# CASE STUDY



#### Ease of maintenance despite tough conditions and varied flows.

## **CITY OF GRAND RAPIDS**

#### **PROJECT-AT-A-GLANCE**

Duperon proves "you'll like working with us" both in customer service and product performance for Grand Rapids CSO facility

SITE:	Wastewater Treatment Plant
EQUIPMENT:	Four (4) Duperon <sup>®</sup> FlexRake <sup>®</sup> FP
INSTALLED:	July 2004

### "TOUGH CONDITIONS WITH UP TO 135MGD"

The City of Grand Rapids, Michigan Wastewater Treatment Plant has four channels with a design flow of 61.9MGD, and which routinely manage up to 90MGD during storm events. An on-site retention basin, designed for the wet weather the city frequently experiences, holds up to 10M gallons—which, during storm events, can mean a potential of 125MGD-135MGD through the screens.

Prior to 2004, the City utilized 7/8 inch spacing on their bar screens. Once the screens reached 30 years of age, however, the City began researching the next solution. "There was much better technology on the market by then—the bar screens we were working with had been put in during the 1970s," relays Mike Lunn, Acting Environmental Services Director. Lunn, who has been with the City of Grand Rapids for more than 15 years, found the Duperon<sup>®</sup> FlexRake<sup>®</sup> at WEFTEC. "I liked that there was no lower bearing, and that if maintenance was needed it could be handled from the deck."

"I liked that there was no lower bearing... maintenance handled from the deck."

The City of Grand Rapids first installed FlexRake<sup>®</sup> technology in July of 2004. The intense grit conditions at the site, which were unknown at the outset of the project, challenged the FlexRake<sup>®</sup>. The conditions pushed the FlexRake<sup>®</sup> FP technology to the limit, fostering the creation of FlexRake<sup>®</sup> FPFS technology which featured, among other design modifications, a channel bottom plate for better grit purchase.



## HH: DUPERON

"We had a bit of a rough go of it at first, but the best part was that Duperon was there next to me the entire time. They were willing to stay and fix it—they never gave up. Duperon stood next to me throughout the project; they never moved in the assurance that they would get it right. They did," Mike concludes.

Now, the site enjoys the result of their early introduction to the Duperon<sup>®</sup> commitment that each site operate at its absolute best. "I was in the control room a few weeks back and we were having problems with the primary pump, so I told a new operator to go and take off the inspection plate to see if anything was in it. Before we installed the Duperon<sup>®</sup> FlexRake<sup>®</sup>, the operators knew all about that. They did it a few times a week; there was always something in there.

Now we don't have to take it off, ever. He had no idea what I was talking about. Eventually I was able to find someone who remembered and he was able to show him how to do it," Lunn concluded.



#### ABOUT DUPERON

Duperon Corporation is the leader in innovative preliminary liquid/solids separation systems. For more than 35 years, Duperon has provided simple yet innovative solutions for a variety of screening and solids handling applications in the water and wastewater industry. Duperon technologies are designed and manufactured in Saginaw, Michigan.