

San Francisco Public Utilities Commission

SFGreasecycle



8" VCP

8178 BELVEDERE AV
061003004 -> 061003003

326' 05"



28' 05"

The cost of the sewer system

- Sewer Main

780 miles = 4,118,400 feet

4,738,370 LF * 200 \$/LF = 8.2 billion

- Sewer Lateral

2,200 miles = 11,616,000 feet

11,616,000 LF * 115 \$/LF = 1.3 billion

That is 9.5 billion for a new sewer system

And impacting it 5% = 475 million

4% = 380 million

3% = 285 million

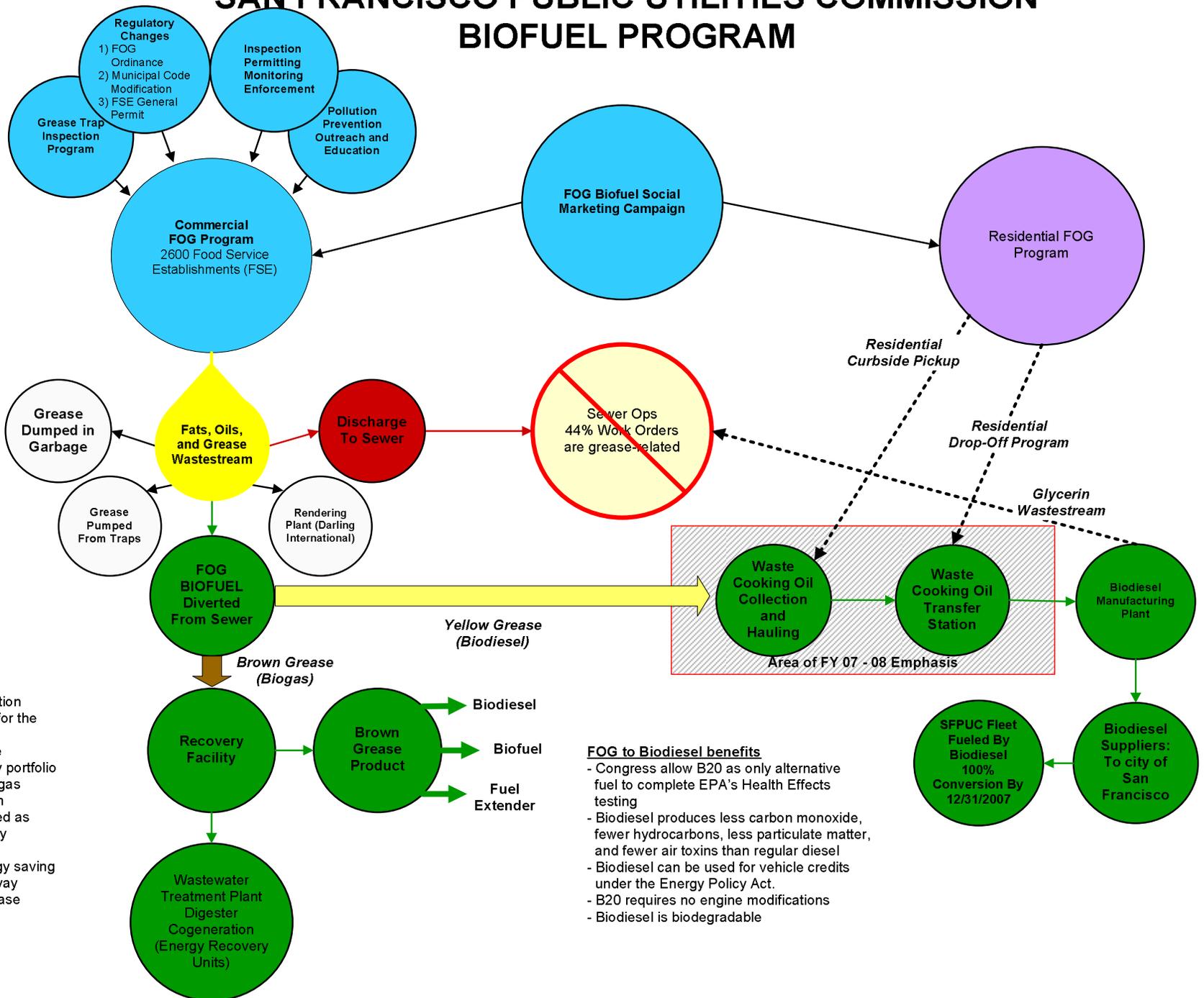
.5% = 47 million

Other reasons to protect the linear asset, the sewer system

- Public perception of bioenergy and alternative infrastructure is valuable
- Rising energy costs are expected
- Non-compliance with AB 32 will cost much more than that not according to a recent Air Quality Control Board study



SAN FRANCISCO PUBLIC UTILITIES COMMISSION BIOFUEL PROGRAM

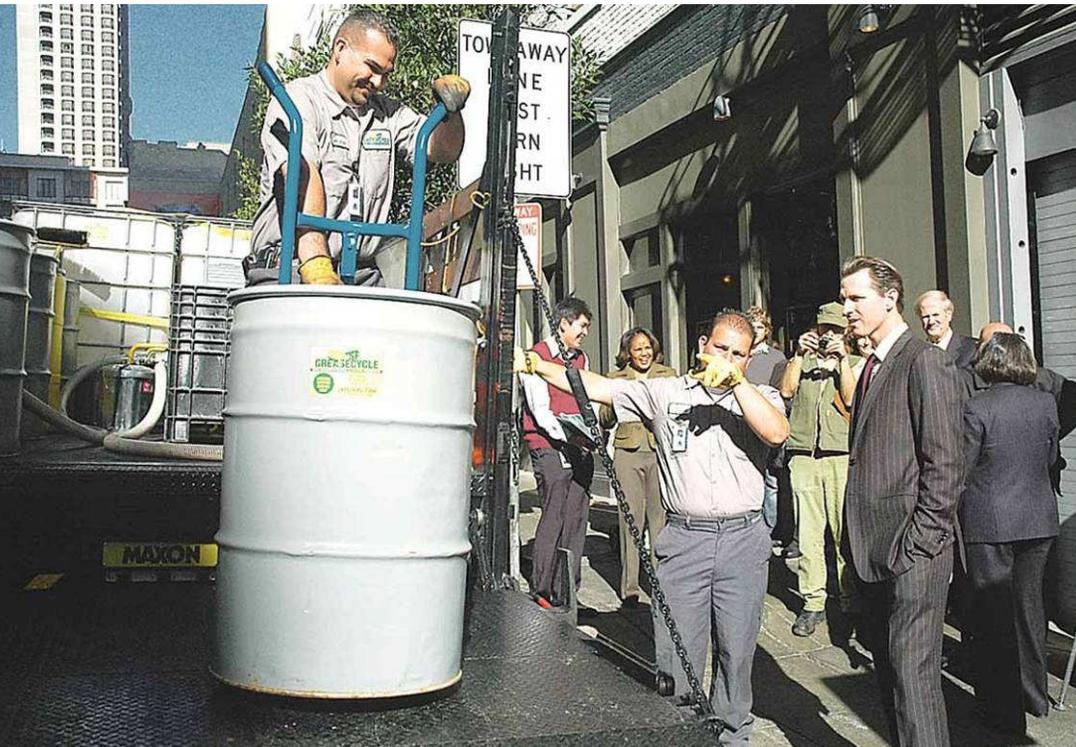


FOG to Biogas benefits

- Increase methane production increases energy savings for the SFPUC
- Renewable energy source
- Expand renewable energy portfolio
- Appropriate green house gas emissions reduction action
- Use of methane recognized as cleaner burning technology
- Alternative energy credits
- Sustainable plan for energy saving in a more environmental way
- Revenue source from grease hauler "Tipping fees"

FOG to Biodiesel benefits

- Congress allow B20 as only alternative fuel to complete EPA's Health Effects testing
- Biodiesel produces less carbon monoxide, fewer hydrocarbons, less particulate matter, and fewer air toxins than regular diesel
- Biodiesel can be used for vehicle credits under the Energy Policy Act.
- B20 requires no engine modifications
- Biodiesel is biodegradable



AN INSTANT CLASSIC VIDEO GAME
DATEBOOK: Mass Effect's action, storytelling make it season's best

AT-HOME DNA TESTS MULTIPLY
BUSINESS: Google, Genentech behind latest kit on the market

San Francisco Chronicle

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San Francisco Bay Oil Spill **Homeland Security spill probe is sought**

House members not pleased safety board could take a year

*By Peter Florio
 CHRONICLE STAFF WRITER*

A House subcommittee grilled the federal and state commanders in charge of handling the oil spill in San Francisco Bay and, unhappy with the responses, announced Monday they would seek a new probe by the inspector general for the Department of Homeland Security.

The subcommittee members, including House Speaker Nancy Pelosi, D-San Francisco, were particularly concerned when they heard that the National Transportation Safety Board investigation could take a year. It is imperative, they said, that problems with the emergency response be identified immediately so solutions can be found before the next disaster.

"I wasn't satisfied with the answers or the path that we were on," Pelosi said after the three-hour hearing in the Presidio held by the House Subcommittee on Coast Guard and Maritime Transportation.

She expressed concerns that the Coast Guard and California Department of Fish and Game office of Spill Prevention and Response were investigating

GREASY PATH TO A CLEAN FUTURE

S.F. to recycle restaurants' cooking oil for use as fuel

*By Charles Burgess
 CHRONICLE STAFF WRITER*

San Francisco officials are giving the city's old grease a new career — one that should mean cleaner air, cleaner streets, and more brownies that smell like fresh bread each day and french fries that melt.

Today the city launches SFGreaseCycle, a free program in which the city will pick up used vegetable oil and grease from local restaurants, health and other commercial food preparation establishments. Those substances then will be turned into a biodiesel, a fuel made of plant oil that burns cleaner than petroleum-based fuels.

Although several other localities around the nation have begun limited programs to collect cooking grease for biodiesel, San Francisco officials believe theirs will be the largest such effort.

Eventually, the city wants to recycle grease produced in homes with the installation of a biodiesel-to-power all city vehicles, including public buses and fire trucks.

"This is a case of taking what could be a bad situation and turning it into a win," said Susan Leal, general manager of the



GETTING BACK INTO THE FLOW



Wave rider Paul Deweller prepares to end an all-imposed drought of wave riding with a surf session at Ocean Beach. Other Bay Area surfers are following suit. **See story, Page A13**

California sues 20 companies over lead in toys

*By Jane Roy
 CHRONICLE ENVIRONMENT WRITER*

California Attorney General Jerry Brown has sued 20 companies, including Mattel Inc. and Toys R Us, accusing them of selling toys that contain unsafe amounts of lead and failing to warn the public of the health dangers.

Brown's lawsuit, filed Monday in Alameda County Superior Court, alleges that the companies violated the Safe Drinking Water and Toxic Enforcement Act of 1986, a voter-approved law passed as Proposition 65, because they didn't notify customers of toys in the marketplace that contained high concentrations of lead.

Lead, known to cause cancer and reproductive harm, also can cause mental and physical retardation as well as behavioral and other health problems in children. In adults, it can damage the nervous system.

The state's legal action follows a string of nationwide recalls by Mattel, Fisher-Price and other companies that make popular toys, including some Fisher, Erno and Big Block toys in the Science Street line. **See story, Page A12**



NATIONWORLD

TENTATIVE STEPS TOWARD NORMALCY IN BAGHDAD

For the first time in nearly two years, people move with freedom around much of Baghdad. While no-go zones remain, more Iraqis drive between Sunni and Shiite areas for work, shopping or school. Residents are surprised and relieved to see commerce and movement increase. **A15**

ESTIMATE OF HIV CASES WORLDWIDE CUT SHARPLY

Scientists are rolling back by 6.3 million the number of people worldwide believed to be infected with HIV. The dramatic reduction is largely the result of new methods of counting, but researchers also find that infections have been declining since peaking in the late 1990s. **A3**

SFGate.com

OPEN MIC: Readers continue to weigh in on Barry Bonds' indictment. [sfgate.com/bonds](#)

THANKSGIVING PAGE: 9's not too late to take it some. [sfgate.com/thanksgiving](#)

INTERACTIVE GRAPHIC: See all coverage of Your Black Mission Bakery at [sfgate.com/black](#)

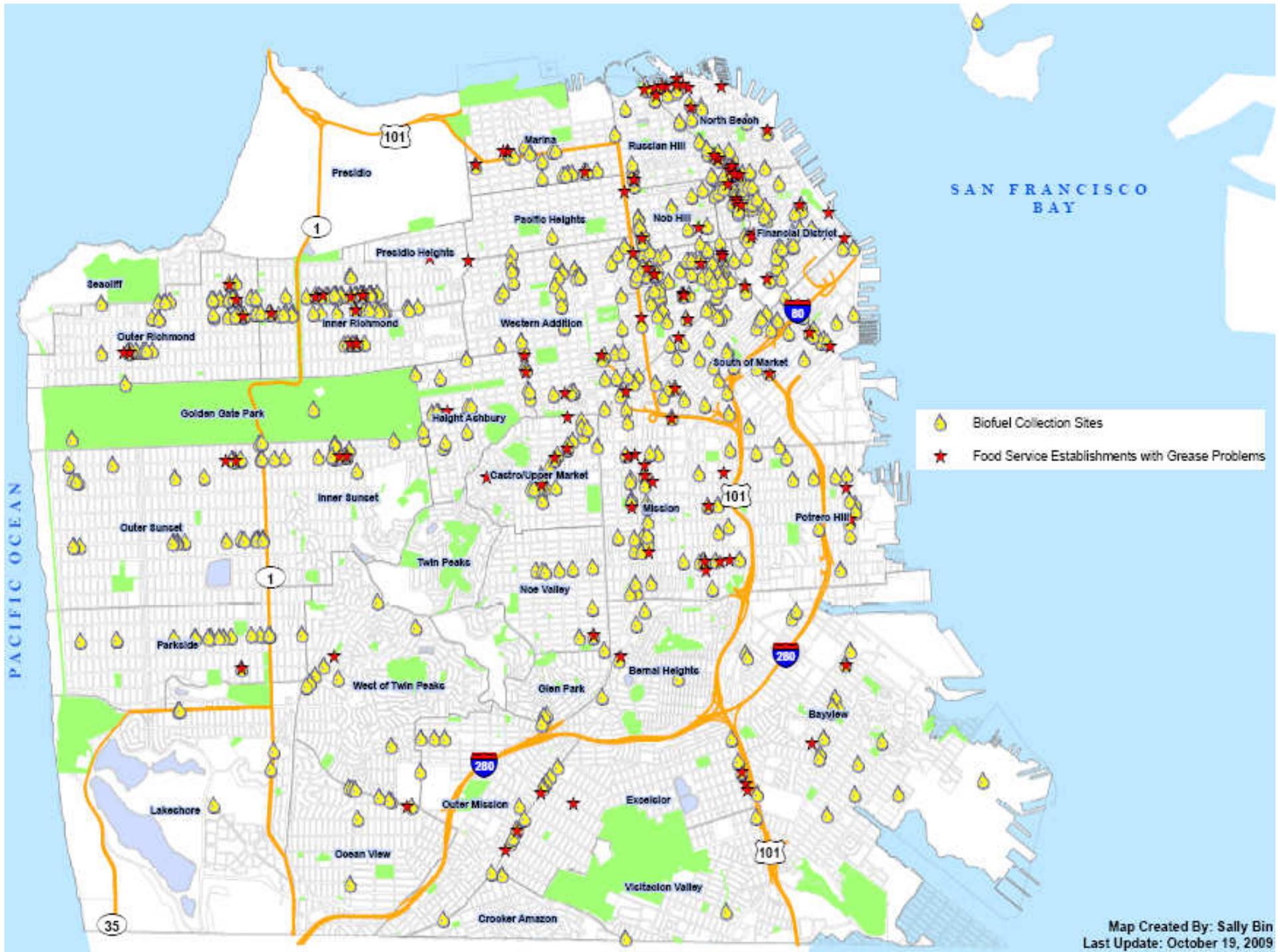
WEATHER: Mostly sunny. High: 54 to 64. Low: 34 to 51. **B3**

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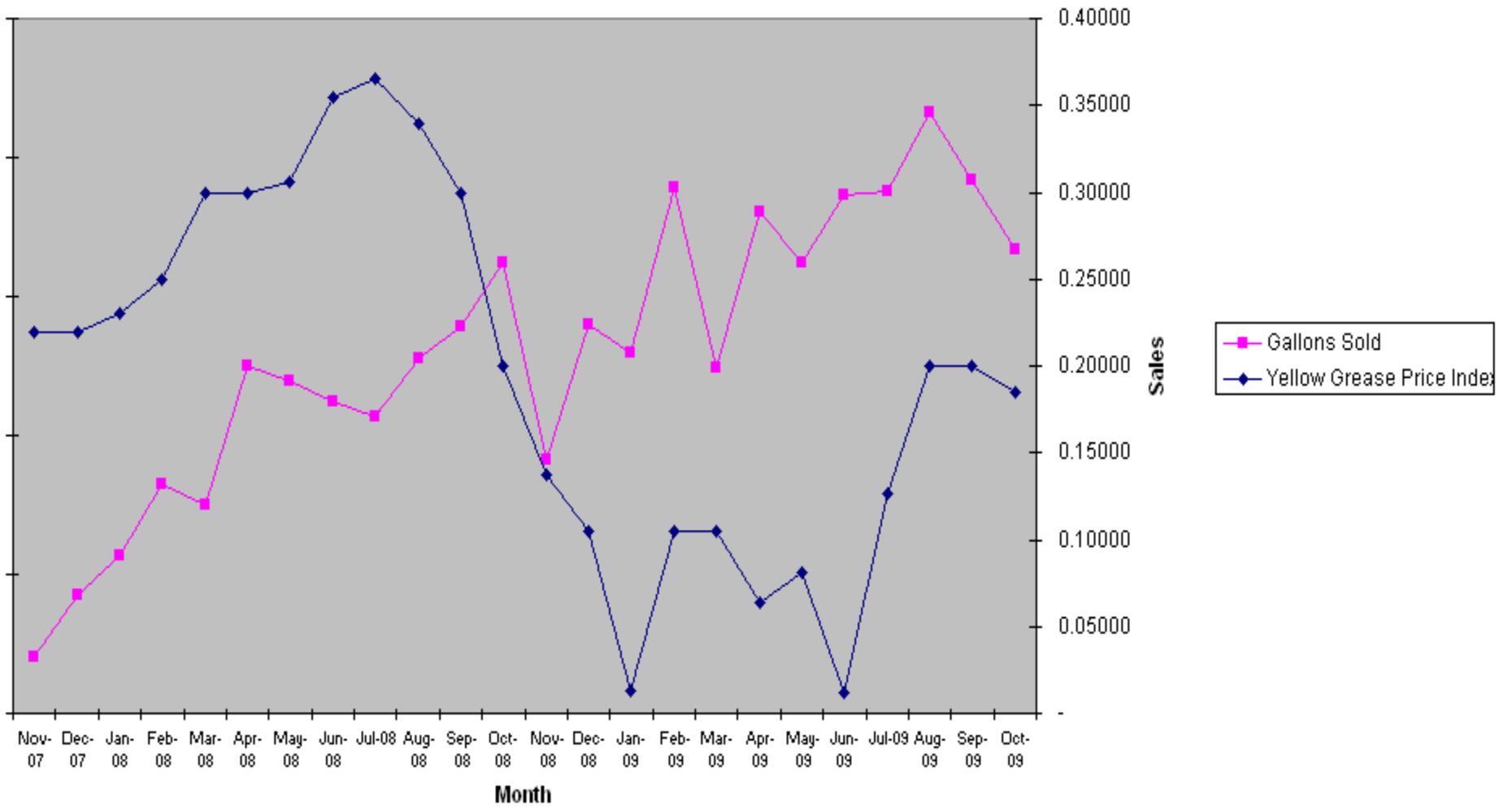




-  Biofuel Collection Sites
-  Food Service Establishments with Grease Problems

Map Created By: Sally Bin
 Last Update: October 19, 2009

Yellow Grease Price







START SAVING YOUR USED COOKING OIL NOW.

Drop it off at the **SFGreasecycle Booth** during the **Chinatown Community Street Fair**.



DROP-OFF DATES:

Saturday, February 7: 10am – 4:30pm
Sunday, February 8: 9am – 5pm

Kitchen Collection Easy How-to:

1. Cool down used cooking oil in the pan.
2. Pour used oil into a clean, non-breakable, leak-proof container with a tight lid. Consider reusing old ones, such as mayonnaise jars.
3. Please make sure there's no water, soapsuds, or food scraps in your used oil.

Look for the **SFGREASECYCLE Booth** on Grant Street and get a **free strainer** when you drop off your used cooking oil. Help us support the City's efforts. Instead of clogging drains and sewer pipes with your used cooking oil—a \$3.5million problem for San Franciscans—recycle it for biofuel.

Thank you for your participation and Happy New Year!
 For more information, visit sfgreasecycle.org.



EVERY DROP COUNTS Put USED COOKING OIL in its place.

For drop-off info, visit SFGreasecycle.org



在這個
 年末節日期間，
 給市政府送一件大禮：
**您用過的
 烹調油。**



在三藩市公用事業委員會的「三藩市油脂回收計劃」(SFGreasecycle) 之下，我們將把它轉變為生物柴油。

送交地點詳情 12月27日至30日

COSTCO WAREHOUSE:
 450 10th St (夾 Bayard)
 時間: 9:30am-6pm
 星期日: 10am-6pm
 星期一休息 星期二: 10am-6:30pm

任何一家三藩市 **WHOLE FOODS MARKET**
 Franklin 1703 California St (夾 Franklin)
 Potrero 141 450 Rhode Island St (夾 Mariposa)
 SOMA 399 4th St (夾 Harrison)
 時間: 星期一至星期二: 10am-10pm

簡便收集小貼士

1. 在烹調後將油倒回冷卻。
2. 將用過的油倒進一個乾淨、不洩漏的、可以蓋緊的容器內，考慮使用舊的罐頭、如舊的保潔劑罐。
3. 避免油內含有水、肥皂或食物殘渣。
4. 在倉庫時間把裝油的罐放在櫃中的後部送往 Costco 或 Whole Foods Market。

廢棄的油積少成多，特別是在烹調活動繁忙的節日期間。把用過的烹調油倒入下水道會造成堵塞，每年給市政府帶來三百五十萬美元的損失。讓我們把油回收為消防車和公車可以使用的、燃燒清潔的生物燃料。

您可以在聖誕節和元旦之間把用過的烹調油送交市內的 Costco 或任何一家 Whole Foods Market 分店。記得使用可以蓋緊、不易破損的容器。請訪問 SFGreasecycle.org 瞭解詳情。



THIS
 THANKSGIVING,
 GIVE THE CITY A GIFT:
**YOUR USED
 COOKING OIL.**



With the New SFGreasecycle Program, we're converting your used cooking oil into biodiesel to power the City's fleet.

COSTCO DROP-OFF DETAILS November 23rd through 26th

HOURS:
 Friday: 9:30am - 8:30pm
 Saturday: 8:30am - 7:30pm
 Sunday: 9:30am - 6:30pm
 Monday: 11:30am - 8:30pm

ADDRESS:
 450 10th St (between Bayard & Dupont)

KITCHEN COLLECTION EASY HOW-TO'S

1. Cool down used cooking oil in the pan.
2. Pour used oil into a clean, leak-proof container with a tight lid. Consider reusing old ones, such as mayonnaise jars.
3. Please make sure there's no water, soapsuds, or food scraps in your used oil.
4. Drop off your leak-proof container at Costco during hours of operation.

SFGreasecycle is a citywide effort by the S.F. Public Utilities Commission to collect Used, Cooked, and Greasy (UCG) oil from homes and businesses. The oil is then recycled into fuel for the city's fleet.

Even a little grease causes problems. Most households generate only a few gallons of used cooking oil during the year, but when it all ends up in the trash, it can cause problems. The resulting oil leaks can clog drains and cause sewer backups.

Please don't pour ANY used oil down the drain, toilet, or sink. Instead, collect it in a container and bring it to Costco on 10th Street—right after Thanksgiving, from Friday through Monday—so we can recycle your clean-burning biofuel.

With your help, we'll save \$1.6 million per year in sewer maintenance and keep our communities for a sustainable city. Thank you for your participation. Visit SFGreasecycle.org for more details.





SFPUC SFGreasecycle Current and Future Job Opportunities

- Global Exchange 3-month internships (seasonal)
- SE Community Workforce Development 8-month positions (Currently 3)
- 9910 Public Service Trainees (1)
- 9920 Public Service Aids–Special Programs (2)
- 7375 Stationary Engineer Apprentices (1)
- 7515 General Laborers
- 7355 Licensed Truck Drivers (3)
- 7373 Stationary Engineer (1)

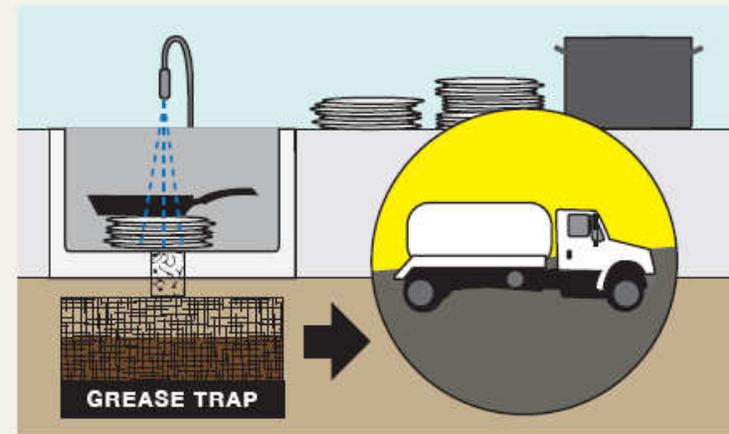


GREASE TRAP GUNK (AKA “BROWN GREASE”) IS PROCESSED INTO CLEAN-BURNING BIOFUEL

Technology developments and enterprising water agencies are solving environmental and energy issues by using the scrapings at the bottom of the grease trap barrel. Here's how:

1. COLLECTION

Most, if not all, grease and food scrapings from dirty dishes and pots from commercial kitchens are captured in a grease trap. Instead of flowing straight from a restaurant's sink drain down into the sewer pipes, brown grease is collected (restaurants pay \$ for this service) and hauled to a wastewater treatment plant (haulers then pay \$ for disposal).



2. CONVERSION

At the plant, the patent-pending conversion process occurs, refining brown grease and creating three kinds of biofuel:

1. High-grade, road-worthy certified biodiesel for vehicles;
2. Lower grade boiler fuel for running sewage treatment plant equipment; and
3. Electricity converted from methane to run the treatment plant



3. DIVERSION

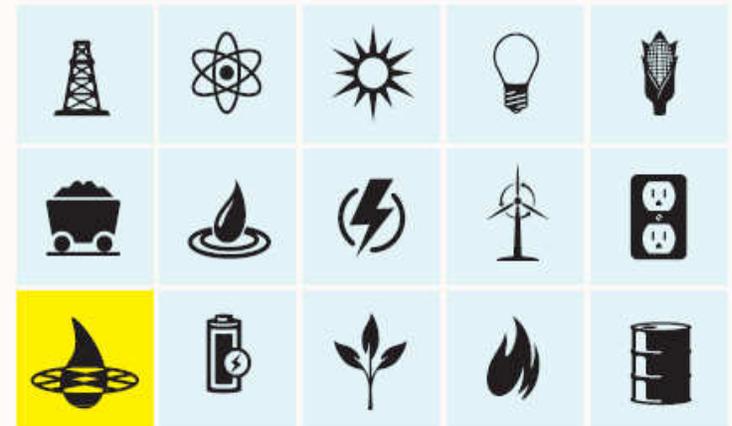
Unlike cooking oil from deep fryers, which can easily be processed and recycled, trap grease is so rancid that it is considered a pollutant. It has typically been sent to an incinerator or landfill. Today's technology enables this waste to be converted into alternative energy.



4. CONSERVATION & MARKET CREATION

Sewer maintenance, including repairs when brown grease clogs sewer pipes, costs municipalities millions of dollars annually. By being the raw material for biofuel, "brown grease" becomes a commodity. It assumes market value and less gets dumped down the drain, minimizing costs for sewer maintenance and repair.

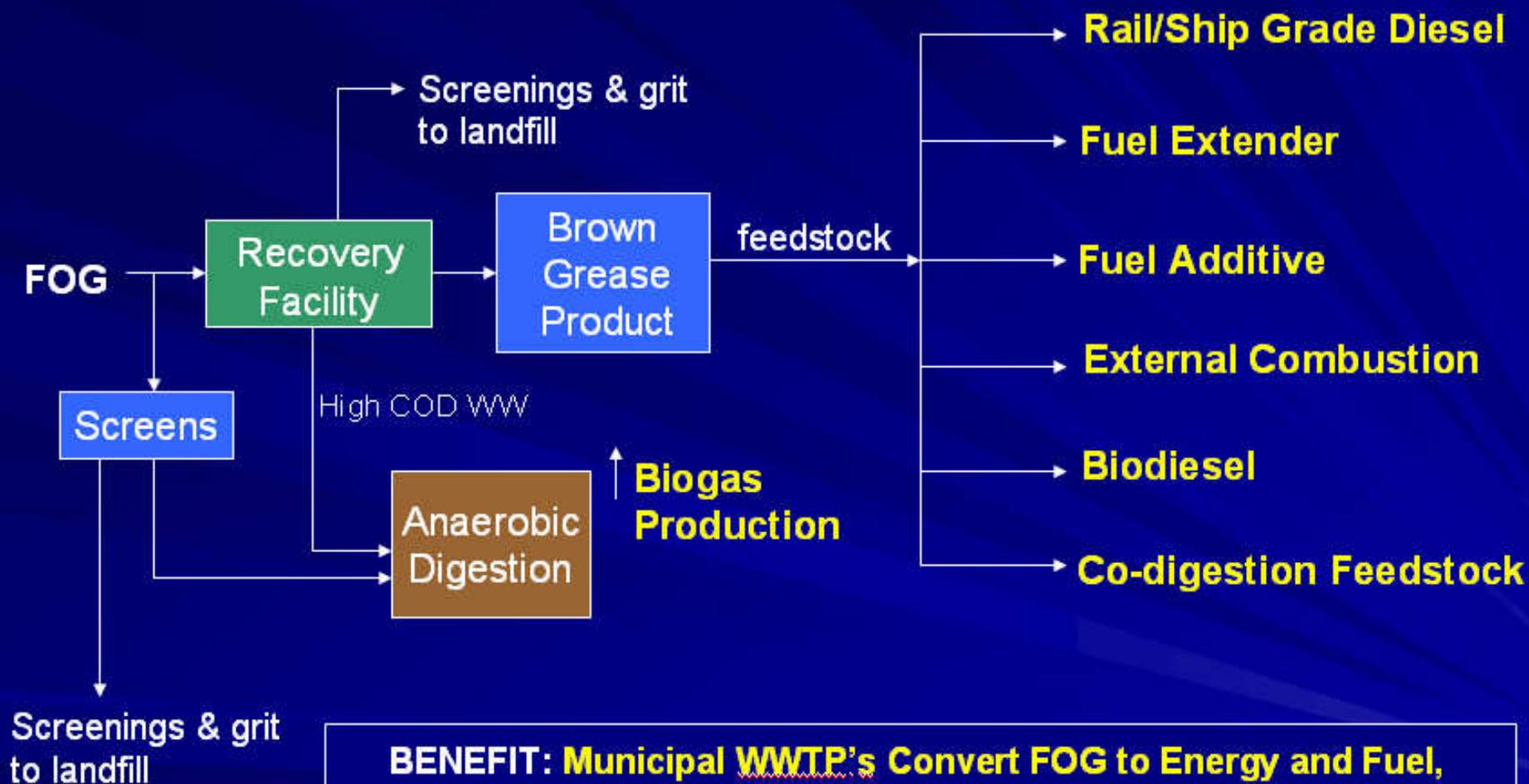
In the end, every drop, every scrap is used to produce energy, leaving nothing wasted.



SFGREASECYCLE: SFPUC
(415) 695-7366 sfgreasecycle.org



FOG Recovery Facility



BENEFIT: Municipal WWTP's Convert FOG to Energy and Fuel, Reduce Fossil Fuel Use, Greenhouse Gases, and Waste Hauling Costs, and Extend Life of Landfills



GREASE RECYCLE

RECYCLE YOUR COOKING OIL FOR BIOFUEL. **SAVE OUR SEWERS**