

## **Consistent Environmental Regulatory Acceptance for Technologies Relating to Soil, Water and Air**

There are approval mechanisms in place for drinking water, waste water plants and transportation usage across Canada. However, when dealing with systems that do not immediately involve human receptors, (ie. aquatic ecosystems and other open loop systems) that have potential to release to the receiving environment no consistent mechanism across Canada currently exists for industry product approval for water or soil chemical usages that supports best available technologies. This is true not only at the federal level but at the provincial and municipal levels as well. The current acceptance process only requires that an MSDS and in some cases a Toxicology report be provided but do not contain minimum/maximum threshold guidance, leading to a broad acceptance of products that continue to pose significant risk to the environment. Many of the products used today also pose a risk via the carrier/distribution means (eg. surfactants, emulsificants). There is limited guidance and decision making tools available to regulatory staff in accepting the best product (via the current system – MSDS/toxicity report absent of range/thresholds).

Many effective products cannot find their way to market easily because end users typically request approvals letters from the regulators before they will change a product, regardless of cost. Regulators such as Environment Canada state that they are unable to provide such approval. The cost to bring a new technology or product to market is prohibitive enough without having to compete with the very regulations (or lack thereof) that should be supporting more environmentally friendly solutions.

Existing products are allowed to continue due to “grandfathering in” and are not required to provide any similar types of letters of approval. This gives existing technologies, regardless of their impact on the environment, a definite advantage over any newer, better, more environmentally preferable technologies. In some cases existing suppliers are able to avoid having to provide toxicity reports. Instead they utilize MSDS sheets as a toxicity report and the same are being accepted because their products are grandfathered in. Newer technologies in many cases can potentially be more cost-effective than existing technologies due to increased quality of water and increased efficiencies, reduction in post application costs, reduced maintenance costs, less monitoring requirements, simpler and more passive operations and reduced labor costs.

In summary federal environmental requirements do not necessarily always match provincial or municipal requirements on projects with shared jurisdiction. This absence of a coordinated regulatory approval process greatly hinders the development of better technologies that are developed to improve our environment.

### **Recommendations**

That the federal government work with the provincial and territorial governments to:

1. Develop consistent requirements for regulations within the environmental sector across Canada and its individual provinces/territories.
2. Ensure that the regulations apply to new products/process or technologies as well as all existing products/process or technologies.
3. Ensure that toxicological data, following accepted standards and practices, has been provided as opposed to relying solely on MSDS information to ensure that a product or technology is verifiably safe to the environment.
4. Ensure that the regulations are realistic, have impact and meet the requirements of all the regulatory bodies and the environment.
5. Implement a harmonized product review standard between the various regulators, Municipal, Provincial/Territorial and Federal that allows a clear and consistent standard that all product,

technology suppliers, manufacturers and or companies must adhere to and or meet. If a product or technology meets acceptable criteria as defined by the product review standard then the product would become a recognized technology within the various Canadian jurisdictions.