

# Matrix Seal Stops Heavy Leaks from Bearing Housing—Extends Reliability

Wastewater Industry
Chesterton Matrix Rotary Seal
Case Study 049 Rotating Equipment

## Challenge

#### Issue

A large flood remediation station was preparing for hurricane season. They were refurbishing all large water pumps in preparation.

The initial seals installed were oversized and leaked excessive amounts of lubricant from the bearing housing. The machines were too large to dismantle and install new unsplit seals in time for potential flooding.

Shafts were refurbished and in good condition.

## **Solution**

### **Application**

Two different size *Chesterton Rotary Matrix Seals* were installed on both ends of the bearing housing. This seal is a unitized design combining polymer sealing and packing for highly reliable sealing, minimal leakage, bearing protection, and improved shaft life.

## Results

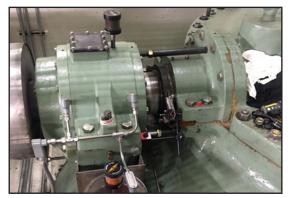
#### **Client Reported**

Chesterton Matrix Rotary Seals are exceptionally simple to install, taking less than 10 minutes each to install and test. The seals are currently installed on two machines.

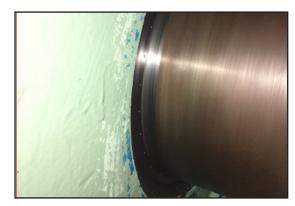
- The facility reported that the Matrix Seals installed have operated leak-free since installation – over seven months!
- No visible shaft wear to date!



Refurbishing one of the pumps.



Matrix Seals were installed on both ends of the bearing housing.



Matrix Seal -9.500" diameter seal installed.