

Regulatory Approval for Soil and Water Technologies

Issue

There are approval mechanisms in place for drinking water and wastewater plants, and for Alberta transportation usage as well as across Canada. However, there is currently no existing mechanism for product approval for industry in Alberta for water or soil chemical usages that supports best available technologies. Current acceptance only requires that a material safety data sheet and toxicology report be provided; however, there is no minimum/maximum threshold guidance, and there is broad acceptance of products that still pose significant risk. We appreciate recent government action taken to address some concerns. There is still, however, more important work to be done, especially for products that focus on soil chemistry.

Background

There are approval mechanisms in place for drinking water and wastewater plants, and for Alberta transportation usage as well as across Canada. However, there is currently no existing mechanism for product approval for industry in Alberta for water or soil chemical usages that supports best available technologies. Current acceptance only requires that a material safety data sheet (MSDS) and toxicology report be provided; however, there is no minimum/maximum threshold guidance, and there is broad acceptance of products that still pose significant risk.

Many of the products used today also pose a risk via the carrier/distribution means (e.g., surfactants, etc.). There are limited guidance and decision-making tools available to regulatory staff in accepting the best product (via the current system –MSDS/toxicity report, yet no range/thresholds). Although regulatory fines are starting to become more significant, enforcement capabilities are still limited, and toxic products and dated processes are still heavily used.

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 or Alberta regulatory groups such as AEP (Alberta Energy and Parks), AER (Alberta Energy Regulator), 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, and more environmentally friendly technologies. In some cases, existing suppliers are able to avoid not having to provide toxicity reports. Instead, they utilize MSDS sheets as a toxicity report and they are being accepted because their products are grandfathered in. Total cost to the end user with 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, fewer monitoring requirements, simpler and more passive operations, and reduced labour costs. For instance, a fish kill at a local mine could have been avoided as the company was informed of alternatives yet did nothing to change products or processes. Enforcement officers for the regulatory departments are also frustrated, along with new technology companies due to the lack of approval mechanisms being in place.

Municipal requirements do not match provincial requirements, which do not match federal requirements. This results in companies that have proven their products/technology to one provincial department, such as Transportation and Infrastructure, having to prove it again to the provincial environment regulators or the municipal regulators or the federal regulators, such as the Department of Fisheries and Oceans, even though they may be working on the same road but just in a different jurisdiction. This absence of a coordinated regulatory approval process greatly hinders the development of better technologies which are made to improve our environment.

There have been recent government actions that have helped address industrial challenges, including more stringent fines for non-compliance, however, there is more work to be done, especially around municipal regulation harmony, and updates to soil chemistry regulations.

The Alberta Chambers of Commerce recommends the Government of Alberta:

1. With consultation from stakeholders, develop consistent requirements for regulations within the environmental sector;
2. Ensure that the regulations apply to any new products, processes and technologies, as well as all existing products, processes and technologies;
3. Ensure that toxicological studies have been performed on all products being used and are available on request (new and existing) in addition to the provision of MSDS sheets;
4. Work to ensure that regulations municipally, provincially and federally are streamlined, consistently applied and have a coordinated regulatory approval process; and
5. Implement a product-review standard between the various regulators. If the product or technology meets the criteria, then it passes for all the regulators.