

# Proactive Solutions for Waste Water Treatment: Reduce Your Costs and Environmental Impact

## The Challenge of Maintaining Sewer Lines

### Did You Know?

- ❏ A city with a population of 350,000 could expect to pay \$600,000 annually to flush their sewer lines using traditional, reactive maintenance methods.
- ❏ It costs approximately \$400 per ton to remove and treat food waste at a waste water treatment facility.

Mac & Co. can reduce your waste water and infrastructure maintenance costs.

It is difficult to control the fats, oils and grease (FOG) that build up in sewer lines. Traditional methods used to clear the lines, such as pumping and hydrojetting, are expensive and can damage the infrastructure. Harsh chemicals used to break up FOG only push it further down the line and can be harmful to the environment.

None of these methods correct the problem at the source—they simply transfer FOG further down the sewer line.

What if there was a way to reduce or eliminate the need for these expensive and harmful procedures, while safely treating the cause of the problem instead of the symptoms?

## The Mac & Co. Proactive Biological Approach

With over 20 years of experience in waste water treatment, Mac & Co. provides proactive bioremediation solutions that treat—and prevent—the buildup of fats, oils and grease in drain lines, grease traps, manholes, lift stations and sewer lines.

- ❏ **Reduce maintenance and outside contractor costs.** Our cost-effective solution reduces or eliminates the need for expensive pumping, hydrojetting or harsh chemicals. We use the sewer lines to pretreat waste water, which makes it easier to maintain the entire infrastructure.
- ❏ **Protect the environment.** Our formulation contains no enzymes, emulsifiers, surfactants or degreasers, which reduces H<sub>2</sub>S and the production of hydrogen sulfide, nitrogen, suspended solids and biological oxygen demand.
- ❏ **Treat the cause instead of the symptom.** Instead of physically removing FOG, pushing it further down the sewer line or creating harmful byproducts, our treatment transforms fats, oils and grease into water and carbon dioxide.
- ❏ **Receive expert service and support.** Our full-service program ensures your infrastructure is properly maintained so that emergency situations can be dramatically reduced or eliminated.

## Your Partner for Waste Water Treatment

Our team of technicians will analyze your current scenario and work with you to develop the best solution. Our solution biologically digests fats, oils, grease and suspended solids, which reduces biological oxygen demand levels in the municipal sewer system. This in turn reduces organic loading and noxious odours.

With our solution, municipalities use their current infrastructure as a pretreatment facility to reduce the loads entering waste water treatment plants. As a result, the high energy costs and machinery repair and replacement costs normally associated with waste water treatment plants are reduced.

By using our biological treatment in manholes and lift stations, municipalities can reduce or eliminate the need for expensive hydrojetting and focus efforts on proactive maintenance programs that support their infrastructure and protect the environment.

As your partner in waste water treatment, we make sure your sewer system is well maintained and issues with FOG, suspended solids, biological oxygen demand and foaming remain under control.

- ❏ **Analysis and cost assessment.** We will analyze your current maintenance procedures and costs, develop a custom solution, and provide an estimate of short-term and long-term cost savings.
- ❏ **Initial treatment.** One of our technicians will set up and begin your new waste water treatment plan based on your custom solution.
- ❏ **Monthly maintenance visit.** Each month, one of our technicians will inspect the sites and replenish the treatment solution as needed. You are not required to keep product in inventory.
- ❏ **Monthly results report.** We will provide a report to demonstrate results.
- ❏ **Source client identification.** If desired, we will work with you to target source clients that contribute the most FOG to your sewer lines and approach them about treatment options at their location. Client confidentiality is essential.



# Reactive vs. Proactive: A Cost Comparison



What are you spending to manage waste water issues? The following shows how one municipal client saved over \$89,000 annually by partnering with Mac & Co. to treat a problematic lift station main line. Six manholes and two lift stations were transformed into pretreatment facilities, which eased the burden on the waste water treatment infrastructure.

## Before: Reactive Method

Cost Components	Unit Cost	Quantity per Month	Monthly Total	Annual Total
Hydrojetting of lines	\$500	8	\$4,000	\$48,000
Truck rental and equipment	\$200	18.6	\$3,720	\$44,640
Labour for two operators on rental truck	\$80/hr	18.6	\$1,488	\$17,856
		<b>TOTAL</b>	<b>\$9,208</b>	<b>\$110,496</b>

*Costs shown do not include vacuum truck and disposal fees associated with FOG removal, which for this type of situation could amount to thousands in additional costs annually.*

## After: Proactive Method with Mac & Co.

Cost Components	Unit Cost	Quantity per Month	Monthly Total	Annual Total
Mac & Co. treatment and maintenance package	\$220	8	\$1,760	\$21,120
		<b>TOTAL</b>	<b>\$1,760</b>	<b>\$21,120</b>
		<b>SAVINGS</b>	<b>\$7,448</b>	<b>\$89,376</b>

### Maintenance package includes:

- ☒ Monthly installation or change out of all treatments.
- ☒ Site inspection.
- ☒ Monthly reporting.

Our waste water treatment programs allow municipalities to proactively maintain city sewers while saving money and reducing their environmental impact. Let us customize an all-inclusive package that will meet your waste water treatment requirements.

Contact us today for a free consultation.

# Mac & Co.

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