Water Leak Detection & Management

Author

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Annual Savings

Had this leak continued undetected it would have cost the client an estimated £186,000 in its first year.

Sewerage Charge Rebate

As a result of the evidence compiled by GM Energy Management this client received a Sewerage Charge Rebate of £17,747 from NI Water.

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In mid August, a significant water leak began on a large public sector site where GM Energy Management are contracted to monitor energy and water consumption. However, as it was underground and the water was able to get away without flooding, there was no visible trace of it and staff on site were completely unaware of the problem. In one day, the site's total daily consumption had risen by 165m³.

Without an automated Energy Monitoring & Targeting (eM&T) System, the leak would have gone undetected indefinitely. Fortunately, the client has an extensive amount of telemetry installed on key meters throughout their estate, which links back to an eM&T System which we manage. Within the system, we have set exception alarms, based on anticipated consumption profiles. Should the site deviate beyond its daily threshold, we receive an exception alarm and are aware of the issue within less than 24 hours.

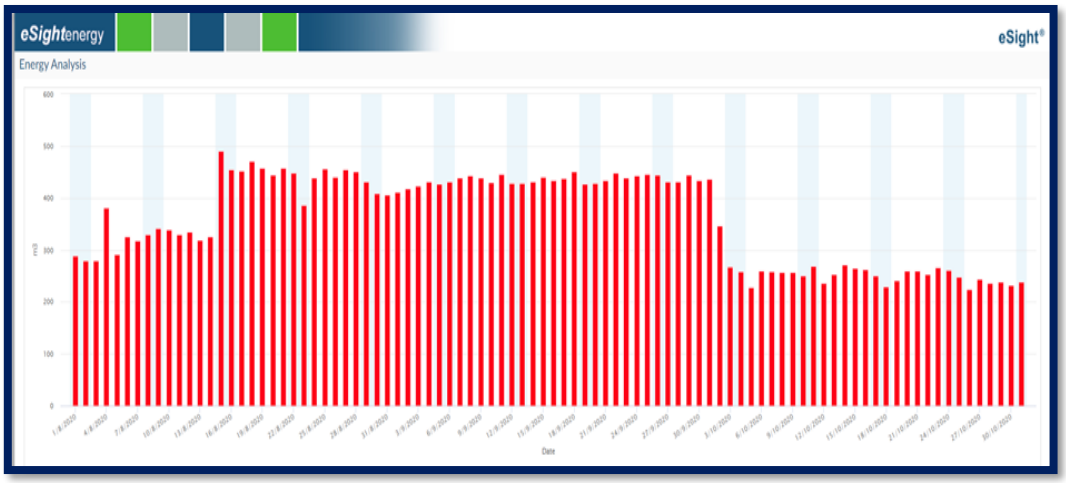
With leaks like this, early detection is critical to minimise the associated costs!

The Source of the Leak

Once we became aware of the leak, locating it was the next challenge. With several water sub-meters on site also connected to the eM&T System, we were quickly able to eliminate a number of locations, but a vast area remained. With no visible trace above ground it was always going to be difficult and very time consuming for the specialist leak detection company who had been brought to site. On the 1st October it was located by the specialist contractor and quickly repaired by the site's main contractor.

During the 48 days that the leak continued for the site's average daily water consumption was 180m³ above its normal. **Had the leak gone undetected it would have cost the client an estimated £186,000 a year.**

Fiscal Water Meter Daily Consumption Totals (m³), 1st August – 31st October



In Northern Ireland, over 60% of a typical commercial water bill is made up of sewerage charges. In the event of a leak, were it can be proven that the water did not return to the public sewer, a rebate may be sought from NI Water for that portion of any associated bills.

Hence, three weeks on from the repair to the broken pipe was completed, GM Energy Management put together an evidence pack for submission to NI Water. Again, data gathered from the eM&T System was invaluable to this - helping us clearly demonstrate the extent and duration of the leak.

As a result of the evidence provided, the client subsequently received a sewerage charge rebate of £17,747 from NI Water.

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