Environmental Tools:
Performance-Based Standards

What are performance-based standards?

A regulatory approach that prescribes the environmental outcome expected, but not the means by which the result is to be achieved. The regulated party can choose the easiest or most cost-effective way to comply with a standard. These types of standards are most appropriate where adverse environmental effects may still result despite a design or technology standard having been imposed, but are designed to continually support better environmental outcomes.

Where are they used?

Performance-based standards are typically used in combination with design-based standards, which promote pollution prevention. An example of a performance-based standard is the requirement for small sour gas plants that flare acid gas to achieve a one-hour ambient guideline for sulphur dioxide emissions as predicted by dispersal modeling. A sulphur recovery technology is not specified.

Tool performance:

Pros

- Outcome focused.
- Allow regulated parties to find the most cost-effective approaches to reach the target.
- Allow regulators to manage existing and potential environmental and public safety issues as it relates to the effects of a pollutant.
- Promote innovation in the creation and adoption of new technologies to prevent pollution when adverse effects may still result.
- Can spur competitive advantages amongst firms within jurisdictions that employ performance based standards, to that of firms in jurisdictions that rely on traditional regulatory tools.

Cons

- May not provide sufficient fiscal incentives for a company to act in a proactive manner with respect to pollution prevention.
- May impose significant demands on government agencies in the application of scientific analysis and understanding of some pollutants and activities, which can change over time.
- Difficult to implement in a situation where many polluters contribute to the same problem.

Special considerations:

This tool is one of the cornerstones of Alberta's Air Quality Management System. All applications are required to assess if ambient (performance-based) standards will be met and under what conditions.