

PROJECT DESCRIPTION

Occidental Chemical Corp. "S" Area

**Location:**

Niagara Falls, New York

Client:

Herbert F. Darling Inc.,
for Occidental
Chemical Corp.

Client Contact:

Mr. Buck Darling,
716 – 632-1125

***View of the Barrier Wall Construction Across the Niagara Parkway
Looking South – Niagara River in Background***

Occidental Chemical Company constructed a ground water barrier wall around the S-Area at its Niagara Falls plant. Occidental engaged Herbert F. Darling, Inc. to construct the barrier. MMCE served the project contractor as its engineer providing design and construction recommendations.

MMCE worked with the contractor to develop an alternative concept when it was discovered that the specified traditional cutoff wall design could not be constructed. Shot-rock fill extends to bedrock along the Niagara River section of the cutoff wall preventing construction of a soil bentonite wall using the conventional slurry trench approach. The barrier wall was constructed in an open excavation using two rows of sheet piling as support for the soil-bentonite mixture.

MMCE was also the project quality control engineer during construction and in that role was responsible for all field and laboratory tests on the trench, bentonite slurry and soil-bentonite backfill. MMCE also coordinated with the various regulatory agencies overseeing the project including the New York State Department of Conservation, the US Environmental Protection Agency and the City of Niagara Falls.