

Application Engineering Bulletin

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ITT Flygt Uses Thompson Pump to Maintain pH Levels in Ontario, Canada

Sam Scola, of INCO Limited, Sudbury Operations, was working in the Crean Hill Mines, 45-minutes from Sudbury, Ontario, Canada. He needed a way to help maintain the pH levels in the Crean Hill Mine's settling ponds before the water was returned to the environment. Large loads of lime were being used to help neutralize the water's alkalinity. Having had success working together on previous projects, Mr. Scola contacted Dan Adams of ITT Flygt, Sudbury, Ontario to see if there was anything he could suggest to circulate the water in the ponds and increase the lime's effectiveness.



The Thompson 6-inch Compressor-Assisted Dry-Prime Pump recirculated the alkaline-laden water and lime mixture to reduce pH levels and made the water safe to return to the environment.

Mr. Adams suggested using a Thompson Pump trailer-mounted 6-inch Compressor-Assisted Dry-Priming Open Trash/Sewage Pump to do the job.

ITT Flygt collected the pump unit and the required suction and discharge hose, and delivered the equipment to the Crean Hill Mines.

The application was not focused on achieving a certain flow, or providing a certain pressure. Rather, the pump was used to re-circulate the lime and the alkaline-laden water and neutralize the pH levels to make the water safe enough to return to the environment. The pH levels experienced after passing through the Thompson 6-inch Compressor-Assisted Dry-Priming Open Trash/Sewage Pump reduced to between 7 and 8, from 10 and 11.

The Thompson 6-inch Compressor-Assisted Dry-Priming Open Trash/Sewage Pump also kept the environment safe with its *ENVIROPRIME*[®] Priming System. The *ENVIROPRIME*[®] Priming System prevents any pumping effluent from infiltrating the priming system and escaping onto the ground or into the air.



Sam Scola, INCO Limited, Sudbury Operations stands by his Thompson 6-inch Compressor-Assisted Dry-Prime Pump.

"This self-priming Thompson Pump makes my job a lot easier. With one turn of the key, the pump starts and I can walk away until fueling time. And with the *ENVIROPRIME*[®] system I don't need to worry about the pumped solution leaking all over the ground. It has helped me maintain the pH levels in my circulating ponds," reported Sam Scola of INCO Limited.

Mr. Scola rental the pump unit for over eight weeks and will continue the rental next year after winter subsides. The environmental management of the Crean Hill Mines reported they needed to maintain the run off and ground water in the area for the next eight years.

NOTE: This AEB is compiled from information submitted by Dan Adams, ITT Flygt, Sudbury, Ontario, Canada, as part of Thompson Pump's Partner Publicity Program. Thanks, Dan!