



PROJECT SNAPSHOT

AUSTRALIAN FIRST: TOXFREE INTRODUCE LANDSPRAY TRUCK

The issue

Drilling by-products are produced as a result of drilling wells and comprise of a mixture of drilling fluids, mud and solids. Typically, these muds and fluids are transported from drilling sites and gas wells in vacuum tankers and sent to licensed facilities to be processed. This method consumes valuable time and resources, with the transport adding unnecessary carbon emission, increasing carbon footprint of the operations.

The solution

Toxfree is constantly looking for innovative methods to benefit customers and the environment. After significant research, a specialised vacuum tank was found in Canada capable of Landspraying While Drilling (LWD). This is a method of managing water-based drilling by-products that can further minimise disturbance associated with drilling operations. Volvo Australia worked closely with the body manufacturer in Canada to ensure that all standards were met and the two major components were 100% compatible. The LWD truck combines the vacuum tank and navigation technology with the Australian custom built Volvo 10x6 chassis, featuring variable tyre pressure control for instant stability over all types of terrain. The vacuum tank contains agitators that spin to keep the drilling by-products moving to ensure continued solids suspension. The mud is then sprayed into nearby designated agricultural land at electronically controlled application rates.



The outcome

The truck demonstrates that drilling mud can be managed by landspray in a manner that preserves soil chemical, biological and physical properties, does not harm vegetation and protects the quality of the surface and groundwater, and is EHP approved. This method for managing drilling mud minimises the environmental footprint associated with drilling operations. Toxfree are also reducing the amount of heavy truck traffic on roads as the result of transporting drilling by-products to a processing facility.