CASE STUDY
WASTE WATER TREATMENT PLANT

Waste Water Treatment Plants play a vital role in water management. They take and process the raw waste water from multiple sources, clean it, and discharge it back into the environment.

PROBLEM

Although Waste Water Treatment Plants are meant to in-take all sorts of waste water, whether it be from residential or industrial sources, oil contamination still poses a considerable threat. Oil polluted waste water can foul the membrane filters, destroy the bio-reactors, or clog the sand filters leading to potentially long plant shutdowns.

Plant shutdowns are particularly adverse when oil contamination exceeds the ability of the plant to handle. To protect a waste water treatment plant from oil contamination, the critical requirement is safeguarding the water inlets.

Plant location is an important factor in assessing the risk level from oil pollution. When a waste water plant is down-stream from manufacturing plants such as cement, chemical or metal refineries who discharge effluent water, there is always a chance for accidental oil contamination reaching the waste water treatment plant.

RECOMMENDATIONS

- OFFSHORE NETWORK OF ROW BUOYS
- SMS ALERTS
- INDUSTRIAL RADIO MODEMS
- POWERED BY SOLAR PANEL
- PROXIMITY TO WATER INLET

SOLUTION

Installing a network of autonomous ROW oil spill detectors in the area leading to the water inlets allow for early detection of potential threats. This provides you, the operator, the time you need to make a decision and allows more options for containment.

In Poland, the authorities of Wroclaw commissioned the ROW in their underground municipal sewer allowing 24/7 detection for oil contamination before water reaches the plant. Likewise, in Norway, the authorities at VOSS Kommune uses the ROW within their plant to be alerted as soon as contamination is detected.

For installations, notification of a spill in the proximity of the plant gives time to shut down pumping to water inlet until the pollution is confirmed and dealt with. Detecting oil earlier enables physical containment to be feasible, with more time to react and organise containment.