

Ice Pigging™ improves landfill leachate discharge to sewer main

The Ice Pigging™ team achieved significant success in its first-of-its-kind cleaning of a landfill leachate discharge to sewer main in the UK. We worked with, a waste management company based in the North of England, to remove as much accumulated fouling as possible from its leachate pumping main, to help improve discharge rates.

THE MISSION

Improve flow rate and pumping capacity of leachate discharge main

A waste management company in northern England wanted to increase its leachate rising main's capacity in its landfill site. The company manages over half a million tonnes of waste each year from various sources including households, businesses, and industries.

Over the last 10 years, the landfill's leachate mains flow rate had dropped from 6.5l/s to only 3.7l/s. Leachate is a liquid mixture normally found in landfills made up of various contaminants and pollutants, which waste companies need to treat and dispose of. A decrease in the flow of leachate discharge main could result in potential environmental harm, increased cost, compliance issues, and other operational challenges.

OUR SOLUTION

Pioneering Ice Pigging cleaning of leachate rising main

In our first-ever cleaning of a waste management company's landfill leachate pumping main in the UK, the Ice Pigging team used 20 tonnes of ice to effectively clear the entire 3,200m length of a DN125 pipe. For ease of cleaning the pipework was broken into two sections, both of which were cleaned at night to minimise disruption.

To ensure smooth operations, we worked closely with the client and the local council to secure permits and have efficient traffic management on the night of the operations.

THE RESULTS

Significant increase in leachate rising main flow rate

The client was happy to see a significant rise of its landfill leachate discharge main post-Ice Pigging operation. Through its pumping monitoring system, the company identified a 67% improvement, with flow rate rising from 3.7l/s to 6.2l/s.

The positive result allowed the client to meet its discharge limits and even provides scope to increase its output in the future to allow for site expansion.

With the successful debut of Ice Pigging, one of SUEZ recycling and recovery UK's innovative solutions, in clearing landfill leachate, this will certainly open doors for so much potential for Ice Pigging throughout the industry.

67%

increase in flow rate

rising from 3.1l/s before Ice Pigging
to 6.2l/s after

