

Municipal Heart Attack: Illegal Dumping Of Fryer Grease, Fat Leads to Infarctions

The Sewer-Fat Crisis Stirs a National Stink

By

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NEW YORK -- Why wait until the next story about coagulated fat in sewers comes along when you can read this one now?

District Council 37, the municipal employees union, has been putting up posters in the subway lately, praising the "everyday heroes" who work for the City of New York. The posters have pictures of a tree pruner, a museum guard, a dental hygienist. Do the guys who get rid of fat clogs in the sewers rate a picture?

Nah.

"Never got on a poster," George Markovics shouts above the oceanic roar of his jet-flusher truck. He is standing over a manhole in south Brooklyn, looking down. At the bottom of the hole, where raw sewage should be babbling along, a smear of sickly gray goop is blocking the pipe. "I like water, you know, sewers -- I love it," yells Mr. Markovics, who works for the Department of Environmental Protection. Positioning his rig near the hole, he bellows: "We do a lot for the city. We're the best. Hey, watch your back!"

Maybe Mr. Markovics, who is 40 years old, can qualify as a poster boy for the national sewer-fat crisis. America's sewers are in a bad way. Three quarters are so bunged up that they work at half capacity, causing 40,000 illegal spews a year into open water. Local governments already spend \$25 billion a year to keep the sewers running. The Water Infrastructure Network, a coalition of the wastewater-aware, warns that it will cost an additional \$20 billion a year for the next 20 years to keep them from falling apart.

Roots, corrosion, cave-ins, bottles, broken stick-ball bats, rusty car parts -- anything will divert sewage on its way to the treatment plant. But the blockages now are almost all wrapped up in fat. The perpetrator is fried food.

Fueled by the fast-food frenzy and an influx of immigrant cooks, America's appetite for eating out has bloated the national output of a viscous goop known as restaurant grease -- to three billion pounds a year. Where does used grease go? Traditionally, into the cauldrons of the rendering industry, which processes animal castoffs into useful products. But for reasons ranging from Malaysia's palm-oil boom to Mayor Rudolph Giuliani's crackdown on New York's garbage Mafia, more goop than ever is ending up in the sewer.

How it wends its way in -- by pipe? by bucket? -- is a matter of culinary mystery and governmental mystification. Once the goop arrives, the effect is clearer than mud: Grease and sewage don't mix.

Don Montelli stands over a manhole on another Brooklyn corner -- a "notorious grease spot," he says, in front of a Chinese take-out. Mr. Montelli, a high-tech sewer worker, holds a video screen attached by wire to a robot camera down below. "What you're looking at right now," Mr. Montelli explains, "is grease down the sewer."

With colonoscopic clarity, the camera shows a pipe with a drippy coating of fat. Fat won't pollute; it won't corrode or explode. It accretes. Sewer rats love sewer fat; high protein builds their sex drive. Solids stick in fat. Slowly, pipes occlude.

Sewage backs up into basements -- or worse, the fat hardens, a chunk breaks off and rides down the pipe until it jams in the machinery of an underground floodgate. That, to use a more digestible metaphor, causes a municipal heart attack.

Fat infarctions have struck of late in Honolulu, Columbus, Ohio, and Lake Placid, N.Y. A grease clot in Cobb County, Ga., recently set off a 600,000 gallon sewage surge into the Chattahoochee River. In January, the U.S. Environmental Protection Agency sued Los Angeles for allowing 2,000 overflows in the past five years; an EPA audit blamed 41% of them on fat.

New York's sewers run for 6,437 miles. Waste water and storm water mix in 70% of the system. When it rains hard, treatment plants can't cope with the flow, so regulators open and the mess gushes into rivers and bays. On dry days, the gates are supposed to stay closed, and do -- except when grease gums up the works.

With 21,000 places serving food, New York gets 5,000 fat-based backups a year and several big gum-ups. Its environmental protectors have fingered greasy-spoon districts as suspects, not just Coney Island and Chinatown, but the area around Carnegie Hall. New York's greasiest sewers, however, lie in the section of the borough of Queens called Flushing.

Flushing's Fat Fallacy

Flushing is solidly Asian and restaurant-intense. Bouquet of deep-fryer wafts over streets abloom with signage. Crowds push past hole-in-the-wall stalls; fish and vegetable stands build mountains of perishing perishables. So much fat gets flushed in Flushing that last year it blocked the sewers 50 times. Three times at the end of 1999, it locked up floodgates and let raw sewage flush into Flushing River.

"We are subjected to the stench of sewer dirt to the degree that we are throwing up. This is not to laugh!" So said Julia Harrison, to laughs, at a special City Hall sewer-fat hearing. Ms. Harrison is Flushing's City Council member. "Restaurant people have been preached to, given literature, and still plead ignorance," she said. "It's not ignorance. It's up yours!"

"And down ours!" came a shout from the audience.

The city's plumbing code requires "grease-generating establishments" to have grease traps. A grease trap is a box. Greasy water flows into it and slows, letting the grease rise. The water drains into the sewer and the grease stays. The MGM Grand in Las Vegas has five 15,000 gallon grease traps; trucks pump them out. In big cities, traps fit under kitchen floors. They have to be emptied by hand.

Scooping out a grease trap is a job nobody wants to do after dinner. Often, nobody does. When a trap fills, greasy water races through it. A Chinese kitchen with four wok stations needs a 5,000 gallon trap or it may as well have no trap at all. Lots of places, Chinese and otherwise, don't.

Last year, New York kicked off a "Grease Outreach" campaign. A kitchen dragnet uncovered a 73% rate of grease-trap abuse. The city cracked down, first in Flushing, with fines of \$1,000 a day. "We think we've been effective," says Robert LaGrotta, head of pollution prevention. Except that the sewers are still full of fat.

New York has six grease inspectors for 21,000 restaurants. It asks them all to recycle trap grease, but the city has only one trap-grease recycler. "We thought this was the future," says Livio Forte of A&L Recycling. It wasn't. Trap grease is too watery -- expensive to boil down. In a month, A&L collects only 15,000 gallons of it.

Which recycles the question: Where does the grease go? Forget trap grease -- it's a drop in the can. Most restaurant grease actually comes from deep-fat fryers. You can't pour gallons of that down the drain. The real issue is: What happens to the deep fat? Mr. LaGrotta admits he's out of his depth. "From my understanding," he says, "it has value, but I'm no expert. Better talk to some people in the business."

A place to start is [Darling International](#) Inc., a rendering company whose Web site says, "We are the grease team. We love it. We dream grease. Its color. Its ... you know ... greasiness." "The value on this product is low," says Neil Katchen, who runs Darling's eastern region. "The cost of processing is high. Honestly, I've been in the business 30 years and prices have never been so bad."

Mr. Katchen is talking yellow grease. After Darling centrifuges french-fry particulates out of restaurant grease, yellow grease results. Once, yellow grease was animal fat; now, it's vegetable oil. It goes into animal feed, but has uses in paint, face powder and adhesive tape. With oil costs rising, some renderers are burning it.

Yellow grease is an international commodity. On the exchanges, it's up against Brazilian soy oil and Southeast Asian palm oil, not to mention cocoa butter, Borneo tallow, meadowfoam oil and beeswax. Thanks to Third-World plantations, global oil-and-fat output has tripled since 1960, to more than 100 million tons a year. With this great grease glut sending prices ever downward, high-cost old fryer fat can't compete.

Low-Grade Grease

A grease pumper like Darling won't collect low-grade grease in New York. Darling gets it from scavengers willing to wrestle five-gallon jugs and 50-gallon drums out of cellars and back alleys.

"My family came here from Europe and got into grease because grease was good business," says Bob Sirocco, who is 42 and one of the grandchildren. His company is called American Byproducts. At 8 p.m., he's been wrestling grease since dawn. The price collapse has upset

Mr. Sirocco's traditions: The grandfather paid for old fat; the grandson charges to haul it away.

"We don't charge enough," he says. "Maybe \$30 a month." But his customers are in revolt. They don't have to hire grease collectors, so why should they? "They just, ah, do with the grease whatever they do with it," says Mr. Sirocco. "It's something I don't pursue."

This is where the Mafia comes in.

A grease disposal trick, restaurant people say, is to freeze it in plastic and chuck it into the garbage. Problem one: In summer, it melts all over the sidewalk.

Problem two: In 1996, Mayor Giuliani broke the cartels that fixed prices on garbage pickups. "One of the things they did," the mayor told the press at the time, "was to beat people up, bust their kneecaps and kill them." The city sent some perps to prison, asked national haulers to take over many routes and clapped a lid on prices.

That took care of the Mafia, not the grease. For pickups, haulers charge restaurants by the cubic yard; for dumping, landfills charge haulers by the ton. That means the profitable garbage is light and fluffy. Grease is heavy and dense -- and putrid and sloppy. With prices capped and profits slim, haulers are raising a stink. They won't take the grease.

"No, absolutely not," says Bill Johnson at Waste Services of New York, a company with restaurant routes all around Flushing. "Grease is something we do not want to see in our trucks."

So? Where does it go?

"This is really reprehensible," says John Lagomarsino. "They dump it in the sewer at 1 o'clock in the morning." Mr. Lagomarsino, of J&R Rendering, is Bob Sirocco's cousin and a fellow grease man. "Look in the sewers," he recommends. "You see grease trails going into them. I mean, this is primeval."

Presented with this intelligence, a garbage collector in lower Manhattan drops a can and says, "Here, I'll show you." He walks to a corner sewer and points in. "See. That's grease." The basin is plugged solid. Lots of Flushing's are, too. One, on a restaurant-thick street, is so full

even its grate is gunked up, and simple to sample: Sewer grease is gritty yet supple, sticky yet smooth, with hints of putty and beach tar.

"To me," George Markovics is yelling across the open manhole in south Brooklyn, "it's almost a concrete substance."

Mr. Markovics has lowered his flusher hose into the hole. Now he maneuvers its nozzle into the pipe, hits a lever and guns up the water pressure. The nozzle rockets into the blockage. Seconds later, sewage boils out, followed by hunks of fat riding the gusher toward the next floodgate.

"Know what this is from?" Mr. Markovics says as the flow returns to its usual ooze. "This is from good cooking. Good cooking -- know what I mean? Whenever I see grease, that's what I think of. Good cooking and good food."

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