



## MUNICIPAL

### UAE'S POSITIVE VIBRATIONS, THANKS TO CORNELL

*Two Cornell 14NHG 28RPEMTB pumps help alleviate failure of previously installed pumps; working flawlessly since 2011.*

A municipality in the United Arab Emirates had installed twin 700 HP submersible sewage pumping equipment in 2005. Repetitive failures of these pumps occurred due to system mismatches and severe vibrations. Lacking adequate backup and given the systems problems, the client with was concerned. Failures included seal leaks and on some occasions, sewage seeping into the motor windings and burning out the motor, with some shaft shearing as well.

Client's expenses on emergency maintenance and repairs reached towards than 200 percent of their installation investment. Additionally, the pump station was located in densely populated area of the city, hence any shut down would be an awful situation

CENTEX FP LLC, Cornell's distributor and technical supports office in Middle East & North Africa (MENA) worked with the municipality to find a solution that would allow them to use a Cornell pump as a complete back up, which would keep the system operational with minimal modifications in piping. Centex conducted a complete site study, including system resistance, average / peak flow situation, and piping design. After the thorough review, they were able to offer suitable pumps that would not only handle this station at peak load but also another master station which has similar issues.

Cornell's Redi-prime system® was seen as real asset with ability to run dry and be able to lift the sewage from nearly 23 feet (seven meters) deep. In February of 2011, two Cornell 14NGH28 Redi-Prime® pumps were installed, and have been working well ever since. The pumps each operate on a 630 HP Cat engine, each with 9200 GPM (580lps) at 206 feet of head, for a total flow of 18,400 GPM (1160lps.) It just took two of Cornell's 14" pump to accomplish that flow, while a competing system designed required 6 units of 10" pumps to match. Understandably, the Centex & Cornell team won the contract on merit, offering the best performance and system solution for the client.

In an appraisal letter the client described their experience as:  
"We are extremely satisfied with these pumps completely designed, manufactured, tested and commissioned by Centex-Cornell. In fact, the pumps by far exceed our expectations, not only in terms of product quality, pumping capacity and performances, but also in terms of reliability, robustness, solids handling ability (the pumps never clog), suction lift ability (7.56 m), fuel consumption (very low) and maintenance requirements (just basic routine checks).

Furthermore, we are tremendously grateful to Centex-Cornell for the professional services they offered us well ahead of the decision to select their product."



TWIN SUBMERSIBLE  
SEWAGE PUMPS RUN  
WITHOUT FAILURES



CENTEX, A CORNELL  
DISTRIBUTOR, WORKED  
HARD WITH THE  
MUNICIPALITY