

Management Summary

Legionella pneumophila removal of EAM Benelux modules

General

Four filter modules of EAM Benelux, coded modules 1 till 4, were tested under test conditions which are based on the ASTM F838-5 at Vitens Laboratories, Leeuwarden, The Netherlands. Tests were performed at April 2023; in order determine the LOG reduction of the filter module for the bacteria Legionella pneumophila.

Used methods

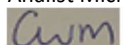
First the filter module was flushed with 1 L filtered tap water, followed by a challenge of 1 L water with a minimum concentration of $1,0 \times 10^9$ Legionella pneumophila per liter. An effluent sample was taken at the end of the challenge. The feed and effluent sample taken from the challenge test were analyzed by Vitens Laboratories, Leeuwarden, The Netherlands. Analysis of the samples was conducted within 24 hours after the testing. Detection and enumeration of the Legionella pneumophila was done according to NEN-EN-ISO 11731

Test results

The table below displays the results of the Legionella pneumophila challenge experiments, using the data from the analytical report of Vitens.

Filter	CFU / liter	LOG	LOG reduction
1 Influent	1,1E+10	10,0	-
2 Influent	1,1E+10	10,0	-
3 influent	1.95E+10	10,3	-
4 influent	1,95E+10	10,3	-
1 Effluent	2,09E+1	1,3	8,2
2 Effluent	2,07E+1	1,2	8,4
3 Effluent	2,03E+1	1,0	8,7
4 Effluent	2,06E+1	1,2	8,3

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