

CASE HISTORY

GODWIN PUMPS OF AMERICA, INC., ONE FLOODGATE ROAD, BRIDGEPORT, NJ 08014



Godwin Dri-Prime pump with engine cover and locking door

GODWIN DRI-PRIME® BACKUP SYSTEM FOR LIFT STATIONS ASSURES MUNICIPALITIES CRITICAL PUMPING CAPACITY

Sewage collection and treatment authorities across the nation are concerned with maintaining lift station pumping capacities during system failures. Traditional design has incorporated a diesel-powered generator to provide backup electricity in the event of a power failure at the station. Now, tradition is being broken as sewage authorities discover the benefits of backup pumping capacity instead of backup electrical capacity.

Improving Lift Station Reliability and Flexibility

Backup pumping capacity supplied by the Godwin Dri-Prime automatic self-priming diesel powered pumpset provides lift stations with 100% pumping redundancy for emergencies, power outages, and scheduled preventive maintenance. The reliability issues of transfer switches and control panels of traditional lift station designs become a thing of the past. The following three case studies illustrate how backup pumping capacity has improved lift station reliability and flexibility.

CITY OF HOOVER, ALABAMA

Lift station reliability had become such an issue that city engineers decided to research the cause of outages. Their findings were surprising. They found that only 14% of lift station outages were directly related to power failures. "Our discovery that a large percentage (86%) of lift station failures were caused by either mechanical pump or electrical control panel failures was a huge wake-up call for us," states Phil McGraw, Civil Engineer, City of Hoover.

McGraw had used diesel powered portable pumps on a temporary basis during emergency repairs for permanently installed pumps and was impressed by the reliability. He knew a Godwin diesel Dri-Prime pump was what he needed as a backup system.

As a result, the City of Hoover devised a plan in the mid 1990s to convert all of its 40 lift stations over to Godwin Dri-Prime pumpsets instead of electrical generators. The Godwin 6-inch CD150M Dri-Prime was the first pump purchased for this application and it is still operating to the city's satisfaction. Today, over 30 stations have been completed.



Godwin Critically Silenced Dri-Prime pump at City of Hoover, Alabama

ORANGE WATER AND SEWER AUTHORITY, NORTH CAROLINA

Orange Water and Sewer Authority (OWASA) of Carrboro and Chapel Hill, North Carolina initially purchased a Godwin HL10M Dri-Prime pumpset and trailer for a bypass needed in its wastewater treatment facility during a clear well upgrade. In addition, OWASA used the HL10M pumpset for six weeks to provide supplementary pumping while installing permanent pump upgrades.

“Godwin was responsive and really worked with us to provide quotes, engineering and service – all with very short notice. They were also terrific with follow-up,” explains Barbara Oslund, OWASA Engineering Manager. “I recommend that municipal engineers talk to Godwin before undertaking similar projects.”

“These pumps have other uses, too,” continues Barbara Oslund. “We’ve put the trailer and original pipe configuration into storage and are now using the HL10M at our raw water pumping facility as a contingency during power outages.”



Godwin HL10M Dri-Prime pump at OWASA in North Carolina

In a separate application, OWASA used two Godwin 12-inch DPC300 Dri-Prime pumpsets at its wastewater treatment facility. The pumps, designed as critically silenced units, solved the challenge of providing enough capacity to meet peak demands until a major system upgrade could be completed. As permanently installed pumps at the station were taken off line and upgraded, the DPC300 Dri-Prime pumpsets provided supplemental pumping capacity during high flow conditions.

“I was against diesel pumping initially, but I sure see the benefits now,” explains Johnny Johnson, OWASA’s Maintenance Manager. “Godwin’s solutions have really helped us during our system upgrades.”

Walter Gottschalk, Waste Treatment Plant Operator, is also enthusiastic about Godwin. “They delivered the pumps as planned, and on time. Godwin is so dedicated... it’s like life support in the medical field. We’re impressed!”



Two Godwin DPC300 Dri-Prime pumps at OWASA in North Carolina

OWASA was so impressed that they asked Godwin Pumps representatives to advise on a contingency plan to deal with the impact of coastal storms and hurricanes. As a result, Godwin has contingency plans in place with seven of OWASA’s pump stations.

MARYLAND ENVIRONMENTAL SERVICES

Maryland Environmental Services (MES) operates lift stations for a correctional facility in Jessup, Maryland. As part of a planned lift station upgrade, MES’s consulting engineer contacted Godwin Pumps to provide the backup system design required on the project.

Godwin designed backup pumping systems at two lift stations. Each pumping system consisted of a Godwin 8-inch CD225M Critically Silenced Dri-Prime pumpset that was skid mounted and permanently installed with the capability of pumping up to 3 MGD.

Correctional facilities operate on an increased maintenance schedule that requires more pump servicing, generator exercising and line clearing than at a typical municipal lift station. Therefore, MES required double backup systems for the permanently installed electric submersible pumps at the station. The Godwin Dri-Prime pumpsets provide the secondary backup in the event of a primary backup system failure. The additional reliability provided by Godwin’s self-priming diesel pumps meets MES’s standard for a 100% operational guarantee.

“Those Godwin pumps start every time and do the job,” states Harry McNally, Maintenance Supervisor for MES. “They give me peace of mind knowing those diesels are there to back us up.”



Godwin Critically Silenced Dri-Prime pump in Jessup, Maryland



Home Offices:
Bridgeport, NJ USA
856-467-3636

Gloucestershire, England
+44 (0)1285 750271

www.godwinpumps.com

Norwich, CT
860-889-2343
Manchester, NH
603-887-5550
Richmond, VA
804-798-6600
Syracuse, NY
315-536-2317

Buffalo, NY
585-344-3156
New York Metro
201-858-8850
Pittsburgh, PA
724-266-6936
Cleveland, OH
440-357-6868

Wilmington, DE
302-656-9144
Washington, DC
301-390-3806
Chicago, IL
708-889-1560
Charleston, WV
304-984-0200

Virginia Beach, VA
757-490-1300
Raleigh, NC
919-661-6061
Charlotte, NC
704-588-4592
N. Charleston, SC
843-818-2266

Atlanta, GA
770-529-7559
Tampa, FL
813-740-0331
Houston, TX
281-864-9200
San Antonio, TX
210-648-9101

Corpus Christi, TX
361-879-0031
Helena, MT
406-495-1335
Seattle, WA
253-395-5450
Los Angeles, CA
909-278-3636