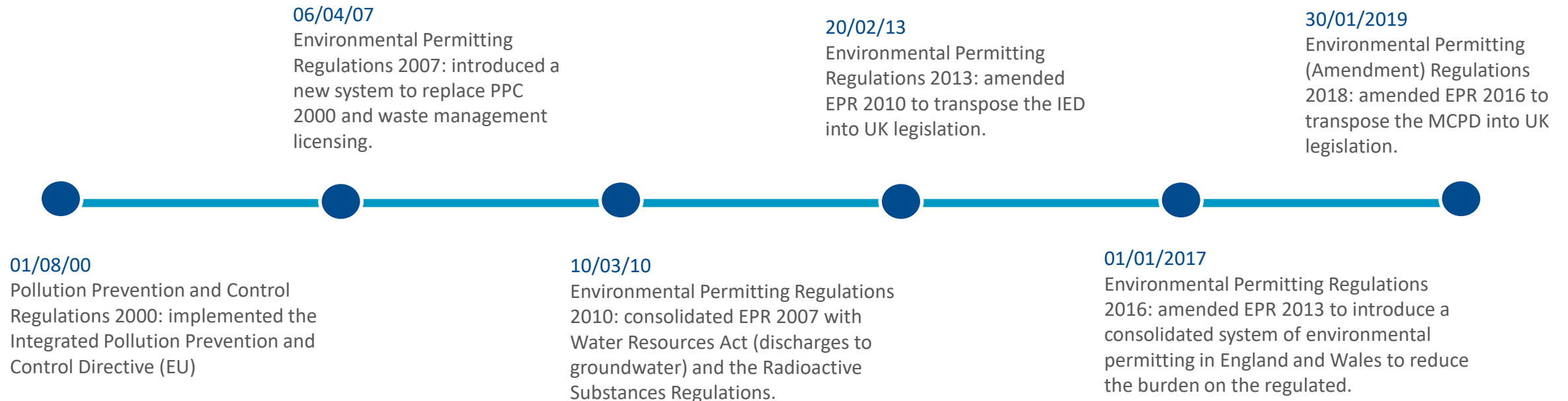
IED entered force on 6 January 2011 and had to be transposed in Member State legislation by 7 January 2013. In the UK this resulted in the Environmental Permitting Regulations 2013.



# OVERVIEW OF EPR

The EPR is the instrument for implementing IED in England and Wales.

Chronology of Environmental Permitting in England and Wales:





# COMPLIANCE MANAGEMENT, ENFORCEMENT & SANCTIONS

global **environmental** and **advisory** solutions

**IEMA**

Transforming the world  
to sustainability

**SLR** 

# ENVIRONMENTAL REGULATORS

- Environment Agency and Natural Resources Wales
- Local Authorities
- Natural England
- Sewage Undertakers
- Health and Safety Executive



# REGULATORY POWERS – EA AND NRW

- Warranted Officers = Defined under Section 108 of Environment Act 1995
- **Power of entry** at any reasonable time, to any premises, which they believe it necessary to enter (in an emergency this is any time and by force, if necessary)
- **Power to investigate**, including taking measurements and photographs
- **Power to take** and remove samples and use them in evidence
- **Power to seize** and render harmless any article or substance which appears to be the cause of imminent danger of pollution or harm to health



# CONSEQUENCES OF NON-COMPLIANCE

DIRECT IMPACTS	INDIRECT IMPACTS
Potential fines	Loss of customers
Increased subsistence fee	Poor local community relations
Adverse publicity to company and brand	Increased insurance premiums
Remediation and clean-up costs	Damaged reputation amongst wider stakeholders
Increased inspections from regulatory bodies	Disadvantages during tender submissions and other forms of business development
Increased internal resources to manage non-compliance process	



# ENFORCEMENT AND SANCTIONS

There is a range of enforcement options the Regulator can use:



Site  
warnings

Enforcement  
notices

Prosecution

The Enforcement Response can be influenced by the Operators attitude, which will also be taken into account when deciding upon the enforcement response. Refer to the ORO.

# ENVIRONMENTAL LAW - STRUCTURE

CRIMINAL LAW	CIVIL LAW
1. Made by Parliament	1. Judge made case law some parliamentary law
2. Rights of society	2. Rights of persons
3. Aims to punish with fines or imprisonment	3. Aims to provide a remedy: compensation or injunction
4. Crime	4. Negligence
5. State enforces	5. Claimant initiates action
6. Criminal courts	6. Civil courts
7. Beyond reasonable doubt	7. Balance of probabilities
8. Cannot insure against fine	8. Insure against liability



# ARTICLES 13, 14 and 15 OF IED

Impacts on Emission Limit Values and  
Derogations

global **environmental** and **advisory** solutions

**IEMA**

Transforming the world  
to sustainability

**SLR** 

# ARTICLE 13 – BEST AVAILABLE TECHNIQUE (BAT)

- IED Article 13 relates to development, review and updates of the Best Available Techniques (BAT) reference documents (BREFs).
- The BREFs, which are developed at EU level, are reference documents which cover many of the industrial activities covered in Annex I of the EU IPPC Directive.
- The BREFs provide descriptions of a range of industrial processes and include details on operating conditions, emission rates and importantly provide best available techniques.
- On publication of a BREF, the BAT Conclusions (BATc) are issued as a standalone document. The BATc summarise the BAT requirements as detailed in the associated BREF.
- EU Member States are required to take these documents into account when determining BAT for environmental permitting purposes.

# ARTICLE 13 – HOW BREFs ARE DEVELOPED

- The EU Commission organises an exchange of information between the Commission, EU Member States, the industries concerned, and non-governmental organisations promoting environmental protection.
- After a positive opinion on draft implementing decisions, these are adopted by the EU Commission and published in the Official Journal (OJEC).
- The adopted BREFs and BATc documents are the published on the European IPPC Bureau website <https://eippcb.jrc.ec.europa.eu/reference/>

*The Expert Group (IED Article 13 Forum) is listed on the register of commission expert groups on the EU website <https://ec.europa.eu/transparency/regexpert/index.cfm?do=groupDetail.groupDetail&groupID=2611>*

# ARTICLE 13 – BAT CONCLUSIONS

## WHEN DO THEY APPLY AND WHEN SHOULD YOU COMPLY?

- **New Installations** – immediately  
BAT is used for setting permit conditions; all relevant BAT conclusions published before the permit is issued apply.
- **Existing Installations** – following publication of revised BAT Conclusions (BATc).  
An existing permitted Installation must comply with the BATc within the 4 year period from the date of publication of revised BAT.

*It should be noted, based on the wording of the Industrial Emissions Directive, that the competent authorities do have the power to apply those BAT conclusions before the 4-year period expires.*

- For installations not covered by any BAT conclusions, IED Article 21(4) provides more generally that permit conditions shall be reconsidered and, if necessary, updated where developments in the BAT allow for the significant reduction of emissions. The same principle should apply for IED installations where the main activity is not covered by BAT conclusions, while other activities carried out in that installation are.

# ARTICLE 13 – BAT CONCLUSIONS

## WHEN DO THEY APPLY AND WHEN SHOULD YOU COMPLY? CONTINUED

- Following publication of BREF and associated BATc updates, the Regulator will contact permitted Installations by way of a Regulation 61 notice.
- In addition to the BATc, the Reg 61 notices will also require consideration of other EU and UK legislation.
- Subject to the response to the Reg 61 notice, the Regulator may vary your permit to ensure compliance with the updated requirements. This review also allows the regulator to consolidate original permits to reflect variations/changes made via earlier versions of the permit.



# ARTICLE 14 – ENVIRONMENTAL PERMIT CONDITIONS

Environmental Permits will be issued with a number of conditions which must be adhered to.

These typically include:

- Management of the Installation in accordance with an Environmental Management System (EMS)
- Energy efficiency
- Resource efficiency
- Waste
- Emissions monitoring
- Emissions not controlled by emission limits

# ARTICLE 14 – ENVIRONMENTAL PERMIT CONDITIONS CONTINUED

Environmental Permits will be issued with a number of conditions which must be adhered to.

These typically include:

- Record retention
- Reporting
- Improvement Programme
- Pre-operational conditions

Other requirements:

- Pollution Inventory reporting
- Operator monitoring assessment (OMA)

# ARTICLE 15 – EMISSIONS LIMIT VALUES AND DEROGATION

Relevant BREF notes define BAT Associated Emission Limits (BAT-AELs) in the BATc under specific reference conditions.

**Paragraph 3** states that Regulators shall set ELVs that ensure that emissions do not exceed BAT-AELs expressed for the same or shorter periods of time and under the same reference conditions; or setting different ELVs, periods of time and reference conditions. In the later case, the Regulator shall at least annually assess the results of emissions monitoring to ensure that BAT-AELs have not exceeded.

**Paragraph 4** states that by way of derogation the Regulator may, in specific cases, set less strict ELVs. Such a derogation may apply only where an assessment shows that the achievement of BAT-AELs would lead to disproportionately higher costs compared to environmental benefits due to:

- a) geographical location or local environmental conditions; or
- b) technical characteristics of the installation

## ARTICLE 15 – EMISSIONS LIMIT VALUES AND DEROGATION CONTINUED

Relevant BREF notes define BAT Associated Emission Limits (BAT-AELs) in the BATc under specific reference conditions.

The Regulator would have to document in an annex to the permit the reasons for granting the derogation, including the results of the assessment and justification for the conditions imposed.

Any ELVs set by derogation cannot exceed the ELVs set out in the relevant Annexes of the IED and the Regulator must ensure no significant pollution is caused and that a high level of protection of the environment as a whole is achieved.

# ARTICLE 15 – DEROGATION

Derogations are time bounded, i.e. of the Operator states that they can achieve BATc within 5 years, rather than the 4 stipulated. All derogations will be reviewed at the next BREF review which is every 8 years.

Criteria for applying for a derogation relate to disproportionately higher costs compared to environmental benefits due to:

- geographical or local environment conditions
- technical characteristics of the installation

Other factors, i.e. an alternative project unrelated to BAT-AEL compliance that will reduce pollution and provide greater benefits than compliance with BAT-AELs by the relevant deadline, where the two projects are mutually exclusive may be considered to be a relevant technical characteristic.

# ARTICLE 15 – DEROGATION CONTINUED

## What do you need to do?

- 1) Upon receipt of your Reg 61 notice you need to complete the summary spreadsheet provided which lists each BATc, this is basically the BATc review where you will state how you intend to achieve BAT or whether you will need a derogation.
- 2) If you decide you need to apply for a derogation, please appreciate that it is not a quick or straightforward process and there is no guarantee that the Regulator will grant a derogation. Sufficient time is required for the Operator to gather the supporting information and then allow sufficient time for the Regulator to assess the request.
- 3) Demonstrate the disproportionately higher costs compared to environmental benefit by using the DEFRA approved Cost Benefit Analysis tool:

<https://www.gov.uk/government/publications/industrial-emissions-directive-derogation-cost-benefit-analysis-tool>

# THANK YOU FOR LISTENING

---



Paul Wright  
Technical Discipline Manager – EMPC Europe  
[pwright@slrconsulting.com](mailto:pwright@slrconsulting.com)  
07786 808408

## ANY QUESTIONS?