

Filtration System Provides Success for Landfill Remediation



PROJECT SCOPE

Stormwater from a landfill remediation project required collection and filtration in order to remove contaminants.

CLIENT

Municipality

INDUSTRY SEGMENT

Environmental/Municipal

EQUIPMENT

- 1 DV200c 8" pump
- 2 Open Top weir tanks
- 3 1,800-gallon tanks
- Water Quality Monitoring Box
- BF400 bag filtration unit
- 54-4SK media filter

BACKGROUND

A municipality required a filtration system that would remove stormwater contaminants during a wet-weather landfill remediation project, at a rate of 500 GPM.

OUTCOME

Rain for Rent provided a temporary filtration system designed to remove contaminants from the site's water through a multi-step process that began by altering influent stormwater pH from 11.0 to 7.0. This was performed within the first chamber of two parallel weir tanks by introducing CO₂ - the gas dissolves in water to form carbonic acid which slowly lowers the pH. To remedy the high turbidity, chitosan flocculant was used to help the majority of sediments drop out into the middle sections of the weir tanks, which then emptied into a temporary holding pond. Additional chitosan was injected into the holding pond water as it was pumped into a series of three bi-level tanks for final settling. An 8" pump then moved the treated water through a water quality monitoring box, a series of media and bag filters, and finally through two sand filters containing media that removed dissolved metals.

HIGHLIGHTS

- Rain for Rent performed ongoing field tests and worked closely with the Municipality's engineers to review and address the complexities of the project.
- The filtration system performed without issue during the nine month project and assisted the customer in meeting all water quality regulations and avoiding costly fines.

CUSTOMER FEEDBACK

The customer was pleased with Rain for Rent's ability to work closely with their engineering consultants, and appreciated that the equipment worked right the first time to prevent environmental contamination. They look forward to partnering with Rain for Rent again in the future.



Liquid Ingenuity®

PUMPS • TANKS • FILTRATION • PIPE • SPILLGUARDS

800 742 7246 rainforrent.com