

Agenda

Introduction	Joe Denk	8:30AM-8:35AM
Welcome	Melody Tovar	8:35AM-8:40AM
Presentation	Sujanitha, Jamie, Ryan	8:40AM-9:20AM
Q & A Session	Joe, Ryan, Jamie, Sujanitha	9:20AM-9:45AM
Plant Tour	Bruce Frisbey	9:45AM-10:30AM

Grease Hauler Workshop

**Environmental Services Department
City of San José
November 10, 2010**

Presenters:

Joe Denk

Ryan Harrison

Jamie Hernandez

Sujanitha Sambasivan

Workshop Goals

- ❑ Educate Haulers on Fats, Oils, and Grease (FOG) and Stormwater program requirements and Best Management Practices (BMPs)
- ❑ Provide Haulers with resources to ensure uniform services that:
 - Optimize Grease Control Device (GCD) performance
 - Help Food Service Establishments (FSEs) achieve compliance



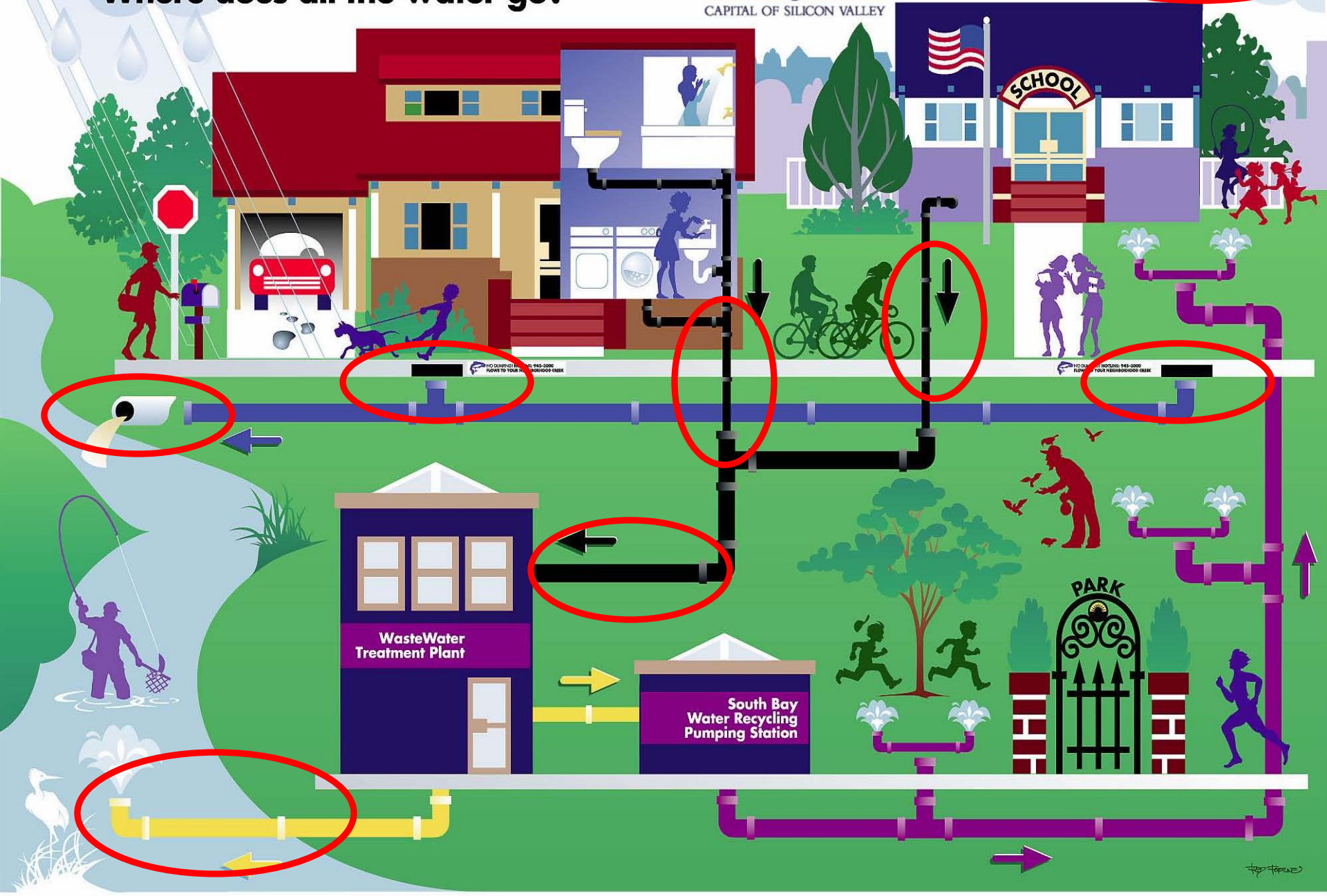
Presentation Overview

- Regulatory Background
 - FOG Program requirements
 - Stormwater Program requirements
- Service Documentation
- BMPs
- Case Studies
- Stakeholder Relationships



Wastewater Paths: Where does all the water go?

- Untreated Wastewater
- Treated Wastewater
- Reclaimed Water
- Stormwater



WasteWater Treatment Plant

South Bay Water Recycling Pumping Station

SCHOOL

PARK

NO DISCHARGE PERMITTED 645-2000
FLOW TO YOUR NEIGHBORHOOD SEWER

NO DISCHARGE PERMITTED 645-2000
FLOW TO YOUR NEIGHBORHOOD SEWER

Regulatory Background



California Environmental Protection Agency
**SAN FRANCISCO BAY REGIONAL
WATER QUALITY CONTROL BOARD**



SAN JOSE/ SANTA CLARA WATER POLLUTION CONTROL PLANT

Serving :
*The Cities of San José,
Santa Clara, and Milpitas*

*Cupertino Sanitary
District*

*West Valley Sanitation
District
Including Campbell, Los
Gatos, Monte Sereno and
Saratoga*

*County Sanitation
District 2-3*

*Burbank Sanitary
Districts*

Prevent SSOs
caused by FOG

Protect public
health

Protect the
environment

Prevent plant
malfunction
due to FOG

Prevent costly
property
damage and
clean-up

Regulatory Background

- FOG Inspection Program
 - Required by Federal and State Agencies
 - Reduce FOG related SSOs
 - FOG is a major contributor of documented SSOs
 - Attempt to reduce the amount of FOG being discharged from commercial sources
 - Educate FSE representatives on BMPs and Requirements

Grease Management



Grease Interceptor Maintenance

KEEP ANGRAGE OUT OF THE SYSTEM

Tips For Hiring a Maintenance Service Provider

- Obtain cost estimates from several different service providers and compare prices. Be wary if a quote is much lower than others — this may be an indication that the waste hauler is illegally dumping.
- Require the service to describe their pumping and cleaning procedures, in writing.
- Require the service to describe the disposal method and disposal destination for your wastes, in writing. As the food service facility owner or operator, you

can be held liable for the improper disposal of any waste generated by your facility, even if the actual work is performed by a third party.

- Require the service to include in writing that they intend to comply with all applicable municipal sewer ordinances, federal, state and local regulations relating to grease waste handling and disposal in performance of the work.
- Require the service provide advance notice before each scheduled visit if you have a pre-set maintenance schedule with them (e.g., every 90 days). You should have a representative



Grease waste can never be disposed to storm drains.

Grease interceptors must be pumped dry regularly.

present to confirm that proper pumping is being performed.

- A visual inspection should be done periodically after pumping, or when plumbers work on laterals, to ensure the interceptor standpipes are undamaged.

Recommended Pumping Practices

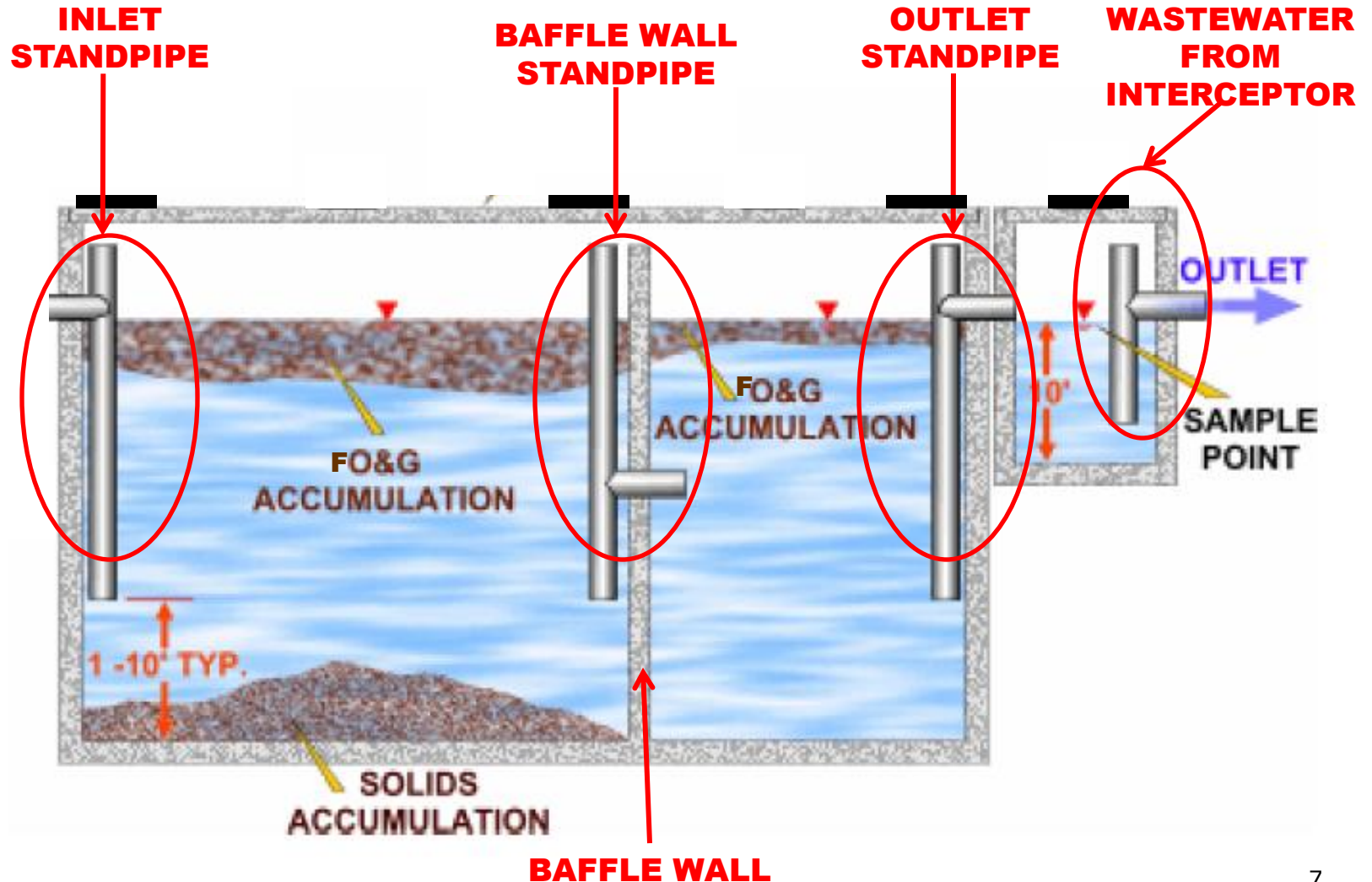
Include the following pumping practices in your contract.

- Require the service to wash down the grease from the sides and baffles inside the unit so they can be pumped.
- Require the interceptor be pumped **dry**, removing as much of the floating grease, water, and 'sludge' on the bottom as possible.

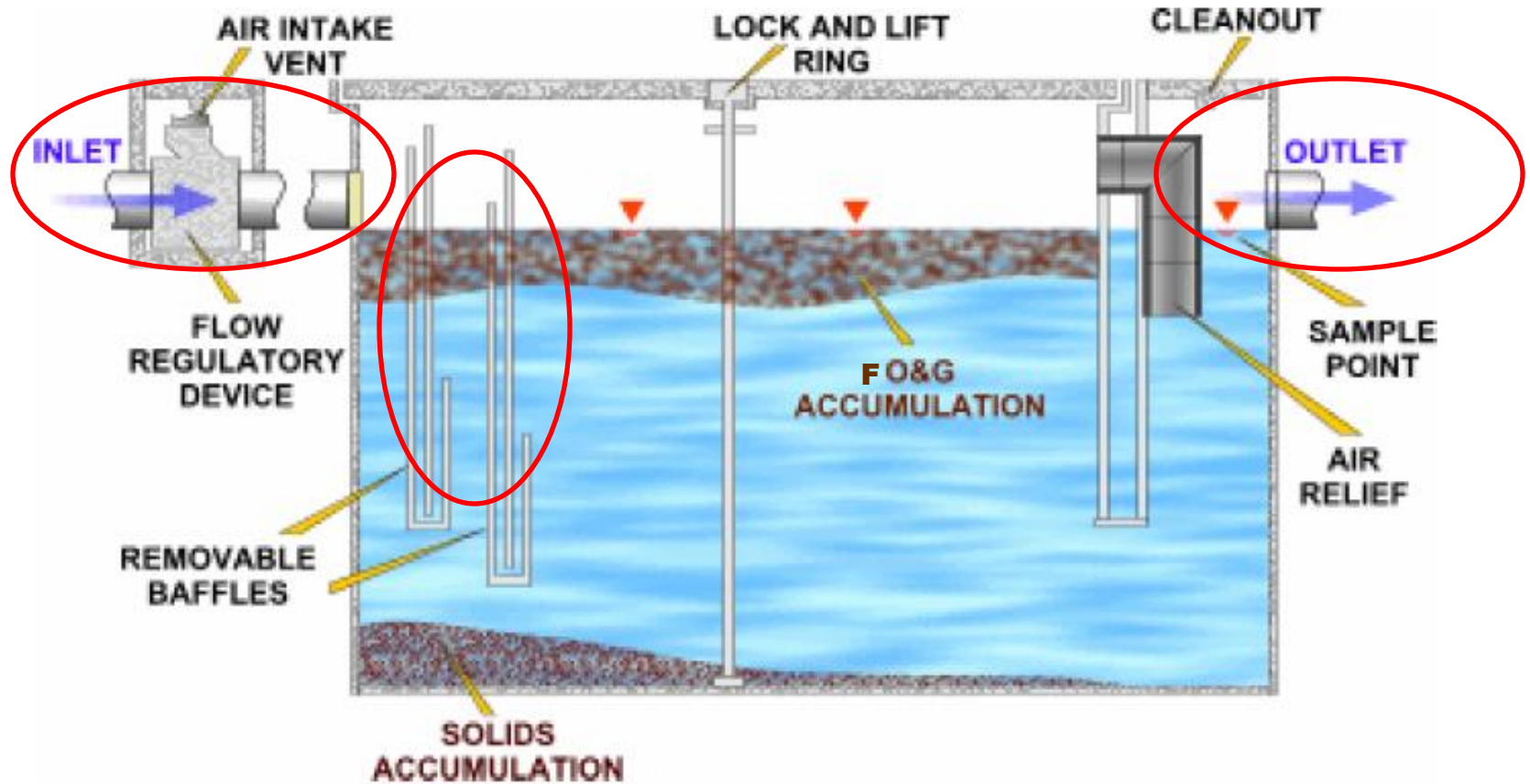
Continued on Next

Grease in the system causes problems in storm drains and sanitary sewers — and increases your operating costs.

Grease Interceptor and Sample Box



Grease Trap



Regulatory Background (Cont'd)

- Inspect FSEs to verify:
 - Maintenance of GCDs
 - Performance of GCDs through visual inspection
 - Retention of service records on site
 - Implementation of FOG and Stormwater BMPs
 - Compliance with FOG and Stormwater Program Requirements



Regulatory Background (Cont'd)

- FOG Program 2009 Data:
 - ~ 3000 FOG Inspections
 - 244 reported SSOs
 - 64% or 157 FOG related SSOs
 - 18 grease investigations involving 77 facilities
 - 650 Tons of grease removed from the plant



FOG Program Requirements

□ Grease Interceptors

- Shall be cleaned once **every 90 days** (quarterly) unless otherwise determined by the City

□ Grease Traps

- Shall be cleaned once **every 30 days**

- GCDs shall be cleaned by being **pumped** and all accumulated sludge on all surfaces shall be removed by washing down the sides, baffles, and tees (standpipes)

FOG Program Requirements (Cont'd)

- ❑ GCDs **must** be installed (and maintained) per manufacturer's specification
- ❑ FSEs **must** retain records from each service for three (3) years on site



Grease Management

Maintenance Documentation

PREVENT OVERFLOW

KEEP RECORDS FOR 3 YEARS

A food service facility engaged in operations as regulated in documents, including the clearing and emptying frequency for grease removal devices and grease disposal methods. Maintenance records should be kept on file in a clearly accessible location and must be made available in appropriate and copying upon request by local officials. You are required to keep maintenance documentation for a period of not less than 3 years.

Your maintenance documentation should include the following records:

- Date, type, make/model and details of your grease removal device (e.g., a 500 lb. 100" grease trap under the pot sink, or a zero gallon 10" grease collector by the food line.)
- Clearing instructions for this grease removal device.
- Copies of clearing/service contracts with professional clearing services, if applicable.
- Records of clearing/inflow visits.

A log documenting the clearing frequency and/or service visits you grease removal device is important to include the following information for each service visit:

- Date, equipment size, model, service provided, grease catch, explanation for service visit if other than routine maintenance/cleaning.
- Sign of person and company performing the clearing service.
- Description of method by which the equipment was cleaned.
- Volume of wastewater generated or removed.
- Description of how and where the wastewater/grease will be disposed of.

Keep clearing and maintenance records in a binder for easy access.

DO NOT FORGET

Remember this!

It's there to fix system service problems in those states and states having... and includes your company logo.

Stormwater Program Requirements

- Prevent storm drain, creek, and bay pollution:
 - Discharge to storm drain prohibited
 - Protection from accidental discharge
- Municipal Regional Permit (MRP)
 - Requires **10 business days** compliance or **before the next rain event**



Service Documentation (Cont'd)

- ❑ To help FSEs achieve compliance; detail any structural, maintenance, or repair issues
 - Grease interceptor examples:
 - ❑ Broken or missing influent, effluent, baffle wall standpipe, or blockages etc.
 - ❑ Reason for incomplete servicing (Example: Rocks)
 - ❑ Excess (solidified) FOG
 - ❑ Fluctuation in FOG or solid food waste loading
 - ❑ Recommendations (such as increased frequency in servicing)
 - ❑ Evidence of surcharging
 - ❑ Evidence of trash/debris

Service Documentation (Cont'd)

- Grease trap examples:
 - Broken or missing cleanout caps or baffle plates, leaks, cracks, corrosion, blockages, etc.
 - Reason for incomplete servicing, if applicable
 - Excess (solidified) FOG
 - Fluctuation in FOG or solid food waste loading
 - Recommendations (such as increased frequency in servicing)
 - Inadequately sized grease trap



FOG Best Management Practices Do's

- Pump FOG, water, and bottom solids
 - Remove and capture all FOG and solid materials remaining on the walls, baffle walls, influent, effluent, baffle wall standpipes, and in the sample box¹



¹ Entering a grease interceptor is considered **confined space entry**. Adhere to **OSHA Confined Space Entry** regulations when entering inside any grease interceptor.

FOG Best Management Practices Do's

- ❑ Conduct a visual inspection of the GCD and document on service receipt any structural and maintenance issues noticed at the time of service



FOG Best Management Practices Do's

- ❑ Dispose the entire truck contents properly at a local grease receiving station, for example:
 - East Bay Municipal Utility District
 - Millbrae Water Pollution Control Plant
 - Monterey Regional Water Pollution Control Agency
 - Palo Alto Regional Water Quality Control Plant
 - South Bayside System Authority
 - Watsonville Wastewater Treatment Plant



FOG Don'ts

- ❑ Do not return/decant any material collected from a GCD back into a GCD, tallow bin, sewer manhole, clean-out or storm drain inlet
- ❑ Do not mix grease loads with different types of wastes such as septic or yellow grease (used cooking oil or tallow)



Stormwater Best Management Practices Do's

- ❑ Ensure hoses and equipment are not leaking onto the ground
- ❑ Immediately clean-up any spills or leaks
- ❑ Provide a **spill kit** inside each truck for clean up and spill response:
 - Kitty litter or other absorbent material
 - Broom
 - Dust pan
 - Garbage bags
 - Gloves



Stormwater Best Management Practices Do's (Cont'd)

□ Clean-up using dry methods²:

1. Apply kitty litter or other absorbent material onto the spill
2. Physically work-in the absorbent material into the spill with a broom
3. Immediately sweep up the soiled absorbent material with a broom into a dust pan

Do it Right WASTE STORAGE AREA <small>Compactors / Dumpsters / Tallow Bins</small>	Hágalo bien ÁREA DE CONFINAMIENTO DE RESIDUOS <small>Compactadoras / Contenedores / Recipientes de residuos</small>	Làm Cho Đúng Khu Vực Giữ Rác <small>Máy Hôn Rác / Thùng Lớn Dạng Rác / Thùng Sụp Đầu Mũ</small>
 <p>Maintain and clean waste enclosure area on a regular basis. <small>Mantenga limpia las áreas de confinamiento de residuos regularmente. Thường dọn dẹp nơi chứa chất thải thường xuyên.</small></p>	 <p>Prevent spills and leaks, and have spill kit readily available for clean up. <small>Previene los derrames y fugas y tenga lista un kit de limpieza de derrames. Phòng ngừa chất gây ô nhiễm rò rỉ, và chuẩn bị sẵn sàng cho xử lý sự cố.</small></p>	
 <p>Do not hose down dumpsters, compactors, tallow bins, or the enclosure area to the storm drain. <small>No lavar con manguera los contenedores, las compactadoras, recipientes de tallow o el área de confinamiento de desechos plásticos. Không dùng vòi nước để rửa các thùng đựng rác, các máy nén rác, các thùng đựng dầu mỡ, hoặc khu vực khu chứa chất thải bằng nước mưa.</small></p>	 <p>Clean up all spills and leaks immediately using spill kit. Sweep up absorbent right away; do not let it sit out overnight or in the rain. <small>Limpie todos los derrames y fugas inmediatamente cuando el kit para derrames. Barrer inmediatamente el absorbente, no lo deje en su sitio por una o más semanas lluviosas. Lau dọn ngay khi có sự cố để tránh lãng phí chi phí xử lý sự cố. Dùng vật hấp thụ ngay lập tức, không để chất này nằm ngoài trời hoặc dưới mưa.</small></p>	
 <p>When you clean the enclosures, collect all wash water and dispose of it in the auxiliary sewer. <small>Quando limpie el área de confinamiento de residuos recolecte toda el agua sucia y deséchela en el alcantarillado auxiliar. Khi dọn sạch khu vực để rác, thu lại nước rửa và đổ vào ống thoát phụ.</small></p>	 <p>Close lids on all containers after use. <small>Cierre los tapas de todos los contenedores después de su uso. Đóng nắp kỹ cho tất cả các thùng đựng sau khi dùng.</small></p>	
 <p>Do not put liquid waste in dumpster or compactor. <small>No ponga residuos líquidos en el contenedor o en el compactador. Không đổ chất thải lỏng vào thùng đựng rác hoặc máy nén rác.</small></p>	 <p>Double-bag wet waste. Let dry absorbent in with wet waste. Then tie off bags. Use buckets to transfer bagged wet waste to the dumpster. <small>Ponga los residuos líquidos en doble bolsa. Absorbente con material absorbente, luego asegure las bolsas. Utilice baldes para pasar la bolsa de residuos húmedos al contenedor. Đóng hai túi cho tất cả chất thải ướt. Trải chất hấp thụ với chất thải, và cột hai túi. Dùng xô đựng để chuyển túi rác ướt tới thùng đựng rác.</small></p>	
 <p>Train employees to keep waste enclosure area clean and prevent all wash water from going to the storm drain. <small>Entrene a los empleados para mantener limpia el área de confinamiento y evitar que el agua sucia vaya a los desagües pluviales. Huấn luyện nhân viên về việc giữ cho khu vực khu chứa chất thải của bạn sạch sẽ, và giữ cho nước rửa không chảy vào ống thoát nước mưa.</small></p>	 <p>Call your leader to replace leaky bins immediately. <small>Llama a su supervisor para reemplazar los contenedores con fugas inmediatamente. Gọi cấp trên của bạn để thay thế thùng đựng rác bị rò rỉ.</small></p>	
<p>Keep your waste storage area clean to protect the Bay Mantenga limpia el área de confinamiento de residuos para proteger la bahía Giữ cho khu vực để rác được sạch sẽ để bảo vệ cho Vùng Vịnh</p>		
<p>408-945-3000 www.sanjoseca.gov/esd/</p>		<p>SAN JOSE / SANTA CLARA WATER POLLUTION CONTROL PLANT </p>

² **Avoid** using water, chemicals, or any other liquids to clean-up spills, and leaks.

Stormwater Best Management Practices Do's (Cont'd)

□ Clean-up using dry methods²:

4. Place the soiled absorbent material into a double-lined garbage bag
5. Ensure that all the spill and absorbent residues are picked up by the absorbent material. If not, repeat steps 1-4
6. Dispose all the soiled absorbent material in the trash

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 <p>When you clean the enclosures, collect all wash water and dispose of it in the auxiliary sewer. <i>Cuando limpie el área de confinamiento de residuos recolecte toda el agua sucia y deséchela en el alcantarillado auxiliar.</i> <i>Đổi rửa nước bẩn vào bể rác, lau lại nước rửa vì để nơi đây cũng bị ô nhiễm.</i></p>	 <p>Close lids on all containers after use. <i>Cierra los tapas de todos los contenedores después de su uso.</i> <i>Đóng nắp kỹ cho tất cả các thùng đựng sau khi dùng.</i></p>	
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<p>Keep your waste storage area clean to protect the Bay <i>Mantenga limpia el área de confinamiento de residuos para proteger la bahía</i> <i>Giữ cho khu vực đổ rác được sạch sẽ để bảo vệ cho Vịnh Vịnh</i></p>		
<p>408-945-3000 www.sanjoseca.gov/esd/</p>		<p>NO DUMPING! FLOWS TO HAY</p> <p>SAN JOSE / SANTA CLARA WATER POLLUTION CONTROL PLANT</p> <p>SAN JOSE WATER POLLUTION CONTROL PLANT</p>

² **Avoid** using water, chemicals, or any other liquids to clean-up spills, and leaks.

Case Studies (Grease Interceptor)



**Grease in Effluent
Standpipe**



**Submerged or Missing
Baffle Wall Standpipe**

Case Studies (Grease Interceptor)



Surcharging



Heavy Grease

Case Studies (Grease Trap)



Corroded Baffle Plate



Heavy Grease

Case Studies

What's wrong with this photo?



Missing Baffle Wall Standpipe

Case Studies

What's wrong with this photo?



Missing Influent Standpipe and Heavy Grease²⁸

Case Studies

What's wrong with this photo?



Rebar in Grease Interceptor

Case Studies

What's wrong with this photo?



Debris Inside Inlet Standpipe

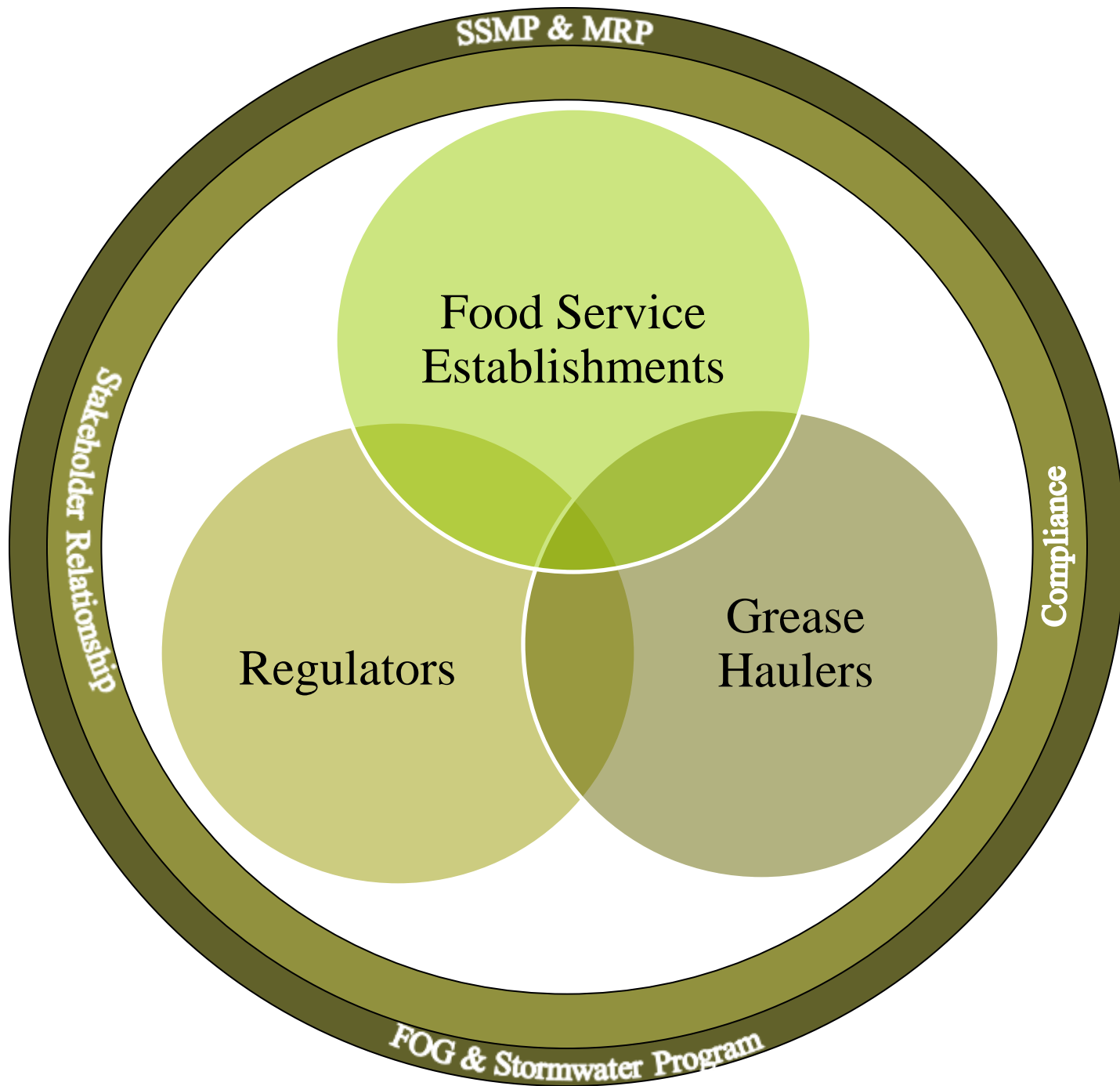
Stakeholder Relationships



Regulators

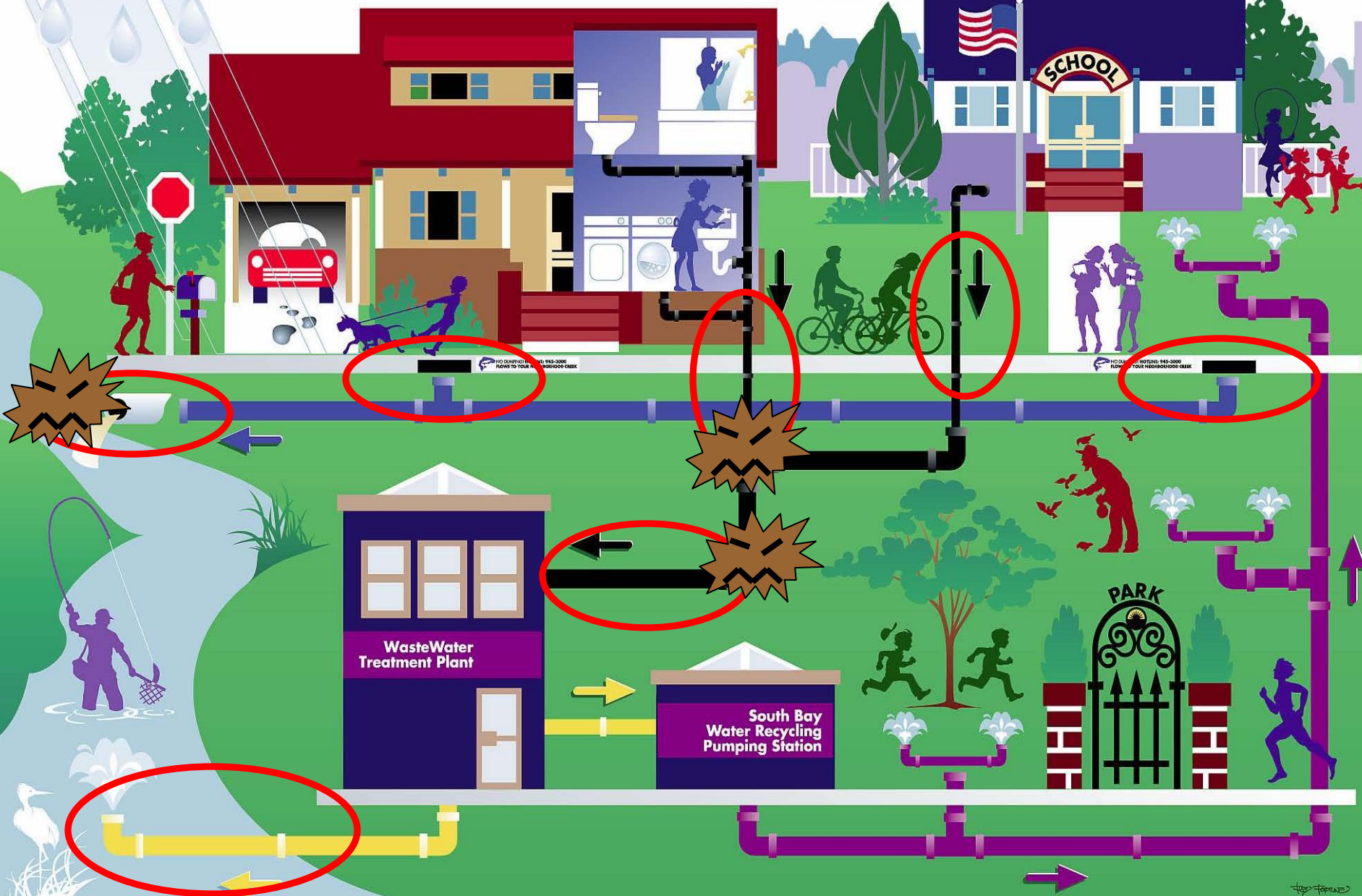
Grease
Haulers

Food Service
Establishments



Wastewater Paths: Where does all the water go?

- Untreated Wastewater
- Treated Wastewater
- Reclaimed Water
- Stormwater



Summary

- ❑ Storm drain conveys untreated water to the Bay
- ❑ Implement BMPs while servicing GCDs:
 - Completely pump the entire contents
 - Clean up spills and leaks using dry methods
- ❑ Document GCD issues to help your customers achieve compliance
- ❑ Educate your staff on FOG and Stormwater Program requirements
- ❑ Help prevent FOG related SSOs

Thank You

Contact:

- Joe Denk, Senior Environmental Inspector
Environmental Services Department | City of San José
(408)-793-5374
E-mail: joe.denk@sanjoseca.gov
Website: www.sanjoseca.gov/esd
- Please report illegal storm drain dumping at:
(408)-945-3000