

LIFE  CLEAN

PFAS

LifeClean's new unique method
setting new global standard

Fire Marshalls August 2024



Agenda

LifeClean's unique PFAS removal method with LifeClean Sani A

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What is LifeClean Sani A?

Revolutionary product for PFAS removal



LifeClean Sani A patented product is stabilized chlorine dioxide in water.

This is our game-changing solution for PFAS removal. It effectively removes per- and polyfluoroalkyl substances (PFAS) from firetrucks, fire extinguishers and sprinkler systems.

As stricter restrictions regarding PFAS levels are being enforced, it's crucial to deal with contamination properly to avoid expensive and severe consequences.

Merely replacing the foam won't work. If the equipment or tank is already contaminated, PFAS substances will continue to contaminate, leading to costly cleaning and replacement procedures. But with LifeClean Sani, you can remove the PFAS contamination once and for all, saving you time and money while keeping your equipment and tanks safe and compliant.

LifeClean Sani A – Industry sectors

New industry best practice for firetrucks, fire extinguishers and sprinkler systems



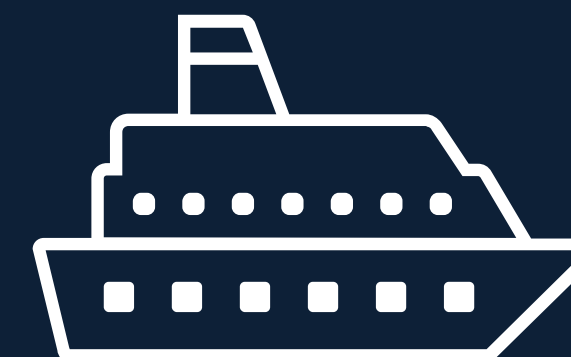
Firetrucks



Fire
extinguishers



Sprinkler systems



LifeClean Sani is environmentally friendly

Not classified as dangerous according to EG 1272/2008 (CLP)

LifeClean is easy degradable, reacts immediately and breaks down completely

LifeClean Sani A removal process

→ Evaluation

Client establishes PFAS problem. Evaluation of PFAS levels, choice of new non fluorinated foam, system combability and other conversion specifications.

→ Delivery

LifeClean delivers LifeClean Sani A for PFAS removal process.

If client DIY LifeClean Education on PFAS removal

→ Decontamination

Full decontamination process.

Starts with emptying the tank followed by flushing and cleaning.

After decontamination wastewater is collected and samples are taken and sent for analysis.

→ Recommissioning

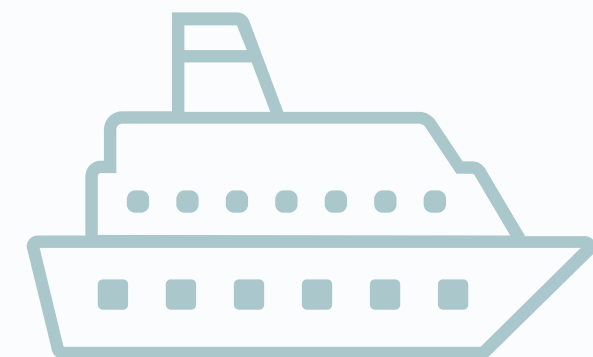
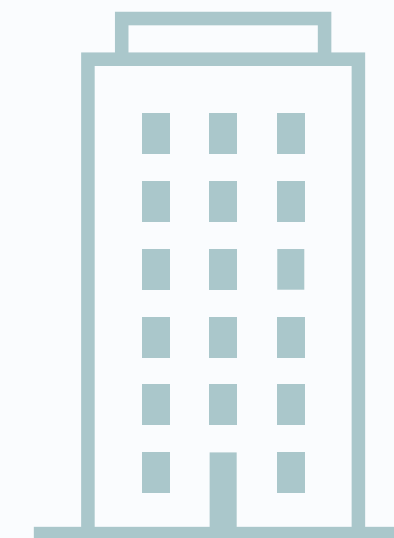
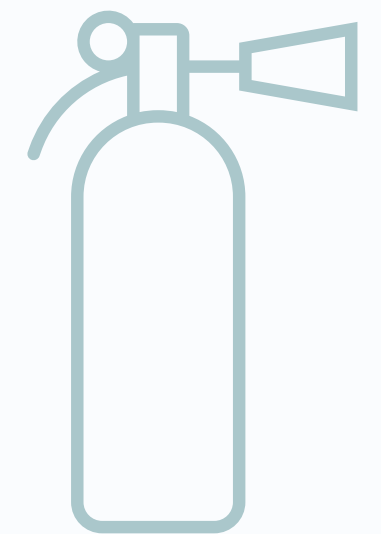
System conversion according to specifications.

Filling the new non fluorinated foam.

System commissioning.

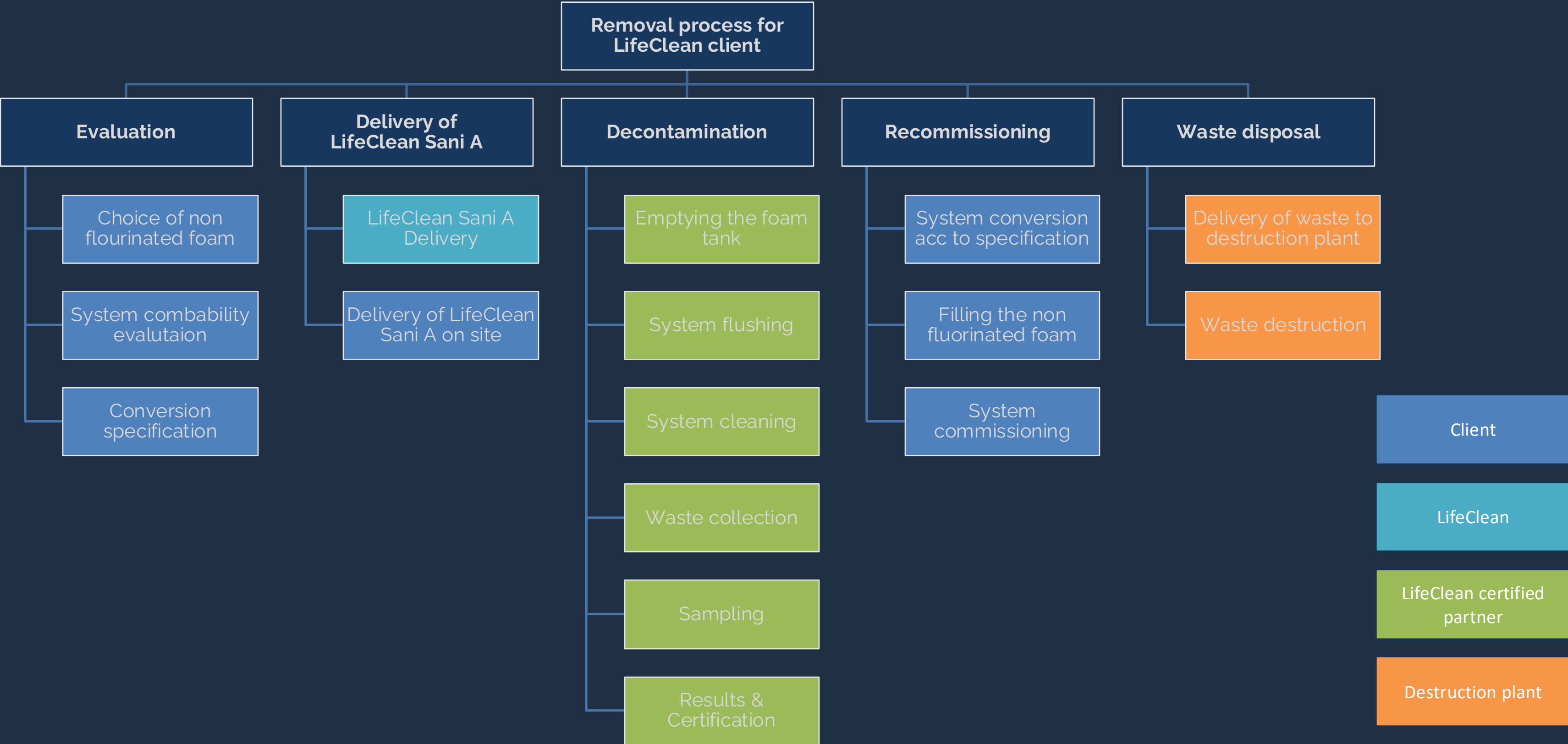
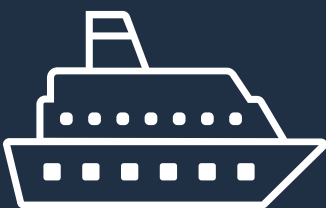
→ Waste disposal

Delivery of waste to destruction plant.



LifeClean Sani A removal process map

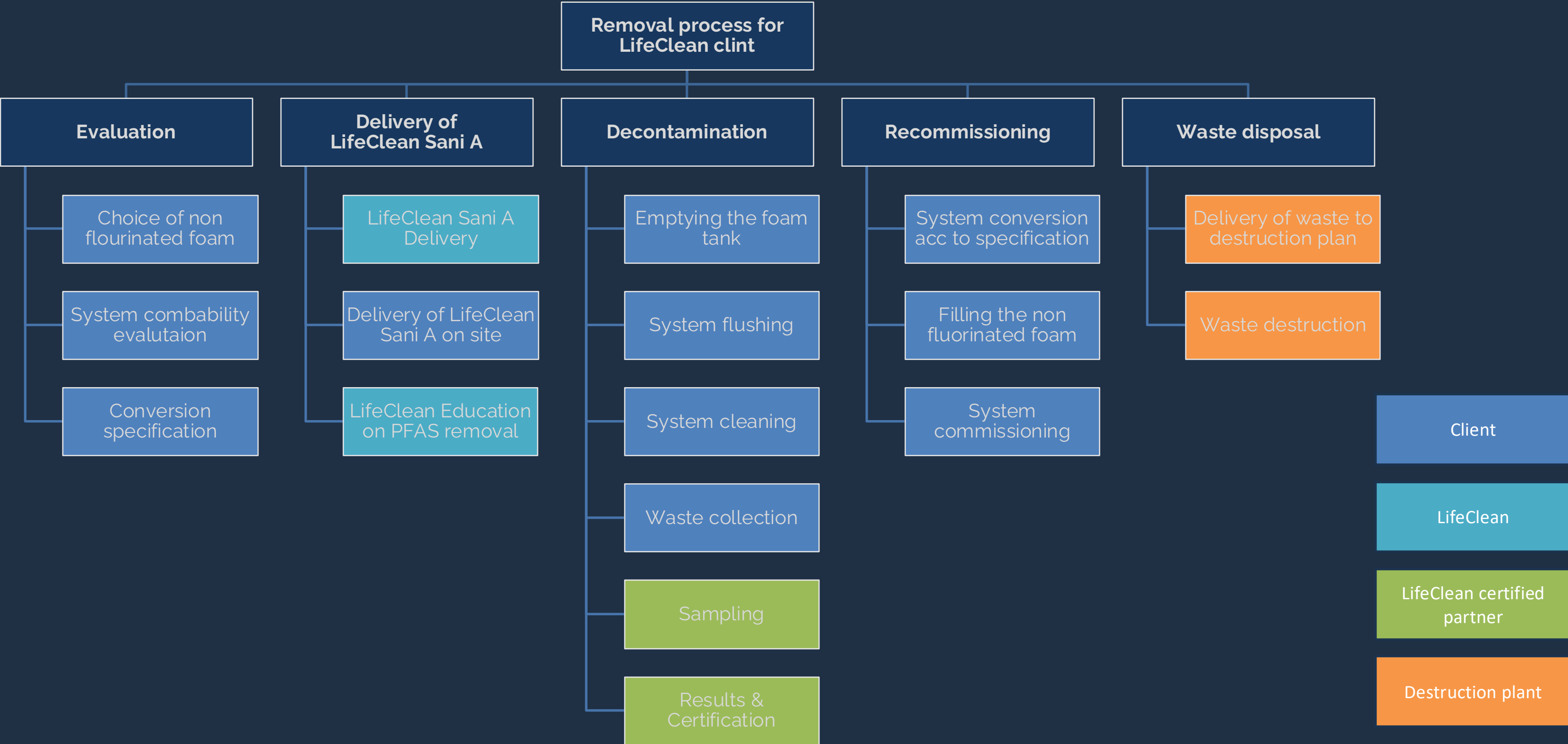
The process from A to Z on a vessel, using certified partner



LifeClean Sani A removal process



The process from A to Z on a firetruck, client DIY



LifeClean trusted partners

We have trusted partners in Sweden, the Nordics and EU

For Sweden and The Nordics:

BST

Market leader in sprinklers and fire protection systems.

<https://bstab.com/>

ScanUnit

Scandinavia's top-tier provider of comprehensive maintenance solutions for the shipping industry.

<https://scanunit.se/>

For Europe:

Remondis

REMONDIS is one of the world's leading recycling, service and water companies with around 800 business locations in over 30 countries

<https://remondisrecycling.se/>



PFAS - Decontamination Process

100 of millions ppm with PFAS

ECHA Propsed Limit 1 ppm



LifeClean Sani is very effective and has been shown in independent tests to remove over 99.97% of PFAS in foam tanks. LifeClean Sani produces very little residual water that has to be disposed or filtered to drinking water quality



LifeClean Exceeding ECHAs proposed limit of 1 ppm

ECHAs new proposal for PFAS in fire-fighting foam is suggested to a limit of 1 ppm.

ECHA restriction
1.000.000 ng/l
1 ppm = 1.000.000 ng/l



Before and after using LifeClean PFAS remover

PFAS (TOP) Pre-test average	103 000 000 ng/l
PFAS (TOP) Tank 1	767 ng/l
PFAS (TOP) Tank 2*	6 575 ng/l
PFAS (TOP) Tank 3	1 050 ng/l
PFAS (TOP) Tank 4	2 465 ng/l
*Additional cleaning will be performed, expected result approx. 700 ng/l	
PFAS (TOP) Pre-test average	52 000 000 ng/l
PFAS (TOP) Tank 5**	16 250 ng/l
PFAS (TOP) Tank 6**	10 000 ng/l
PFAS (TOP) Tank 7**	20 500 ng/l

**without the possibility of mechanical processing

Take responsibility today for a more sustainable tomorrow

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