



OIL REFINERY

Plant Application Successful Experience

An oil refinery located in South America with a 350 m³/h wastewater treatment plant.

CURRENT TREATMENT

- Does not achieve the environmental regulations standard from the Brazilian environmental agencies;
- High levels of oil, grease, COD and H₂S in the treated wastewater;
- High cost in the wastewater treatment using alum salts, polymers and a huge quantity of lime;
- High energy consumption in the biological treatment;
- Very low efficiency process using alum salt, polymer and lime;
- Generates a huge amount of sludge;
- High ecotoxicity and toxicity in the current treatment process;
- Harmful sludge;
- Sludge with low degradability;
- The treated wastewater still contains high levels of alum salts;
- The large amounts of alum salts and polymers will be accumulated in the surrounding ecosystem, affecting negatively wildlife and the ecosystem.



REDUCES TREATMENT COST

- Acquapol is a metal-free vegetable organic coagulant/flocculant with the special characteristic to remove oil and grease;
- Reduction of COD and H₂S;
- No need to use polymer and lime;
- Very low cost of the treatment compared to the current treatment process;
- This “green technology” will highlight the company’s image due to its attention and care for the environment, positioning the company above the competition;
- High performance of the Acquapol in the wastewater treatment process;
- Reduces ten times the sludge volume;
- Does not dispose any alum salts in the surrounding ecosystem, protecting wildlife and the ecosystem;
- Non-harmful sludge;
- No need to use alkalinizing agents during treatment process;
- Easy handling.

	Dosage mg/L	PAM mg/L	Lime - pH 11	COD (in flow 320 mg/L)	G&O (in flow 185 mg/L)	H ₂ S (in flow 48 mg/L)
Alum Salt Treatment	70 mg/L	2	11	215 mg/L	66 mg/L	21 mg/L
ACQUAPOL Treatment	15 mg/L	1	11	132 mg/L	10 mg/L	9 mg/L
Reduction	78.6 %	50.0 %	100.0 %	58.8 %	94.6 %	81.3 %

