



CONTAMINATED SOIL REMEDIATION

Municipal Landfill Partnership

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Client

- Oil & Gas Producer

Problems

- Hydrocarbons
- C₆-C₁₀ ± 3,700 ppm
(Criteria = 260 ppm)
- Benzene ± 100 ppm
(Criteria = 0.05 ppm)
- Toluene ± 140 ppm
(Criteria = 0.1 ppm)
- Ethyl-Benzene ± 100 ppm
(Criteria = 0.1 ppm)
- Xylenes ± 400 ppm
(Criteria = 0.1 ppm)



Project Summary

The impacted soil was contaminated with petroleum hydrocarbons resulting from a former on-site underground storage tank (UST). The targeted remediation goals were the Saskatchewan Environment Criteria for BTEX and PHC fractions in a fine-grained surface soil using an agricultural land use. A total of approximately 1,100 m³ was transported to a designated treatment pad where bioremediation was initiated by utilization of our dual-drive Allu bucket attachment. The remaining bioremediation process was completed within a windrow turner.

Results and Advantages

- Achieved successful remediation for Benzene, Toluene, Ethyl-Benzene, Xylene and F1 (C₆- C₁₀) petroleum hydrocarbons (results were <0.04 ppm, <0.10 ppm, <0.10 ppm, <0.10 ppm, and a range of 20 to 46 ppm respectively).
- Treated material was subsequently used as daily cover at the landfill.

Duration and Cost

- Project completed in 2 months.
- Project Cost:
± \$57,000.00 (on budget)

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