

Brick Manufacturer Eliminates Disposal Costs by Treating and Reusing Process Water

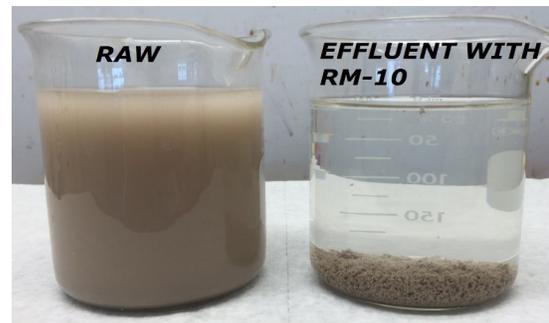
When a brick manufacturing facility was unable to reuse their water due to high solids content and pigments, they turned to CETCO for a solution. Utilizing RM-10 flocculants allowed them to treat their process water on-site.



Pigment Migration in Retention Pit



Red Brick Cutting Process Water



Brick Cutting Process Water

PROJECT DETAILS

Brick Manufacturing Facility

LOCATION

North America

PRODUCTS USED

RM-10® flocculants

CHALLENGE:

High solids content and pigments in saw cutting process water prevented a brick manufacturing facility from reusing their water. In addition, stricter discharge limits implemented by local POTW meant water was required to be hauled away for off-site treatment resulting in significant costs. As a result, CETCO was tasked with finding a solution that would help the brick manufacturer reduce or eliminate monthly disposal fees associated with hauling off contaminated process water.

CETCO SOLUTION:

Combining CETCO's proprietary RM-10 flocculant chemistry with a specialized dry chemical feeder, the facility was able to treat their contaminated process water on-site while meeting environmental discharge criteria. As a result, the effluent could be discharged into the local sewer or be recycled back into the brick cutting process.

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RESULTS:

The brick manufacturer is now recycling treated water back into their brick cutting process, significantly reducing water usage costs. Treated water also meets local sewer discharge criteria, which avoids the cost of hauling away wastewater from periodic system clean outs. RM-10 flocculants' ability to capture solids has eliminated solids build-up in their retention pits.

LABORATORY TESTS ON SAMPLES SUBMITTED INDICATE THE FOLLOWING BEFORE AND AFTER TREATMENT

PARAMETER (IN PPM OR MG/L)	UNTREATED	AFTER TREATMENT
Appearance	Reddish-orange	Clear, colorless
Suspended Solids	10600	34
pH	8.79	8.74
Aluminum	21.8	0.69
Cadmium	<0.005	<0.005
Chromium (total)	0.14	0.11
Copper	0.95	0.02
Iron	10.5	0.11
Lead	<0.02	<0.02
Nickel	0.02	<0.005
Phosphorus	2.06	1.06
Zinc	0.18	<0.005

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