

THE SOIL AND GROUNDWATER TECHNOLOGY ASSOCIATION

SAGTA REPORT 12 - PPC AND CONTAMINATED LAND

PPC regulations and the question of how site conditions and restoration is to be managed formed the topic for SAGTA's June 2000 Workshop. With the act now law, representatives of the Environment Agency and SEPA joined SAGTA Members to discuss the practical issues of initial site characterisation for permit applications and the implications of comparison of land investigation data when permits are to be surrendered.

The workshop considered the following issues:

- current developments/ issues related to the new regulations
- guidance available
- case studies illustrating practical problems

As a result, three key topic areas were debated in further detail:

- practical aspects of baseline studies
- interface of PPC with other legislation
- management issues during transition periods

Outputs from Workshop discussions

Baseline Studies

The issues related to the Baseline Studies were examined. In summary:

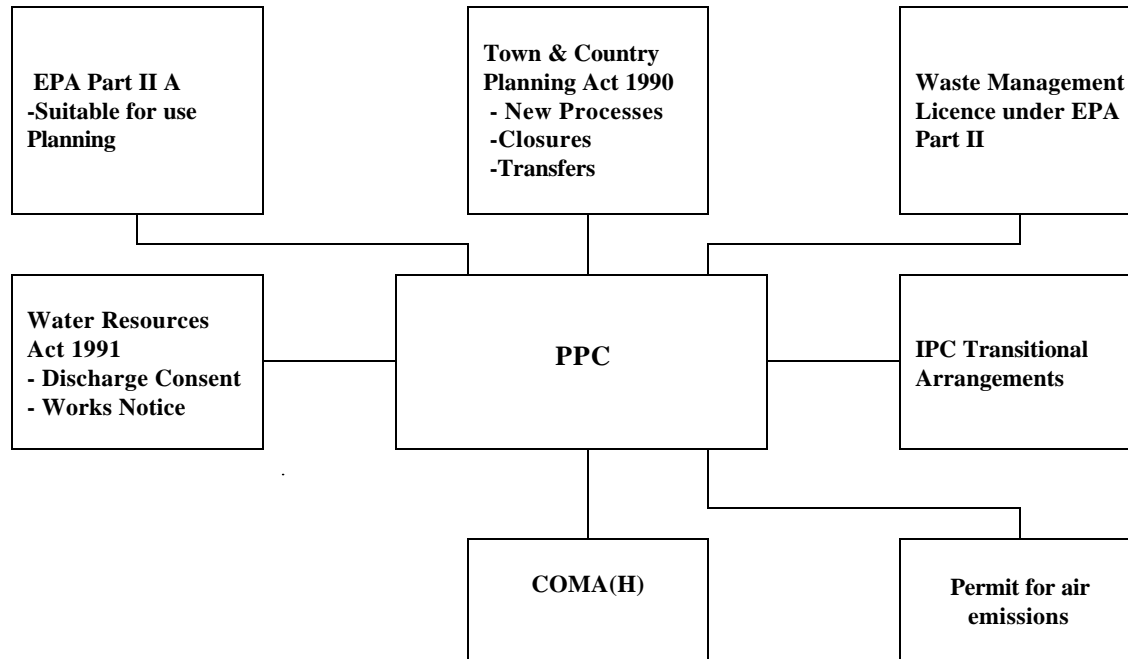
- the preferred options for baseline studies is to take a risk based approach and compare the current risks to risks in the future. The practicality of returning back to the original conditions is also an issue deserving of examination. The main risks associated to baseline studies are:
 - appropriateness of the site investigations
 - rejection of application
 - lateness and uncertainty
- key issues are:
 - the practical difficulties of returning sites back to original conditions should be examined
 - analytical problems / issues are mainly related to:
 - variability of sampling (may be unimportant)
 - changes over time
 - archiving of samples should be considered
 - baseline conditions for new sites are easier to define. To evaluate sites, different statistical techniques should also be considered covering amongst other things:
 - cost benefit analysis
 - sampling strategies, etc.
 - there is a need to keep good records to identify when there is a change in existing site conditions. There is also need to allow for updating as new data is obtained
 - consideration of alternative approaches to define baselines. These may include:
 - good inventory control to monitor product input and output.
 - carry out limited sampling
 - the amount of sampling work is carried out at owner's risk
 - preparation of an exit strategy from the outset.

Areas where SAGTA can contribute

- carry out case studies in partnership with the Environment Agency
- examine and review existing data
- contribute to compiling position papers.

PPC legislation interface with related legislation.

The interrelationship with other legislation in a diagrammatic form was developed as part of the discussions. In obtaining a PPC licence, an operator has to consider the legislative interactions



Areas where SAGTA can contribute

- assist in the detailed review of legislative interrelationships
- contribute to dialogue with DETR
- contribute to considerations when other EU Directives are scheduled and how PPC impacts

Management of transitional arrangements

Issues considered:

- interim guidance on delivery compliance is needed, for example:
 - how to ensure something that is built as new now will comply with future legislation.
 - existing tanks/bunds requiring retrofitting. Proposal to base this on a risk basis.
 - means of monitoring existing sites to demonstrate compliance or current conditions
- complementary management approaches could include:-
 - transparent improvement in infrastructure management
 - quality assurance / quality control procedures for design / construction/ maintenance operations
 - introduction of environmental management systems
- implications on financial reporting should be considered
- setting and clarifying the definition of what constitutes an installation

Areas where SAGTA can contribute

- review and offer input into guidance on site preparation
- consider case studies
- act as means of dissemination of information for issued documents / guidance.

Summary of the workshop

The Environment Agency's activities

The PPC Act 1999 is now law and came into operation as from 1st August 2000. As preparation, the Environment Agency has issued a Regulatory Package for consultation, which includes guidance onsite reports.

Operators have to prepare a site report to describe baseline conditions on the site on Day 1 and upon which future remediation requirements at surrender of permits would be based. On surrender of the permit, the operator has to provide amongst other things a final site report affording evidence that the site has been restored to its original condition.

SEPA's activities.

SEPA has developed guidance on contaminated land and PPC. The main points are that PPC regulations are based on the principle of sustainable development. It seeks to prevent pollution and ensure that the land is not degraded compared to its condition prior to operation under PPC.

Site investigations of operational sites. SEPA guidance identifies that a thorough desk study is to be carried out before site investigations. The guidance recognises that investigation of operational sites needs careful consideration. It was acknowledged that groundwater monitoring is a good indication of soil quality and that testing needs to be directed at chemicals the operator is planning to employ

Closure reports. When decommissioning and demolition is finished the guidance confirms the need for a closure report.

SAGTA case studies

These offered perspectives of past experience. One case study dealt with issues on the implications of land under the terms of a PPC licence to cover the eventuality that if the operator goes out of business the regulator requires the means of restoring the site to its original condition.

A second case study provided an illustrative example of how site heterogeneity may well cause problems in defining site baseline conditions.

The approach taken in preparing IPPC site reports formed a third case study. Key issues were:

- setting the boundary of installation
- acknowledging that identification of all contamination may not be possible
- balancing S I costs with future remediation cost needs consideration
- costs of sampling during the lifetime of an installation need to be optimised

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