

SOIL TECH

SOIL REMEDIATION

HYDROCARBON CONTAMINATED SOIL REMEDIATION

THE NATURAL SOLUTION TO OIL POLLUTION PROBLEMS

(MPDS)

SOIL TECH neutralizes oil pollution in Soil and Gravel by making them inert and changing them to a non-hazardous substance called organo silicate. SOIL TECH has been specifically designed to neutralize toxic hydrocarbons to a non-hazardous and irreversible state under normal pH conditions. This process is simple and fast leaving the converted hydrocarbons inert.

SOIL TECH is at the forefront of the natural and environmentally safe treatment of the remediation of oil contaminated Soil.

PROPERTIES:

SOIL TECH is:

- ✓ Non-flammable
- ✓ Water-soluble
- ✓ Non-hydrocarbon
- ✓ Fire-suppressant

SOIL TECH's remediation process is faster, requires less labour and is environmentally safer to use than any other method of soil remediation.

COMPOSITION

SOIL TECH is based on a complex blend of mineral silicates, and solution. It is a clear liquid with no discernable odor, with a Specific Gravity of less than 1.25 and which is miscible with water. It has an alkali pH.

ACTION

SOIL TECH eradicates oil, diesel, petrol, slicks, and fat stains from Soils. There will be no leaching of contaminants.

READILY BIODEGRADABLE

SOIL TECH is readily biodegradable and is safe for use in environmentally sensitive areas.

HANDLING AND STORAGE

Store in a cool, dry, non-freezing place and keep containers closed. Avoid eye and skin contact and do not eat or drink in the storage facility.

CAUTION

SOIL TECH could etch glass if allowed to dry on a glass surface. If it comes into contact with glass, wash off immediately with clean water.

Do not allow SOIL TECH to come into contact with skin or eyes. If SOIL TECH splashes onto skin or into eyes, it can cause irritation. Wash immediately with large amounts of clean water.

DIRECTIONS

NB. Do not dilute.

Equipment required

A high-pressure spray system, rubber boots, rubber gloves and goggles.

- It is recommended to take soil samples before, during and after the process to accurately record the improvement in the health of the soil. (Lubritech can facilitate the testing at an independent Laboratory)

SOIL REMEDIATION

SUMMARY

1. Test the soil to determine the level of the Hydrocarbon contamination percentage
2. Till the soil while spraying SOIL TECH directly onto the soil
3. Continue to till the soil to expose all the contamination and continue to spray until saturation
4. Leave for 24 hours
5. Test the soil to determine the level of the Hydrocarbon contamination percentage
6. Further treatments may be necessary

DETAILED PROCESS

1. Small spills on gravel, tailings and soil

Completely loosen all the polluted soil (Steel rakes or forks) While breaking-up and tilling the soil, a second person must apply SOIL TECH, using a high pressure spray pump applicator. Ensure that SOIL TECH comes in contact with all of the polluted soil. A second treatment may be necessary 3 – 7 days later. When spillage is not fresh ie, two weeks and older, additional treatments may be required.

After one month, soil samples can be tested, and depending on the results, the soil can then be returned to it's original location.

2. Large spills on soil, gravel, tailings and clay

Ideally the polluted soil should be remove to a concrete slab. The polluted soil should be spread to a depth of approximately 150 mm. Apply SOIL TECH via a high pressure spray pump applicator while the soil is being broken-up and tilled. Ensure that all soil receives a liberal treatment of SOIL TECH. Once treated the soil should be turned every couple of days. A further treatment should be done after 3- 7 days. Once again the soil can be turned as this will help with the remediation process.

After one month, soil samples can be tested, and depending on the results, the soil can then be returned to its original location.

When treating excessive volumes of soil, earthmoving equipment can be used for the tilling process and portable cement mixers can be used for the remediation process.

3. Polluted stones and ballast

Use a portable cement mixer. Place polluted stones in cement mixer and wash for five minutes. Allow to dry and return to their original location. The resultant solution in the mixer can be poured onto the ground.

Soil samples can be taken after one month and sent to a certified laboratory. (Lubritech can facilitate the testing)

Method of analysis should be the GC (Gas chromatography) method.

Note: SOIL TECH will leave a white residue. It is the organo silicate residue and will disperse naturally.

Clean and rinse all application equipment; flush out sprayers and nozzles

REMIEDIATING CONTAMINATED EARTH

BEFORE APPLICATION



AFTER APPLICATION



Note how SOIL TECH has dried out the ground and broken down the oil. There are still some areas that need another application.