



**META**FLO  
technologies™

## Transforming Hydrovac Waste into Agricultural Benefits

MetaFLO repurposes hydrovac mud to improve soil health and sustainability for Canadian farmers, turning an industrial byproduct into a valuable agricultural resource.

CASE STUDY



PROJECT

# MF006 - REUSE OF SOLIDIFIED HYDROVAC MUD ON FARMLAND

Canada

## MF006

MetaFLO Technologies

### Challenge

Hydrovac operations generate significant volumes of slurry, a mixture of water and soil that can be challenging to dispose of. Traditionally, hydrovac mud is considered waste and is often sent to landfills, where it contributes to environmental strain and incurs high disposal costs. However, the hydrovac mud's properties offered potential as a soil amendment to improve water retention, particularly valuable for Canadian farmers facing increasing water management needs. The challenge was to stabilize the mud to meet agricultural standards while reducing its environmental impact, creating an opportunity for sustainable reuse in farming.

### Solution

MetaFLO applied a customized solidification reagent on-site to treat the hydrovac mud, transforming the slurry into a stable, beneficial soil amendment. This process solidified the mud, stabilizing its composition and improving its ability to retain moisture. By enhancing water retention, the treated mud could help farmers reduce irrigation needs, aligning with sustainable agricultural practices. The solidified mud met safety standards for soil application, allowing farmers to apply it directly to fields, where it supported soil structure and moisture levels. This process provided a practical alternative to traditional disposal, keeping valuable material in use and reducing waste.

### Outcome

- ✓ **SUSTAINABLE REUSE**  
The solidified hydrovac mud was diverted from landfill disposal, reducing environmental strain and supporting a circular economy by repurposing industrial byproducts.
- ✓ **ENHANCED SOIL MOISTURE**  
MF006 improved water retention in treated soil contributed to healthier crops and reduced reliance on irrigation, aligning with sustainable agricultural practices and lowering water costs for farmers.
- ✓ **ENVIRONMENTAL IMPACT**  
This innovative use of hydrovac mud promoted eco-friendly practices in both the industrial and agricultural sectors, demonstrating MetaFLO's commitment to sustainable waste management and environmental stewardship.

