## CAF® CASE STUDY



## Rendering

## Problem:

The meat industry (poultry included) generates some 30 billion pounds of inedible surplus each year. The rendering industry contributes tremendously to efforts to maintain a clean and healthy environment and prevent a waste disposal problem by turning this otherwise unusable material into usable commodities.

One challenge they face in creating a clean environment is the treatment of their wastewater. The type and degree of wastewater treatment required depends on whether the plant discharges their effluent to a city sewer, a navigable stream, or lagoon.



Sludge layer being scrapped into the auger chamber.

CAF Performance			
	<u>Influent</u>	<u>Effluent</u>	<b>Reduction</b>
TSS	25,000	230	99.1%
FOG	15,000	215	98.6%
BOD	29,000	4,500	84.5%
COD	66,000	13,600	79.4%



CAF in operation at a rendering plant shows the sludge layer created by the aeration bubbles.

## Solution:

The first step in treating rendering wastewater is primary treatment, which removes suspended solids and oil & grease, and to reduce BOD and COD. The Hydrocal CAF system is a highly effective pretreatment system in reducing the concentration of these pollutants in the wastewater. The CAF will in turn reduce discharge fees, as well as recover fats and protein solids, which are recycled into new products.

The Hydrocal CAF has been successful at numerous rendering facilities, and one rendering company has installed a Hydrocal CAF in 78% of their plants so far.

Note: It is far more economical to reduce suspended solids and oil & grease loading by primary treatment rather than by secondary treatment. The cost of primary treatment is 60-75% less, including costs for operation, maintenance, chemical addition, and depreciation.