AIRWATERGREEN
Air Technology Sweden

AIRWATERGREEN INSTALLATION IN RESERVOIRS

Reference case Water Reservoirs

BAKGROUND

Reservoirs for drinking water, which is a food, often have challenges with moisture. It can lead to mold formation, corrosion but also damage to instruments and equipment. This leads to unnecessary elevated maintenance costs. During parts of the year, pipes and other surfaces are typically cooled by the cold raw water, which often leads to condensation as warmer humid air is ventilated into the building.

EVALUATION

At the first visit, several places with too high humidity levels were identified using a hand-held instrument. With a relative moisture level above 60% RH, corrosion will start developing. Damages were easily identified on several pipes, fittings, and parts of the walls.

Corrosion on pipes

As moisture penetrates reinforced concrete, there is also a risk of concrete break-up when the reinforcement rods start to corrode.

A decision was made to do a test with a FLEX and a REX dehumidifier. The installation was made easy as no unnecessary piping was needed. Only power supply and handling of reduced water. The purpose was to demonstrate the difference made by letting dehumidifiers reduce the humidity level.

Moisture measurement with hand instrument

FLEX installed for test

REX installed in reservoirs

After 2 months, new measurements were made and a reduction in the moisture level by more than 10% could be observed!

«It really makes a difference; it's completely dry now!» - Operations Manager

INVESTMENT

It was then decided to invest in several FLEXs and a REX. A pair of FLEXs are controlled using external sensor (dew point control) so that the temperature on the coldest surface determines the relative humidity level that the dehumidifiers are set for.

BENEFITS OF USING AWG´S PRODUCTS VS DO NOTHING?

The test showed that there is a need to use dehumidifiers to deal with the moisture problems and that the dehumidifiers can address the humidity challenge. Ventilation does not work but rather contribute to too high levels of humidity. Especially during the summer period.

The fact that the dehumidifiers are equally effective down to minus degrees is a big advantage in this installation where the temperature often tend to be below 15C. That it was easy to install the machines was equally important and that the energy consumption is low made the decision easy!

Airwatergreen AB
Lastbilsgatan 9
754 54 UPPSALA

info@airwatergreen.com

Org no: 556815-4818

www.airwatergreen.com