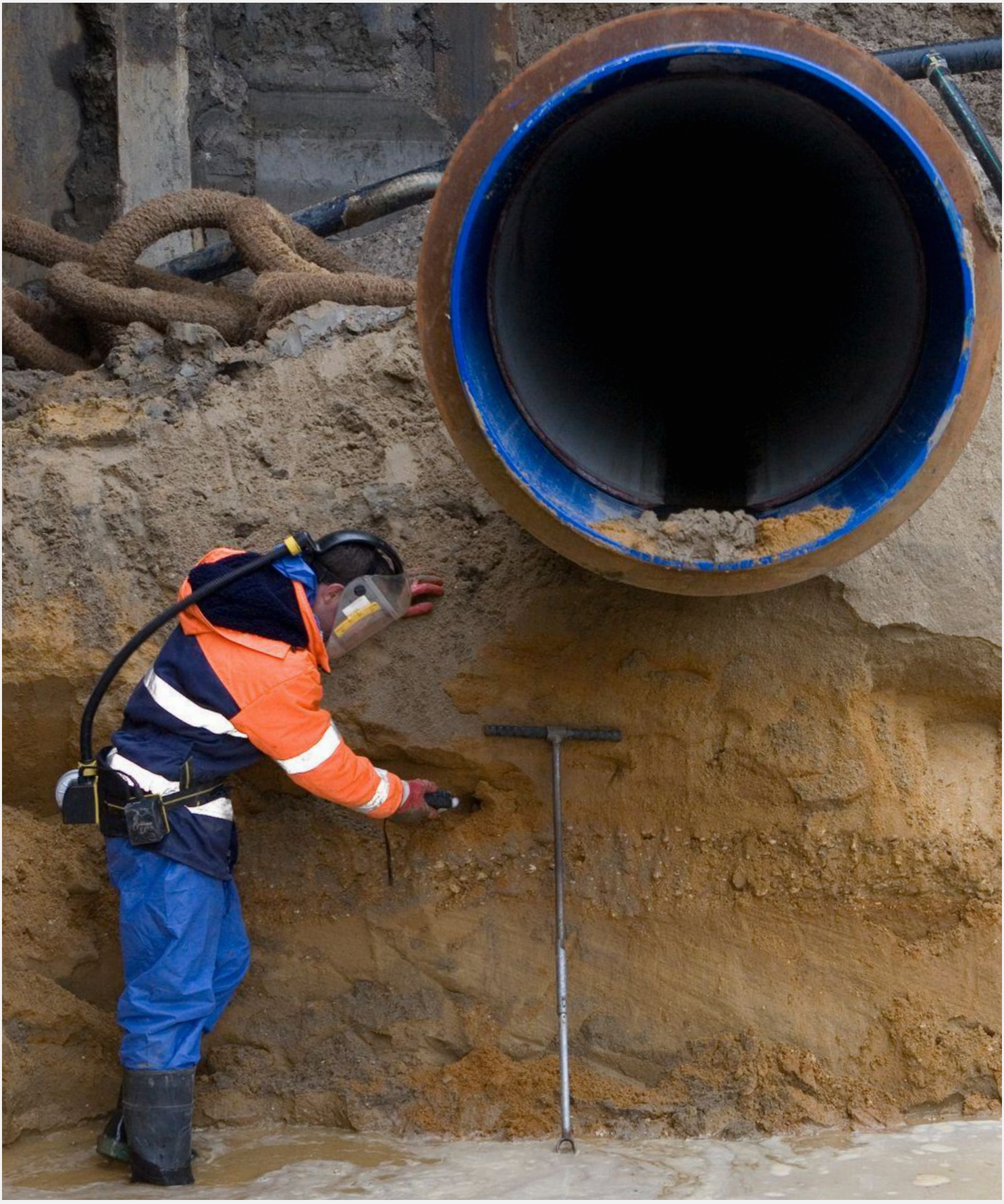

Reference Project

Construction Dewatering for a
Major Sewer Line Installation

CarboNet

Dewatering of a new sewer line struggled with discharge levels and runaway costs, forcing a shutdown and re-evaluation of the chems.

Background: When a main sewer line of a large municipality reached capacity, an alternate line was built and needed dewatering for the trenches.

The problem: Unfortunately, a complex mix of four chemicals was unable to hit the <25 NTU discharge limit and, with constant adjustments slowing down construction, was driving up project costs.

↳ **In the mix**: coagulant (1200 ppm), flocculant (1900 ppm), peroxide (1400 ppm), and caustic solution (280 ppm), averaging around 5000 ppm.

↳ **Including crew and equipment**, the treatment package alone cost $80k/month

Solution: The introduction of SimpleFloc offered a simpler, less expensive option. Bench scale testing indicated that it could replace all four chemicals and the make-down process itself.

↳ SimpleFloc hit the target discharge levels without the need for supporting chemicals—and at much lower dosing rates (250-450ppm)

↳ SimpleFloc also eliminated the peroxide and caustic solutions (although these may be reintroduced if influent water quality changes or additional KPIs are added).

↳ The plug-and-play nature of SimpleFloc removed make-down, reducing rig rentals, crew hours, and NPT from mis-dosing.

Additionally: SimpleFloc, to its name, simplified the necessary chemistry, but also:

- Crews were more efficient as they didn't have to babysit make-down
- Significantly less chemicals were introduced into the operating envelope, ensuring no permits were breached
- Crews enjoyed safer working conditions not having to deal with dry make-down dust or slips from emulsion slop

RESULTS

- Eliminated need for four chemicals
- Cut treatment package cost
- Removed make-down
- Boosted crew efficiency

CarboNet: As freshwater becomes increasingly scarce and regulated, companies from energy and mining to food and beauty turn to CarboNet to reduce, recycle, and renew the water they need to compete.