

# Hydrocarbon Separation of Oil, Grease & Emulsified Wastewater with the SSF Treatment Technology







#### Abrimix Treatment Process

The utilization and implementation of the Abrimix patented advanced Unique technology:

- To treat process plant waste discharge waters
- To provide a cost-effective treatment plant
- To improve plant performance at reduced operating costs





#### **Abrimix Technology**

The patented technology has been designed to provide the client with the following key benefits:

- Access to an affordable treatment process plant.
- To provide acceptable and affordable operating costs
- To comply to local authority waste discharge water standards and limitations.
- To avoid costly waste discharge water noncompliance penalties.





#### **Abrimix Technology**

#### Abrimix Technology Continued:

- Provide the ability to recover and reuse treated water to reduce costly Municipal make up water.
- To produce a moisture reduced sludge for easy disposal /collection by waste oil recyclers.
- To effectively break and separate oil emulsions common to cleaning processes (wash bays).
- To provide a treatment process that is versatile and "delivers results "





#### **Technology Trial Examples**

Some of the following examples are results achieved with the utilisation and implementation of the Abrimix technology within various industries, oil, grease & oil emulsion contaminated waste discharge waters as well as with the Hydraspin treatment process to recover free oil.





#### **Technology Trial Examples**

Oil & Grease
Separation & Removal from
Waste Discharge Water





# Abrimix MOGS Plant (Mobile Oil & Grease Separation)





Separated oil and grease collection flow bin



#### Workshop Oil & Grease Contaminated Discharge Water

(separated and removed with same Abrimix treatment plant)

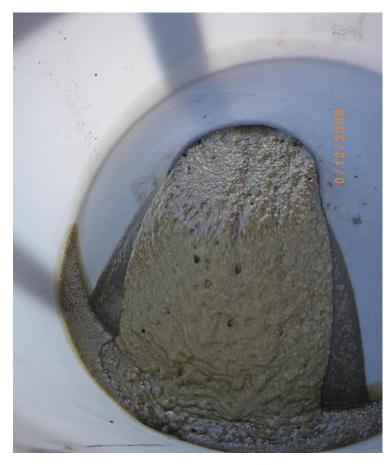


Oil Contaminate Discharge Water Oil Contaminate Discharge Water





# Abrimix MOGS Plant Treated Water Producing a Concentrated Oil Discharge & Treated Water Discharge









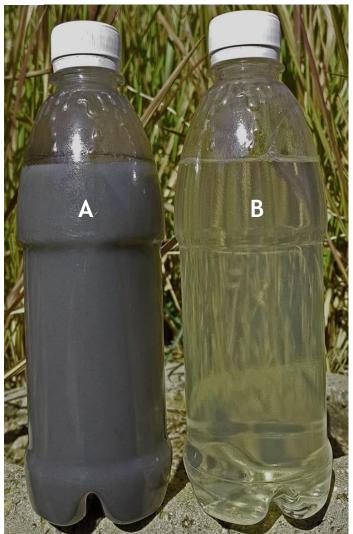
#### Wash Bay Hydrocarbon Separation

Contaminated Emulsified
Discharge Water Treatment





## Mechanical Workshop Wash Bay Wastewater Treatment



The samples show the following:

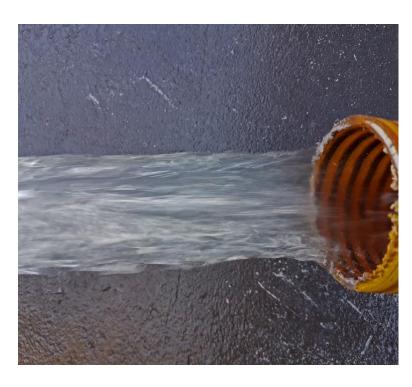
- A) Sample Bottle on the left is untreated wash bay water with a high concentration of emulsified oil /Grease contained there in .
- B) Sample Bottle on the right is the Abrimix treated wash bay water after breaking and separating the emulsion and contained oil and Grease out of the waste water.

The treated waste water is if a quality for compliant discharge or reuse within the wash bay





# **Abrimix Treated Wash Bay Wastewater, Compliant for Discharge or Reuse**



Abrimix treated compliant water discharging from the SSF tank.



Abrimix treated water discharging back into the untreated wash bay waste water holding sump.





# Abrimix Separated Wash Bay Solids & Broken Emulsion Sludge



Separated solids discharging off the top of the SSF tank



Separated solids held by hand to show reduced moisture content there of





#### **Crude Oil Refinery**

Discharge Water Treatment Free Oil Recovery





## Crude Oil Refinery Waste Discharge Water Treatment



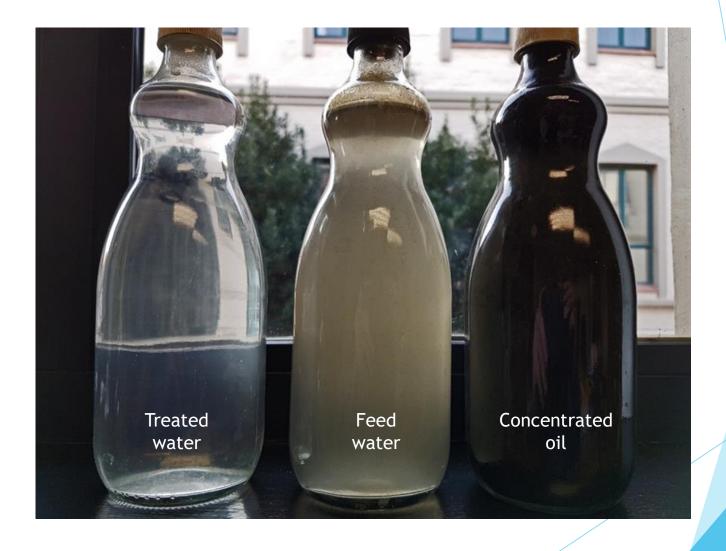
Utilising the Hydramix process on the Oil refinery waste discharge water was treated to produce a clear water as shown.

A photo of the waste water before and after the Hydamix treatment.





# Oil Refinery Wastewater Treatment Showing Feed Water, Treated Water & Concentrated Oil







### Separated Hydrocarbon Sludge from the Hydramix Treatment Process after Removal of the Free Oil & Grease



Separated oil & sludge from the waste discharge water stream

Separated oil & sludge being held by hand to show reduced water content for ease of handling





#### **Hydramix Samples**

**Taken at intervals** 







#### **Refinery Treatment Plant**



Refinery conventional DAF

Refinery API





# Hydramix Pilot Plant Process for Free Oil Recovery & Emulsion Breaking & Suspended Solids Removal







#### **Abrimix Additional**

Other Oil, Fats, Grease / Oil Emulsion Contaminated Process Waste Discharge Waters Treated with the Abrimix Treatment Process





# Steel Smelter Oil / Grease Contaminated Waste Discharge Water



Abrimix process produced treated waste water

Abrimix process broken emulsion

Abrimix process separated free oil

Untreated waste discharge water





# **Cosmetic Manufacturer Waste Discharge Water Treatment.**

(Shows the ability to break highly emulsified oil wastewater compared to a DAF)



Untreated emulsified oil & Petroleum jelly waste water

Abrimix process treated & separate, broken emulsion waste water

Clients existing DAF treated waste water





#### Contact...

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