

Prepared by Lubritech (Pty) Ltd



**Hydrocarbon Remediator &  
Degreaser**

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## **THE PROBLEM**

**HYDROCARBON CONTAMINATION...**

Is not only a

**SAFETY HAZZARD**

but also an

**ENVIRONMENTAL PROBLEM**



# IGNORING PRO-ACTIVE HYDROCARBON CONTAMINATION CONTROL

There could be lapses in adherence to good practice in environmental management and pro-active hydrocarbon contamination control could be ignored, as a result of:

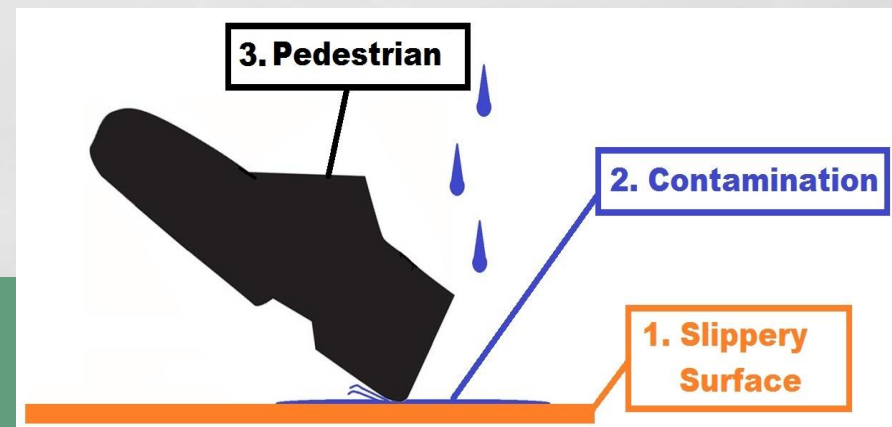
- **The pressure on reducing of operating costs**
- **Lack of information on the impact of contamination**
- **Lack of training on how to handle oil spills effectively**

Inadequately controlling hydrocarbon contamination on mining sites can have many negative consequences for a company:

- **Safety**
- **Environmental**
- **Metallurgical Plant Performance**

# SAFETY FIRST

- Hydraulic, oil, fuel pipe bursts, fuel and oil spills occur on a regular basis above and underground and on roadways and in workshops.  
Due to these spills, Decline's, roadways and all concrete/tarred areas are covered with oil on a daily basis causing slippery and unsafe surfaces.
- Mines waste thousands of litres of degreaser every month attempting to wash these spills away but actually end up moving the oil from point A to point B.
- When using the incorrect degreaser the surface being cleaned will always be soapy and therefore slippery.



# ENVIRONMENTAL

- Mechanized mining equipment moves the oil via their large tyres and pressurized hoses that break and leak onto all surfaces that they travel on.
- This happens on a daily basis, hence the surface areas become saturated with hydrocarbon contamination. Even after it is washed off it quickly turns black again due to capillary action.
- The hydrocarbons need to be pulled out of these roadways on a continuous basis as they are deposited on a daily basis. When HTech is used on a daily basis, this saturation would not take place.

# WHAT IS CAPILLARY ACTION AND HOW DOES IT WORK?

- Due to concrete and soil being porous the area is saturated with hydrocarbons and seeps into the concrete or soil.
- Core drilling samples taken from these surfaces has shown that this can be up to 200mm in concrete and in soil a few meters.
- Heat from the sun fast tracks this process. When an area is washed and cleaned with a standard degreaser, it will become slippery and unsafe again as soon as the oil resurfaces due to the capillary action.

# WHAT IS THE SOLUTION?

## HTECH

- **HTech** is at the forefront of natural and environmentally safe treatment of the remediation of oil staining and pollution.
- **HTech** changes hydrocarbons to inert (chemically inactive) organo-silicates.
- **HTech** has been specifically designed to render the hydrocarbons inert.
- **HTech** is environmentally safer to use than detergents and solvent based degreasers.
- **HTech** is safe to use and will have little or no negative impact on the downstream flotation circuit of the concentrator plant.



# HTECH

- **HTECH PROPERTIES:**

- Non-flammable
- Water-soluble
- Fire-suppressant
- Inert

- **HTECH ACTION:**

- Eradicates oil, diesel, petrol, grease, fat stains and slicks from all hard surfaces, including tarred roads.
- There will be no leaking of contaminants into the soil, as they no longer possess their chemical fingerprint.

# EXAMPLE 1

## General Practice



- Degreaser is used to cut the hydrocarbons off the contaminated surface.
- Leaving the floor still slippery until washed off.

## Proposed Solution



- **HTECH** is used to make the hydrocarbons inert.
- Leaving the floor non-slippery.

## EXAMPLE 2

### General Practice



- A Broom is used to work the degreaser into the floor.
- This is time and labour intensive.



### Proposed Solution

- HTECH is sprayed on with a high pressure hose.
- Time and labour is used productively.



## EXAMPLE 3

### General Practice



- Pipes and water ways are contaminated and resulting in an environmental problem.



### Proposed Solution

- Pipes and water ways are now clean and the mine is environmentally compliant.



# IMPROVED SAFETY EXAMPLE

## Before



## After HTECH



# IMPROVED SAFETY EXAMPLE

## Before

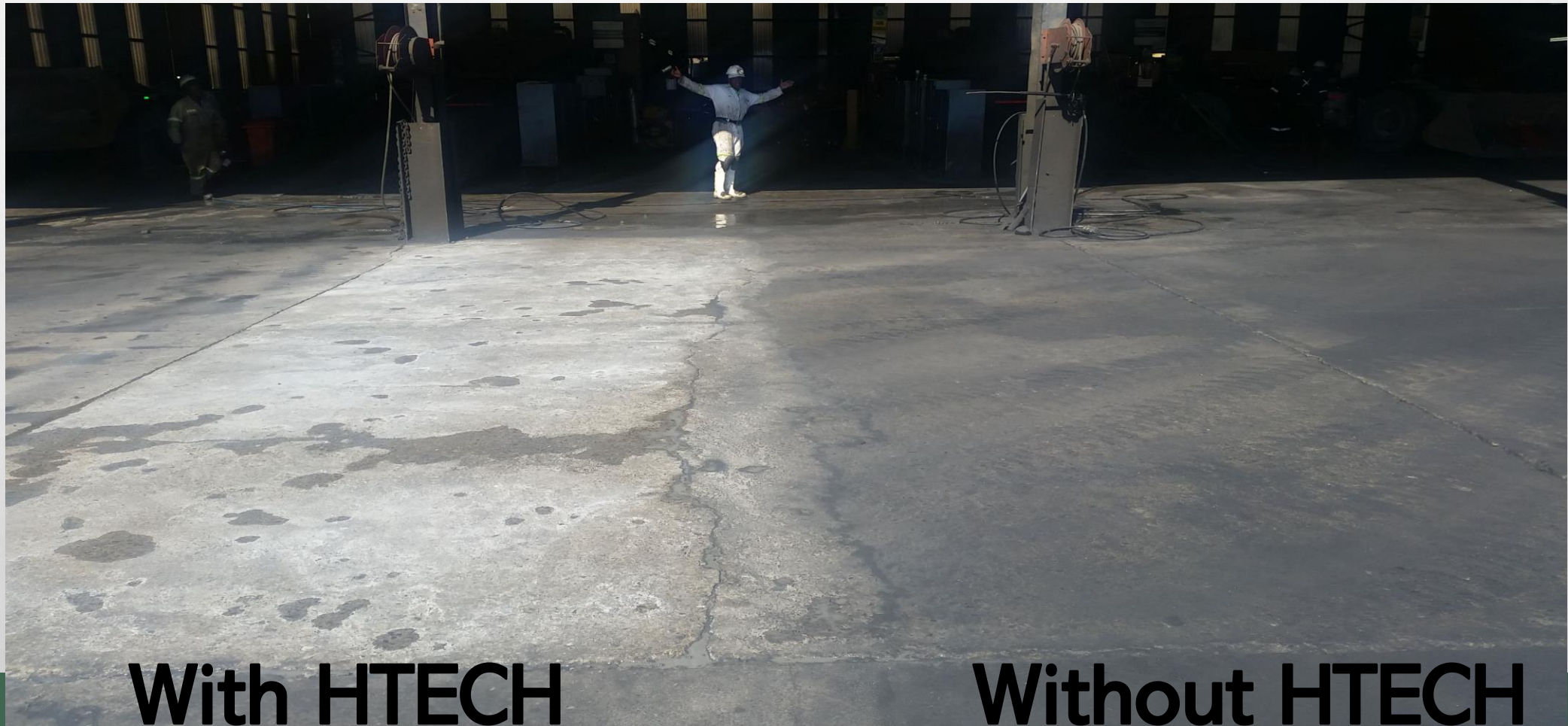


## After HTECH





# IMPROVED SAFETY EXAMPLE





# HTECH BEFORE AND AFTER APPLICATION



**Without HTECH**



**With HTECH**



# WORX DEGREASER – GENERAL INFO

## Serving our Customers

At a time of rapid advances in technology, Lubritech Pty Ltd can help our customers manage technological advances more effectively and so allow our customers to be more pro-active in implementing cost saving solutions adding value and realizing faster returns on investment, Lubritech Pty Ltd is a leader in specialized products and technologies.

Prerequisites generally accepted for Lubritech Pty Ltd green criteria are as follows for blended products:

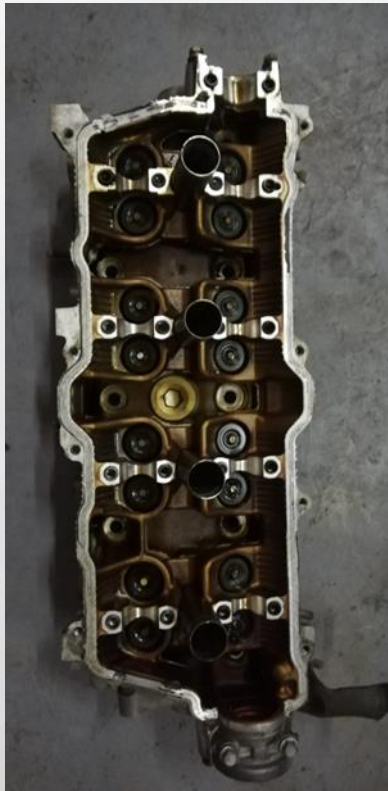
- No Phosphates,
- No Phosphonates,
- No EDTA,
- No “Dangerous to the Environment” classification, and
- No Bioaccumulation.

# WORX DEGREASER (READILY BIODEGRADABLE)

The amount of surfactant used in a degreaser formulation is calculated by the critical micelle concentration, knowing this figure is key to efficacy and economic viability of the degreaser formulation.

(We as the manufacturer will design an effective product to suite the specific need if required).

# WORX DEGREASER – EXAMPLES (before and after application) - 1



# WORX DEGREASER – EXAMPLES (before and after application) - 2





# WORX DEGREASER – EXAMPLES (before and after application) - 3

**Before**



**After**



**Before**



**After**



# CONTACT US

## HTECH & WORX DEGREASER

- Call: Ferdi 061 426 5621 / 0861 000 487  
to set up a demonstration
- Email: [ferdi@lubritech.co.za](mailto:ferdi@lubritech.co.za) /  
[admin@lubritech.co.za](mailto:admin@lubritech.co.za)

