

New technology separates heavy metals from water

The innovation company Chromafora's technology for selectively extracting heavy metals from water from landfills has for the first time been used at full scale at the environmental company Ragn-Sells's facility in Fagerliden in Robertsfors municipality. By capturing the heavy metals at the molecular level, the water is purified from pollutants.

- We are happy to show the market that our technology works on an industrial scale. Because we can capture individual molecules, the treated water becomes clean and we get a concentrate that contains potential future resources such as zinc and rare earth metals, says Anders Kihl, Chairman of the Board of Chromafora.

The technique, called SELMEXT (Selective Metal Extraction), is used in combination with filtration to capture specific molecules from the water. At the plant in Fagerliden, Chromafora's method has been able to reduce the content of zinc by at least 80 percent. After the pilot project, the system has been adjusted and expanded and is now fully operational.

- Traditional methods for purifying water flows at landfills and mines are indiscriminate and create new waste streams that must be taken care of. Our innovative solution captures exactly the substances we are aiming for, which reduces the volume of waste, but also makes it possible to recycle other resources in the future, says Anders Kihl.

The permits required to operate, for example landfills or mining, impose requirements on the purification of water flows. Therefore, heavy metals have generally posed a problem for the owner. Instead, the main idea behind SELMEXT is to selectively extract heavy metals. This means removing the heavy metals that are creating a problem and recovering those that can be recycled and reused again.

- The opportunity to test our technology in operation at a proper landfill has been important to make the last improvements. Now we have a solution that is simple and flexible and can be adapted to the specific needs of mining companies as well as the metal industry, the CHP industry and other sectors," says Anders Kihl.

SELMEXT can also be used to recover, for example, rare earth metals, zinc and copper from waste streams. Chromafora also offers SELPAXT, a method for selectively extracting organic pollutants as the hormone disruptors in the PFAS family.

Chromafora was founded in 2010 by Dr. Martin Kullberg and Dr. Gaston Lavén.

For more information, please contact

Anders Kihl, Chairman of the Board of Chromafora, +46 70 927 26 84,
anders.kihl@ragnsells.com

Angelica Adamski, CEO of Chromafora, +46 70 575 71 60, angelica@chromafora.com