Environmental Tools:

Integrated Permits

What are integrated permits?

Integrated permits/approvals stipulate limits on a facility-wide basis (treating the facility as a "bubble") rather than on each individual source/activity within a facility. The integrated emission limit (or facility cap) may be expressed for a single pollutant across all sources (e.g. the cap on SO_2 emissions from all stacks) or for a single pollutant emitted across media (e.g. elemental lead cap to air and water). In general, this approach gives regulated parties the flexibility to adjust and trade emission levels between sources within the facility as long as the combined total emissions from all sources does not exceed the emission cap. Bubble licensing is comparable to emissions trading but operates within a single facility. This approach provides a high degree of flexibility for regulated parties to meet environmental objectives. Integrated permit schemes are not an alternative to tools like design-based standards and ambient-effects standards, but rather can and are often used in combination to enhance the flexibility and reduce costs of compliance.

Where are they used?

Applications of this tool are currently limited, but are being explored more extensively by environmental agencies worldwide. The approach is most applicable for large integrated industrial facilities that have numerous regulated sources or points of emissions and where different methods and marginal costs of controls exist between sources.

Minnesota Pollution Control Permitting Program

Minnesota has piloted a facility-wide bubble where a single permit sets an aggregate emissions limit to one medium for the entire facility, allowing the facility to shift control responsibilities among individual sources.

European Union IPPC Directive

European Union member states are currently implementing an integrated permit system under the Integrated Pollution Prevention and Control Directive. This permit system requires member state regulators to set limit levels and conditions of permits to enhance environmental performance as a whole and requires facilities to account for all environmental impacts. This system has been designed to cover 32 business sectors, including energy, metals, minerals, chemicals, waste management, pulp and paper, food and drink, intensive agriculture, textiles, glass, and ceramics.

Tool performance:

Pros

- Because organizations have opportunities to reduce pollution control costs, the overall emission cap can be set lower than the total of all emissions from each individual source.

- The flexibility offered in meeting a facility-wide cap on emissions, rather than source-by-source limits, can provide substantial cost savings to regulated parties that choose the best-cost option of abating pollution within the facility.
- As with emissions trading schemes, innovation is promoted as facilities are encouraged to develop new technologies and approaches that will minimize costs.

Cons:

- Determining compliance may challenge a regulator's administrative capacity and prove costly because offences cannot be registered against a single source.
- Evaluation of the emissions from all sources combined must be completed to determine whether compliance is achieved.
- Cross-media integrated permitting is complex to establish and administer. The organization must have accurate and adequate data to weigh all facility inputs and outputs and consider the conversion factors for all possible cross-media transfers.
- Monitoring is required to track and report emissions of the pollutant from all sources and to verify compliance with the facility cap.