

## KROHNE'S TIDALFLUX PERFORMS CRITICAL ROLE IN FIRST MCERTS APPROVED INDUSTRIAL SITE

KROHNE's TIDALFLUX flowmeter is performing a critical role in England's first non-water industry flow monitoring installation to receive MCERTS (Monitoring Certification Scheme) self monitoring of effluent flow approval by the Environment Agency. The instrument has been installed as part of a \$385 million scheme to create an underground gas storage facility in East Riding, Yorkshire. MCERTS was set up by the Environment Agency and sets minimum requirements for the quality, installation and control of self monitoring of effluent flow. It is now being rolled out across other industry sectors and has also been extended to include the requirement to measure, collect and collate monitoring data.



**KROHNE TIDALFLUX installation**

The scheme is being built at Scottish and Southern Energy's (SSE) Aldbrough Gas Storage Facility and is being project managed by Jacobs Engineering. It involves creating caverns a mile underground through solution mining - a process where seawater is injected into wells within a salt bed to dissolve the mineral and create caverns. During solution mining, brine is pumped out of the cavern along a pipeline and discharged into the North Sea. This process is authorised by the Environment Agency and as part of the discharge consent conditions a flow monitoring system was required that met the MCERTS self monitoring of effluent flow standard. A key factor in Jacobs' decision to use KROHNE's TIDALFLUX was that the instrument is capable of accurately and reliably measuring the flow rate of the brine despite the pipe only being partially filled. This can be as low as 10 per cent. It was also capable of measuring a maximum flow rate of 2052 m<sup>3</sup>/hr. The configuration of the measurement electrodes within the TIDALFLUX means it is unaffected by any residues that may be floating on the water surface. It is also unaffected by the motion of the brine and the flow profile of water. The TIDALFLUX has a built-in polyurethane liner, which is resistant to abrasion caused by particles such as sand and stones suspended in the brine.

Dr Roger Wilde from Jacobs said: "Achieving the MCERTS self monitoring of effluent flow standard was important to the success of this project. This is the first time that the Environment Agency has approved an industrial flow measuring system to this standard outside the water industry and KROHNE's TIDALFLUX has formed an essential role in us gaining this certificate."

Paul Wiggins, technical advisor at the Environment Agency, said: "As the first non-water industry site to be put through the MCERTS self monitoring of effluent flow scheme, I am pleased to say that the SSE Aldbrough site set up met the requirements and it is great to see the first industry MCERTS site conformity certificate being awarded."

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