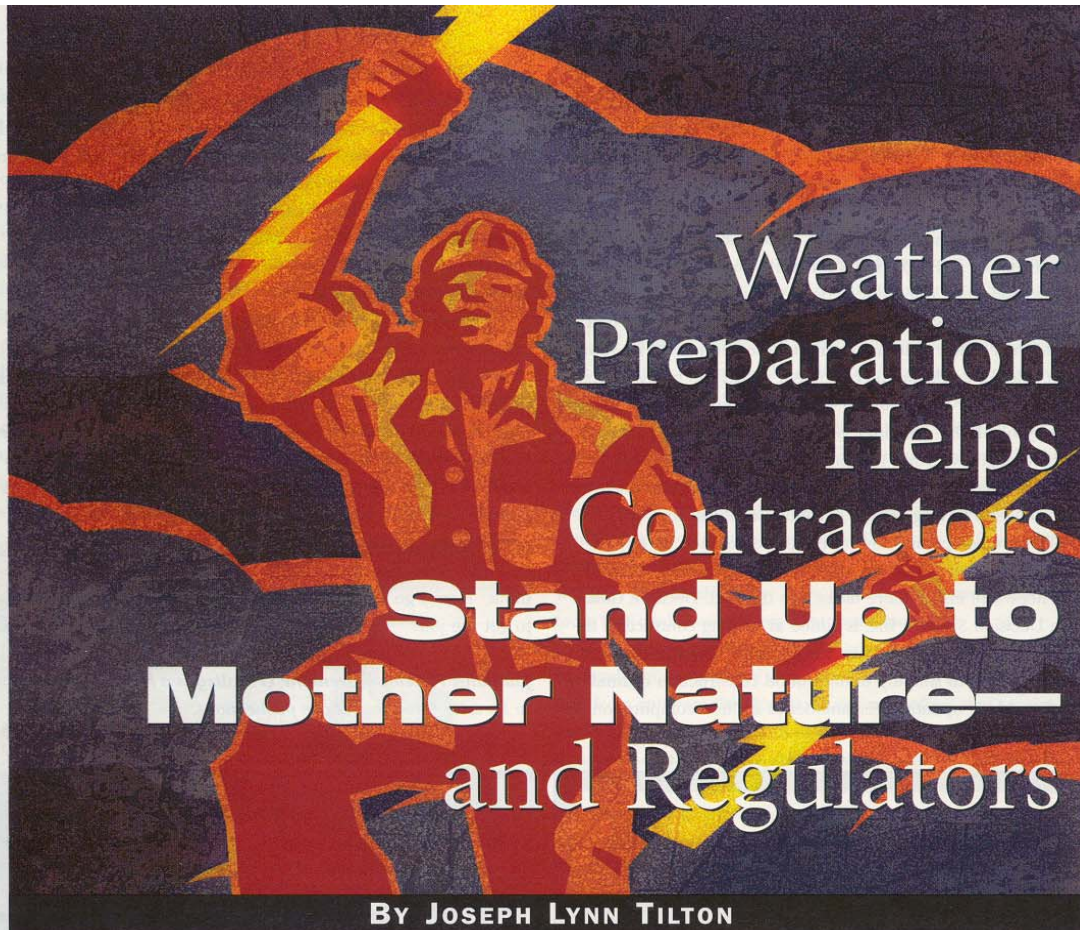


Contractors Stand Up to Mother Nature

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Despite advances in technology, or in ever-more stringent federal clean-water regulations that place greater pressure on the contractor to eliminate erosion and prevent sediment loss (all under budget), no one is able to control Mother Nature. But knowing what's coming, as well as preparing for the worst, helps contractors and their suppliers remain focused on avoiding or solving a problem rather than becoming part of the problem.

You can't control Mother Nature, but knowing what's coming and preparing for the worst can help you avoid weather problems rather than becoming part of them.

When Mother Nature Needs a Pumping

Another challenge facing many contractors is dealing with existing surface or underground water or with all the new water from the storm. “Contractors don’t want their site filling up too much with water, but they have to have somewhere to pump it to,” observes Brad Fine, director of marketing for Thompson Pump of Port Orange, FL. “One reason for pumping is to control unwanted water because of what gets washed around. With EPA, OSHA, and others watching the job site, you don’t want any hazardous material floating around.

“Here in Florida, any road construction requires the entire site be dewatered. Then, if laying pipe is part of that roadwork, continuous pumping has to be done. Contractors need long-lived equipment to help keep their crews working and the site open for work.” Fine counsels operators to be sure their pump of choice meets the flow requirements and that it can handle any solids in the water being pumped. “If the pump isn’t large enough, solids, whether rocks, sticks, or sewage, can jam up in the suction line or in the pump itself and cause damage.

“Another concern, especially in remote or continuous applications, is that the pump have adequate fuel capacity for a long run.” He also cautions, “Pump users don’t want to keep refuel-



Thompson Pump being used in a piling application in Panama City Beach, Florida.



Thompson Pump responds and assists with an emergency flooding situation in a local Florida city.



In cold weather conditions, the water must be moving constantly, or else it may freeze.

ing, especially to hard-to-reach locations.”

Fine adds that the learning curve with today’s pumps is short, thanks to the gauges and indicators that come with them. “Once the suction and discharge system is set up correctly, and all check valves are opened or closed as they should be, then the operation is mostly a matter of turning the key. Visual maintenance checks, done at refueling or on a weekly basis, take just a few minutes.”

Fine points out that recently developed is a compressor-assisted dry priming system that is totally enclosed so there is no blow-by of any pumped material. “This makes the pump perfect in terms of keeping the environment and job site free of any hazardous material, including sewage. This will help make it easier to abide by the NPDES Phase II regulations coming next spring.”

Getting Dry Ditches

Thompson Pump user Dan Johnson, a salesman for Northern Dewatering Inc. in Rogers, MN, reports that his firm’s primary business is underground dewatering, with bypassing—as in sewer system renovation—a close second. “We’re certified in six states and do about \$5 million a year in Texas, Minnesota, South Dakota, North Dakota, Iowa, and Wisconsin. Our goal is to provide the excavation contractor with a dry ditch so he can work below ground level.”

Johnson has been in the business for 35 years and notes that winters are particularly challenging. “We recently participated in a \$4 million project for the City of Minneapolis, which consisted of a number of sewer repairs in varying soil conditions, from dry, easy digging to swamps. Our job was to dewater as needed for the general contractor. We moved all over the place, drilling 40-foot wells and dewatering to 25 feet below surface level. This enabled the contractor to dig to 25 feet in midwinter with subzero temperatures and not let the job get stopped by an unexpected flow.”

Northern Dewatering’s main winter objective is to keep the water moving. “At no time can we have water stop in a pipeline, else it freezes over. One of the ways we do that is with rapid response. If something goes wrong, we respond within a few minutes.” He recalls the time a well pump gener-

ator went down at 10 p.m., 20 mi. away in the northwest quadrant of the city. “We had someone there within an hour. He swapped generators and brought the failed one to the shop, where we had it ready for service the next day.”

Onsite replacement is the fastest way to get the site running again. “Then the failed item can be turned over to any of the 10 full-time mechanics working in the relative comfort of the shop instead of enduring adverse conditions in an attempt to make a field repair.” As a rule, if the repair is greater than

50% of the replacement cost, the company selects replacement. “We have 400 Flygt, Prosser, Crown, and submersible pumps, with over 100 Thompson engine-driven pumps. We also have 50 generators of all brands and descriptions and all the associated materials to build a complete pumping system.”

Chill Factors Affect Equipment

But what about cold weather? “Keeping the liquid moving becomes more important as it gets colder,” Johnson emphasizes. “We’ve had pumps working at 40-below, with wind chills 60- to 70-below. Contrary to scientific belief, wind chill does affect equipment. When it’s windy, the heat from the operating machine is dissipated more quickly. At times we’ll build a barricade of some kind. It’s more for the workers than for the machine, but both benefit.”

Snow and blizzard conditions stop operations. When they have to shut down, Northern

Dewatering immediately drains the equipment of all water. “This takes 10 to 15 minutes at shut down and another 10 to 15 minutes to get it back in operation. But without that care, startup delay could possibly be days because you’re usually talking about ruptured cast-iron parts, which take awhile to replace.”



Photos: Thompson Pump

Contractor pumps are designed to operate in severe weather conditions. These 6-in. pumps used for dewatering keep a job site dry for surface work.

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