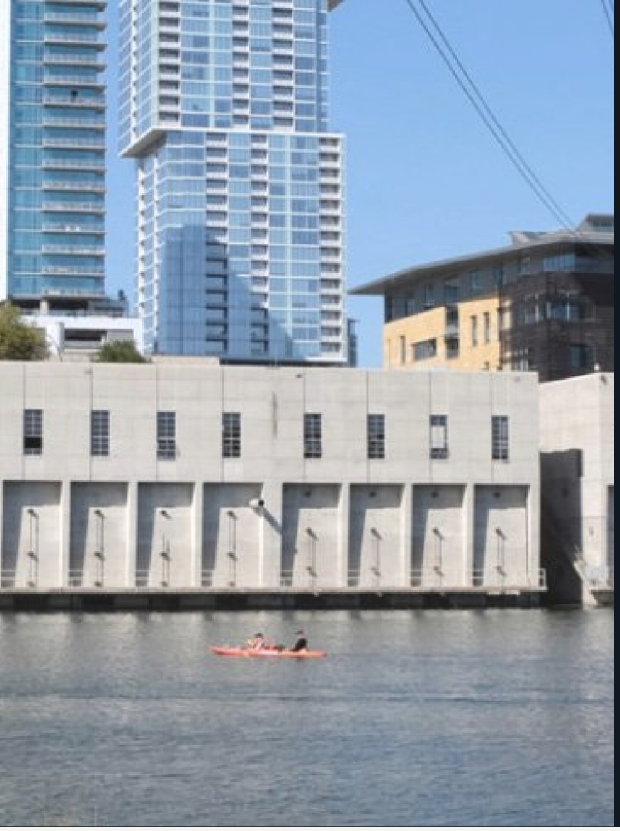


Alchatek

CASE STUDY
LEAK SEAL

SEAHOLM WATERFRONT INTAKE BUILDING AUSTIN, TX

Curtain Grouting in a *Repurposed Power Plant Intake Well*

Sealing leaking intake chambers thirty feet below grade in the repurposed Seaholm Power Plant intake building.

JOB COMPLETED
1 *week*

PRODUCT
Spetec HighFoamer

I · THE PROBLEM

01 What made this job *difficult.*

SEAHOLM WATERFRONT INTAKE BUILDING
AUSTIN, TX

The intake building renovation project hit a snag when they discovered that several thousand gallons of water were pouring into the chambers on a daily basis. Initially, concrete was poured into the chambers to stop the leak. This proved to be ineffective and further complicated the job.

Preventing the free-flowing entry of lake water into the building is central to the scope of this project improving the occupancy conditions by lowering humidity levels, eliminating odors and pests, and preserving the integrity of the building materials.

KEY CONDITION

High-pressure leaks entering chambers thirty feet below grade through concrete previously and ineffectively patched with poured concrete.

THE CONSTRAINT

9 of 10 *wells*

SUCCESSFULLY SEALED OFF

One well required additional work by the underwater construction crew.

AT A GLANCE

1.25 in	4-7 ft	5 holes
INJECTION HOLE DIAMETER	HOLE DEPTH THROUGH CONCRETE	INJECTION POINTS

02 What was specified, *and how it went in.*

SPETEC HIGHFOAMER

Specialty contractors Canalco were brought in to seal the leaks via polyurethane curtain grouting, in which the technicians drill holes through concrete and inject water-activated grout on the other side, stopping the leak at its source. Technical assistance was provided by Chamberlin Waterproofing.

THE MATERIAL

Spetec HighFoamer

WATER-ACTIVATED POLYURETHANE GROUT

The engineering firm Wiss, Janney, Elstner Associates, Inc., specified Spetec HighFoamer as the best grout to handle these high-pressure leaks.

THE METHOD

01
Enter
A confined entry certified technician was sent deep into the well.

02
Drill
Drilled 1.25" injection holes 4-7 feet through the concrete.

03
Inject
Injected Spetec HighFoamer through five holes to create a grout curtain on the outside of the structure to seal off the leaks.

STOPPED AT THE SOURCE

Curtain grouting stops the leak at its source, with water-activated grout injected on the other side of the concrete.

Wiss, Janney, Elstner Associates specified Spetec HighFoamer as the best grout to handle these high-pressure leaks.

03 What the result was, *and what confirmed it.*

COMPLETION TIME
APRIL 21, 2021

The job was completed in just one week. The city continues to monitor the situation and the results have been spectacular given the difficulty of the job and the complications.

COMPLETION TIME

1 *week*

The city continues to monitor the results.

WHY IT MATTERED

Keeping lake water out lowers humidity, eliminates odors and pests, and preserves the building materials.

Several thousand gallons of water had been pouring into the chambers every day.

9 OF 10 WELLS SEALED

One well required additional work by the underwater construction crew.

START THE CONVERSATION

Send us the job.
We will send back an approach.

Send us the soil report or the failure photos and Technical Services will return a written approach within two business days.

TECH SUPPORT

404 · 618 · 0438

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Alchatek manufactures polyurethane resins, chemical grouts, and injection equipment for infrastructure repair: leak sealing, soil stabilization, concrete lifting, and seawall repair. Headquarters in Tucker, Georgia, with a bonded warehouse in Reno, Nevada.

Information in this document is believed accurate at the date of publication. Product performance depends on site conditions and application; consult the current Technical Data Sheet, which is the controlling document.