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## **STORMWATER CONTAINMENT AND TREATMENT**

### ***“Maintenance Free Operations for Remote Treatment Facilities”***

The requirements for capturing, testing and treating surface runoff water are increasing for every municipality. One of the primary challenges is construction of large holding basins which are typically not located near the wastewater treatment facility. They are located at strategic collection points across the service area where the collected stormwater is eventually pumped to the treatment facility. This means that these storage facilities are unmanned on a constant basis and must be automated to engage during a storm event.

The Tideflex Coarse Bubble Mixing System is ideal for remote systems because it is a maintenance free system that will not become clogged with debris in the fluid. The check valve design of the diffuser allows the system to cycle blowers on demand and shutdown when not need to save energy. The air mixing system is designed to re-suspend settled solids prior to pump discharge as well as periodically mix with air to provide some dissolved oxygen to keep the fluid aerobic.

Tideflex systems can be installed in any type of containment structure; bolted steel tanks, concrete tanks, and even lined lagoons. The system is durable enough to withstand extreme weather conditions on open top tanks and lagoons; snow loading, ice and freezing, extreme UV and heat. The construction of the systems is heavy duty stainless steel pipe and anchors, designed to withstand the turbulent conditions of high rate mixing of a fluid with debris.



*Tideflex Technologies / Red Valve Company holds the patent for elastomer duckbill diffusers and their incorporation into a multipoint diffuser piping system. Any suppliers of systems incorporating duckbill diffusers would need authorization from Tideflex Technologies / Red Valve Company. Soliciting of systems incorporating Tideflex diffusers by others without the consent of Tideflex Technologies constitutes intent to violate the patent protection of this product and is subject to the penalties defined within the Patent Protection Laws of the United States.*

*US Patent No. 6,016,839 / 6,193,220 / 6,372,140 / 6,702,263  
Canada Patent No. 2,366,252 / 2,385,902; United Kingdom Patent No. 2,326,603*