

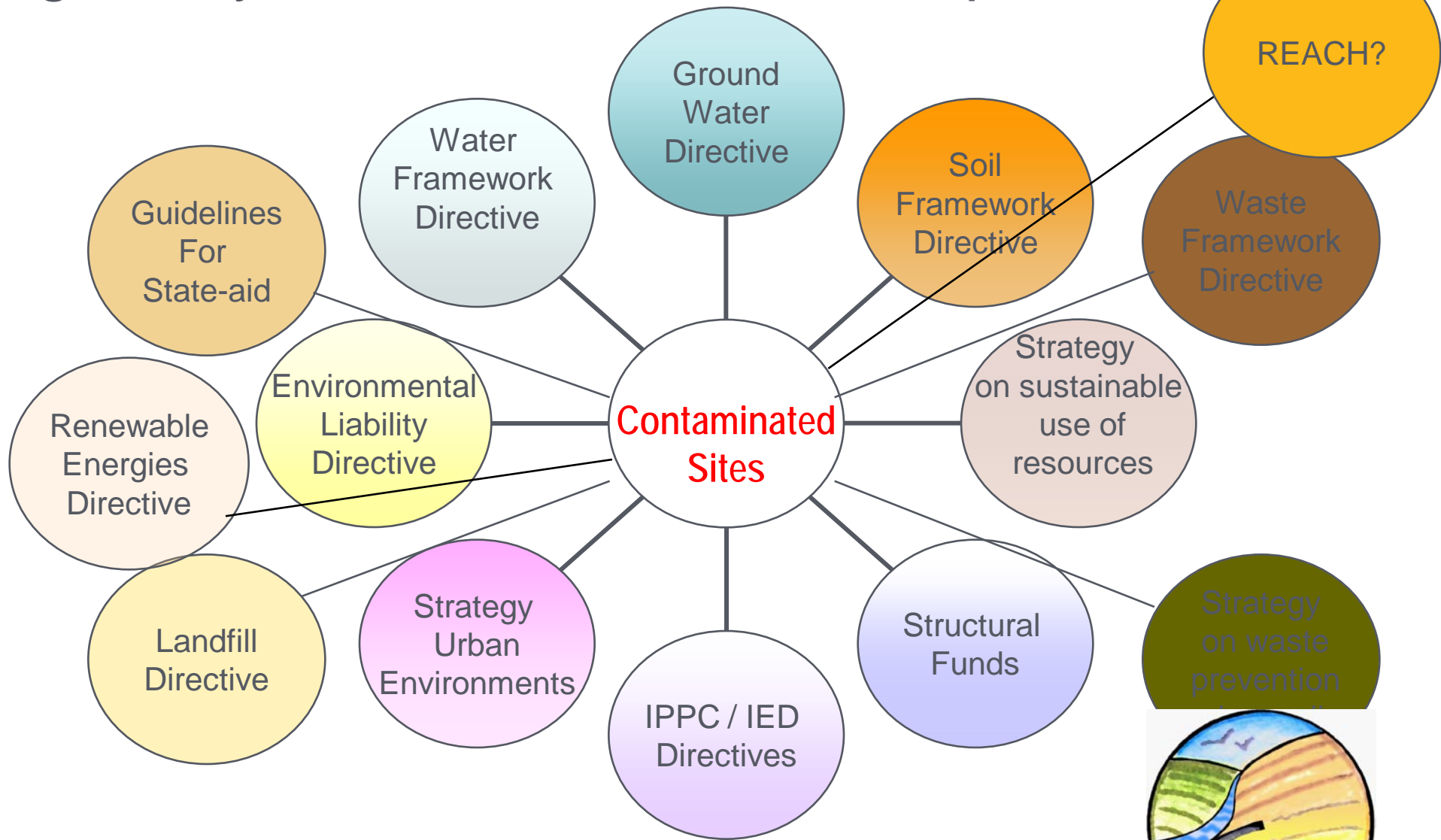


The IPPC Recast / IED Directive

Douai, November 2009



Regulatory environment at the European level



The IPPC Directive Review - IED / CF analysis

Some soil and groundwater protection related elements introduced , like

- Periodical monitoring
- Baseline report
- Site closure and remediation
- (BAT/ BREF-documents)

POLITICAL AGREEMENT IN COUNCIL IN JUNE 2009

- **COMMON POSITION THIS YEAR**
- ACCEPTANCE MAYBE IN THE END OF 2010 ?



Article 3 Definitions

(18) "**baseline report**" means information on the state of soil and groundwater contamination by relevant hazardous substances;

(19) "**groundwater**" means groundwater as defined in Article 2(2) of Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy;

(20) "**soil**" means the top layer of the Earth's crust situated between the bedrock and the surface. The soil is composed of mineral particles, organic matter, water, air and living organisms;



Article 11 General principles governing the basic obligations of the operator

Member States shall take the necessary measures to provide that installations are operated in accordance with the following principles:

(h) the necessary measures are taken upon definitive cessation of activities to avoid any risk of pollution and return the site of operation to the satisfactory state defined in accordance with Article 22.



Article 12

Applications for permits

1. Member States shall take the necessary measures to ensure that an application for a permit includes a description of the following:

(e) where applicable, a baseline report in accordance with Article 22(2);



Article 14

Permit conditions

1. Member States shall ensure that the permit includes all measures necessary for compliance with the requirements of Articles 11 and 18.

Those measures shall include at least the following:

(b) appropriate requirements ensuring protection of the soil and groundwater and measures concerning the monitoring and management of waste generated by the installation;

(e) appropriate requirements for the regular maintenance and surveillance of measures taken to prevent emissions to soil and groundwater pursuant to point (b) and appropriate requirements concerning the periodic monitoring of soil and groundwater in relation to relevant hazardous substances likely to be found on site and having regard to the possibility of soil and groundwater contamination at the site of the installation;

(f) measures relating to conditions other than normal operating conditions such as start-up, leaks, malfunctions, momentary stoppages and definitive cessation of operations;



Article 16
Monitoring requirements

2. The frequency of the periodic monitoring referred to in Article 14(1)(e) shall be determined by the competent authority in a permit for each individual installation or in general binding rules.

Without prejudice to the first subparagraph, periodic monitoring shall be carried out at least once every five years for groundwater and ten years for soil, unless such monitoring is based on a systematic appraisal of the risk of contamination.

IPPC Review - IED / Discussion points

Periodic monitoring

- periodic monitoring not for all installations, reference (art. 15(d)) to dangerous substances likely to be found ...;
- if monitoring is required, it has to be periodic
- frequency of at least every 5 years (GW), 10 years (soils)

Monitoring of soil and groundwater and BREF-documents

- How to tackle monitoring of soil and groundwater and remediation of the site in BREF-documents?

+ monitoring of IPPC plant integrity



Article 22
Site closure

1. Without prejudice to Directive 2000/60/EC, Directive 2004/35/EC, Directive 2006/118/EC of the European Parliament and of the Council of 12 December 2006 on the protection of groundwater against pollution and deterioration and to relevant Community law on soil protection, the competent authority shall set permit conditions to ensure compliance with paragraphs 3 and 4 of this Article upon definitive cessation of activities.

Para 2...

2. Where the activity involves the use, production or release of relevant hazardous substances and having regard to the possibility of soil and groundwater contamination at the site of the installation, the operator shall prepare and submit to the competent authority a baseline report before starting operation of an installation or before a permit for an installation is updated for the first time after ...*.

The baseline report shall contain the information necessary to determine the state of the soil and the groundwater so as to make a quantified comparison with the state upon definitive cessation of activities provided for under paragraph 3.

* OJ: Two years after the date of entry into force of this Directive.



para 2 continues...

The **baseline report shall contain at least** the following information:

- (a) information **on the present use and, where available, on past uses** of the site;
- (b) where available, **existing information on soil and groundwater measurements** that reflect the state at the time the report is elaborated or, alternatively, new soil and groundwater measurements having regard to the possibility of soil and groundwater contamination by those hazardous substances to be used, produced or released by the installation concerned.

Where information produced pursuant to other national or Community law fulfils the requirements of this paragraph that information may be included in, or attached to, the submitted baseline report.

The Commission shall establish guidance on the content of the baseline report.

IPPC Review - IED / Discussion points

Baseline report

- necessary 'where applicable'
 - what is meant by 'where applicable'
 - how to define applicable?
 - reference to art. 22: 'where applicable' = use, production or release of dangerous substances having regard to the possibility of soil and GW contamination at the site of the installation ?
- used for determination of the 'initial state' (art. 22)
 - can we still speak about initial state when updating a permit
- which content? <-> *Soil Status Report of the Soil Protection directive*

“ Upon definitive cessation of the activities, the operator shall assess the state of the soil and groundwater contamination by relevant hazardous substances used, produced or released by the installation. Where the installation has caused significant pollution of soil or groundwater by relevant hazardous substances compared to the state established in the baseline report referred to in paragraph 2, the operator shall take the necessary measures to address that pollution so as to return the site to that state. For that purpose, the technical feasibility of such measures may be taken into account.

Without prejudice to the first subparagraph, upon definitive cessation of the activities, and where the contamination of soil and groundwater at the site poses a significant risk to human health or the environment as a result of the permitted activities carried out by the operator before the permit for the installation is updated for the first time after ...* and taking into account the conditions of the site of the installation established in accordance with Article 12(1)(d), the operator shall take the necessary actions aimed at the removal, control, containment or reduction of relevant hazardous substances, so that the site, taking into account its current or approved future use, ceases to pose such risk.”

IPPC Review - IED / Discussion points

Remediation to initial state from baseline report

- zero-tolerance as a principle
- how to deal with small elevation of concentrations not reaching remediation standards?
- what with update of a permit?
- only risk approach when baseline report wasn't necessary
- does this imply that all operators have to conduct a soil investigation at definitive cessation?

Para 4

4. Where the operator is not required to prepare a baseline report referred to in paragraph 2, the operator shall, upon definitive cessation of the activities, take the necessary actions aimed at the removal, control, containment or reduction of relevant hazardous substances, so that the site, taking into account its current or approved future use, ceases to pose any significant risk to human health or the environment due to the contamination of soil and groundwater as a result of the permitted activities and taking into account the conditions of the site of the installation established in accordance with Article 12(1)(d).

Site closures currently in the UK

- Unprecedented period of site closures
- Practical experiences in permit hand back



A RISK BASED APPROACH TO SOIL – CIA UK

“There is a need to ensure that the risk to soil and groundwater is properly assessed and that appropriate measures are taken to prevent soil contamination. The type and frequency of monitoring of emissions should be determined depending on the specific needs of the installation. This will ensure that the environment is protected as a whole and that there is no superfluous monitoring.

A soil baseline report is a useful tool to achieve this. It identifies the environmental setting and provides an inventory. It also sets the basis to determine appropriate measures to prevent soil contamination. A quantitative assessment requires spot monitoring to determine the concentration of dangerous substances in soil and groundwater.



A RISK BASED APPROACH TO SOIL – CIA UK (2)

This will not necessarily give a good indication of the state of the environment because only part of the soil will be checked. In addition, it is not practical to monitor underneath industrial installations, as they are often sealed precisely to prevent potential leaking of material on the soil.

We therefore fully support Articles 3(18) and 22 .2 and 22.3 on soil baseline report, Articles 14.1.b & e) and 17.2 on soil monitoring which are risk-based and will ensure that soil is adequately protected.

We do not support mandatory quantitative assessment of soil because this is not practical.

CASE STUDY 1 – Specialty Chemical site closing 2009

Baseline plan was presented 5 years ago, regulators could not agree on what was a satisfactory monitoring or sampling regime, so site did not feel they could take it forwards until they had regulatory approval.

On closure, regulator now holding up permit hand back, as there is no baseline to compare it to. Regulator now requiring very comprehensive site condition report, and not paying any regard to Environmental Management systems in place to monitor spills, volumes etc. Owner has two conditional offers for site on permit surrender but cannot progress. Concern by all parties as jobs at stake in area.



Case Study 2 – Closure of specialty chemicals co in UK 08-09

Company in process of buying demolished site on which to construct & expand current licensed operations. Inspector did not require baseline.



CASE STUDY 3 – Specialty Chemical site closing end 2009

Baseline plan was presented 5 years ago, and accepted by regulator – included trial pits, boreholes, etc. Scope was agreed on accessible areas.

On closure, regulator now demanding that baseline is repeated FOLLOWING demolition, and that additional sampling is undertaken underneath all the building footprints, slabs infrastructure etc. holding up permit hand back,

Implication, site operates under permit until after all demolition works completed, extension of permits, fees etc etc.



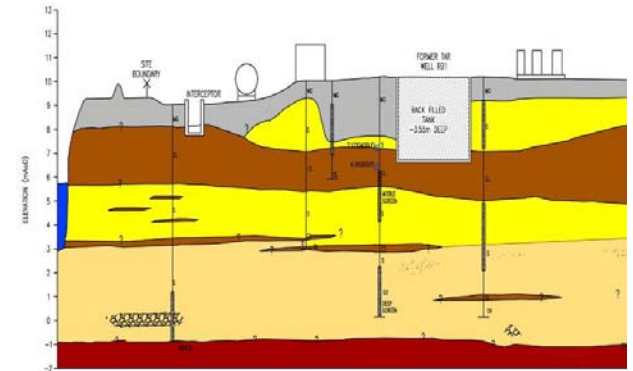
Case Study 4 – Closure of waste sites in UK 08-09

Handed back permits, took a lot of time and was very slow.

Inspector did not require baseline but was inconsistent between different sites



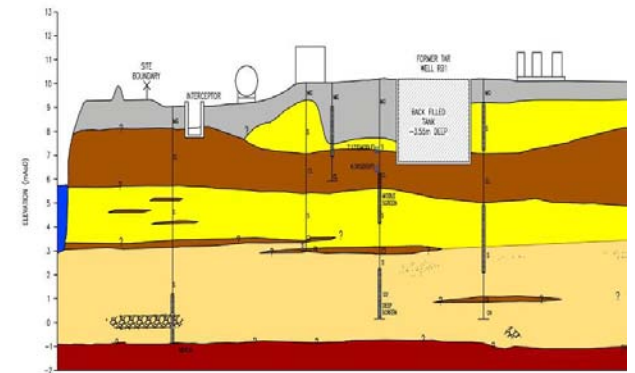
Industry Concerns



- Introduction of even more uncertainties into site closure and transfer
- Rules now are not tested fully yet – only had PPC for a few years
- Regulatory inconsistencies – totally down to inspectorates interpretation
- More difficult to find buyers
- Historically, they have decommissioned sites and sold them with information. Now not acceptable, they have to decommission and demolish to satisfy inspectorate
- Future, they can see the site closure process being extended further from decommissioning, to demolition, and then into site restoration. They do not see themselves as the best people to do this – in the UK because of the Brownfields market and industry, they see other specialist brownfield players as better qualified to do this.

Industry Concerns

- Change the way to do due diligence
- Counter Sustainability
- Fundamentally different to our risk based approach to remediation
- We do not know how technically to assess difference between baselines – there is no way can actually do this



Industry Needs

- Proper discussion on what constitutes a baseline – should be European wide and based on industry experience / expertise – site owners involvement
- Research and documentation on statistics and characterisation in baselines
- Evidence base of cases – successes and difficulties
- Flow chart / Road Map –
 - For site closure
 - Interrelationships between Remediation for Site closure and for other legislation
 - Sustainability Assessment – how fits into story
 - ? Influence via BREF – working groups?





NICOLE

Site closure workshop – Douai 2009

