

Open Channel Flow Measurement for Phu My 3 Industrial Wastewater Treatment Plant.

Phu My 3 SIP is one of two industrial parks set up under the Co-operation and Development Agreement between Vietnam and Japan. The core values of the park include creating sustainable development, with a strong focus on environmental protection, delivering value to their customers, as well as profoundly contributing to the socioeconomic growth of the local area.

Located on the industrial park is a Wastewater Treatment Plant with an aim to safeguard investors from the risk of breaching environmental regulations. A Wastewater Treatment System is one of the compulsory requirements in an industrial parks infrastructure to achieve the target of environmental protection. The WWTP applies

comprehensive state-of-the art technical mechanisms and processes, including screening, equalizing, aerobic and physiochemical treatment, sludge stability, and final disinfection.

Effluent Monitoring with the AVFM 6.1

The Wastewater Treatment Plant is the first of its kind to produce effluents meeting quality requirements under Class A of QCVN 40:2011/BTNMT. As part of this, an automatic monitoring system was required in accordance with current regulations, to carefully monitor effluents and transmit the recorded data to the local government regulator. At the time, they did not have a flow meter installed so there was no way of accurately measuring the flow rate of the treated effluent at the wastewater treatment plant. To ensure they had the right solution for their application they contacted Pulsar Measurement partner TVA Online Solutions.

To ensure that TVA Technical Co Ltd recommended the right



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product for the Wastewater Treatment plant, they completed a survey of the site. From the survey, TVA Technical Co Ltd suggested the AVFM 6.1 Area-Velocity Flow Meter.

The AVFM 6.1 uses a submersible ultrasonic sensor which measures both level and velocity of flowing liquid to calculate flow measurement in an open channel or pipe. The unit can measure forward flow up to 6 m/s (19.7 ft/s) and reverse flow up to 1.5 m/s (5 ft/s). The electronics and software sample and average flow rates continuously provide stable readings.

The standard 26-million-point data logger was perfect for this application. With the ability to store time and date-stamped flow values at 10-second to 60-minute intervals. Daily flow reports are automatically created where total, minimum, maximum, and average flow rates are displayed on the LCD display. Transfer the log files and daily flow reports to any USB flash drive by just connecting to the logger's USB output.



The AVFM 6.1 was easily installed at the open channel and the results allowed the Wastewater Treatment Plant to read and record flow rates of their treated effluent and help orovide accrate reports to the local government. Since installation, the wastewater treatment plant as been pleased with the results that they have recieved from our Pulsar Measurement solution.

To learn more about the AVFM 6.1 and our other area-velocity solutions, visit our website.



TVA Online Solutions: https://tva-onlinesolution.com/





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