



Largest Industrial Wastewater System in the World
- Confidential Client

SORBIX™ RePURE Regenerable Ion Exchange Resin

SUMMARY

In 2015, ECT2 revolutionized PFAS treatment when they introduced SORBIX™ RePURE, the world's first and only regenerable ion exchange resin for treatment of PFAS. ECT2's patented technology, enabled by a proprietary specialty regenerant process, allows for PFAS-saturated resin to be regenerated onsite and reused.

Main Advantages

- Typical expectation up to a 1,000,000:1 volume reduction between treated water and waste
- ECT2 resins are up to 10 times more efficient than GAC
- Sustainable solution reduces long-term liability
- Lowest waste generated versus other solutions
- Resins are regenerated on-site in the treatment vessel
- Multiple treatment systems can share a central regeneration system
- Future-Proof solution capable of treating all PFAS compounds, including short-chains, to non-detect

Applications

Best suited where media replacement drives operating expenses:

- Long-term installations
- High-concentration remediation sites
- Difficult waters due to multiple contaminants
- When short chain PFAS or precursor reduction is required

How does it work?

- Water treatment process is the same as single-use resins
- For regeneration, a proprietary solution is cycled through the lead vessel (typically 6-8 hours to restore)
- The regeneration solution is distilled to recover the solvent
- Brine is treated in SuperLoaders™, typically less than 55-gallons
- Several product lines have been developed to incorporate this technology supported by our R Series Central Regeneration System.

SORBIX™ RePURE

Regenerable Ion Exchange Resin



Performance of Select SORBIX™ RePURE Regenerable IX Resin at Treatment Plants (through 2022)

Site Location	Design Flow Rate (gpm)	Million Gallons Treated	Years of Operation	Average Influent PFAS Conc. (ug/L)	Million Gallons per Regen Cycle
Pease AFB, NH	200	76	4.5	100	8.7
Williamtown Moors Drain ² , AU	125	173	5.0	4.6	22
Williamtown (Former Fire Training Area) ¹ AU	198	360	4.0	21.2	12
Williamtown Southern Area ¹ AU	198	205	3.5	13.9	3.9
Katherine Power & Water, AU	198	489	5.0	0.2	122
Tindal Fire Training Area ⁴ AU	198	216	3.5	11.9	36
Tindal Fire Station Area ² AU	198	342	3.5	14.4	20

¹Williamtown installations utilize a Hub & Spoke approach to regenerate vessels from three treatment systems at a single central regeneration facility.
²Tindal sites utilize a Hub & Spoke approach to regenerate vessels from two treatment systems at a central regeneration facility.



PEASE AIR FORCE BASE

- Groundwater
- 50,000 - 100,000 ng/L
- Startup in April 2018
- Discharge requirement: <70 ng/L for PFOS + PFOA



RAAF BASE WILLIAMTOWN

- Groundwater
- 10,000 - 65,000 ng/L
- Startup in July 2018
- Discharge requirement: <560 ng/L for PFOA, <70 ng/L PFOS + PFHxS



RAAF BASE TINDAL

- Groundwater
- 3,000 - 60,000 ng/L at both sites
- Startup in September 2018
- Discharge requirement: <560 ng/L for PFOA and <70 ng/L for PFOS + PFHxS