

Regional Wastewater Treatment Plant Annual Neighborhood Update



**Dublin San Ramon
Services District**

Water, wastewater, recycled water

October 23, 2024

Presenters



Dan Gill
Operations Director



Tim Lewis
WWTP Superintendent



Jason Ching
Senior Engineer

DSRSD Service Area

Map Legend

- DSRSD Regional Wastewater Treatment Facility
- DSRSD Water Only Service Area
- DSRSD Wastewater Only Service Area
- DSRSD Wastewater Treatment Under Contract
- DSRSD Water & Wastewater Service Area
- Alameda Contra Costa County Dividing Line
- DSRSD Boundary
- Camp Parks (Parks RFTA) Boundary





Then & Now

Regional Wastewater Treatment Plant

DSRSD Wastewater Treatment Plant

HIGHWAY 680



Incoming Collections System Mains



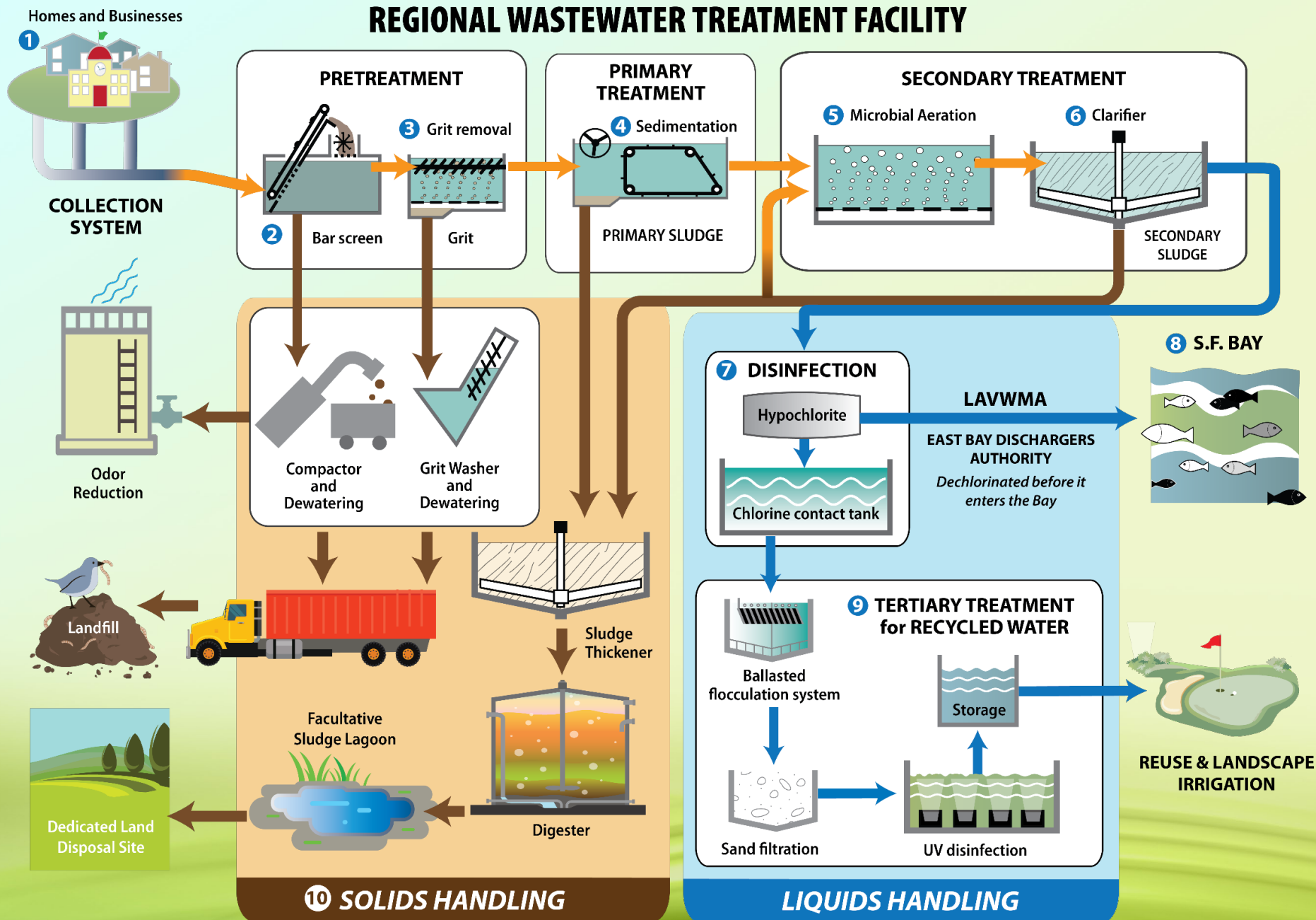
Dublin/San Ramon Line



Pleasanton Lines

- *East Amador*
- *Highland Oaks*
- *Sewer line 6*
- *Sewer line 8*





» **WWTP designed treatment capacity is 17 million gallons/day**

- Current average daily wastewater flow: 11 million gallons/day

» **On an annual basis, nearly half of DSRSD's wastewater is recycled**

- During the dry-season, that increases to 60% to 80%

Biosolids Treatment

Facultative Lagoons

Dedicated Land Disposal Area

STONERIDGE DRIVE

Digesters

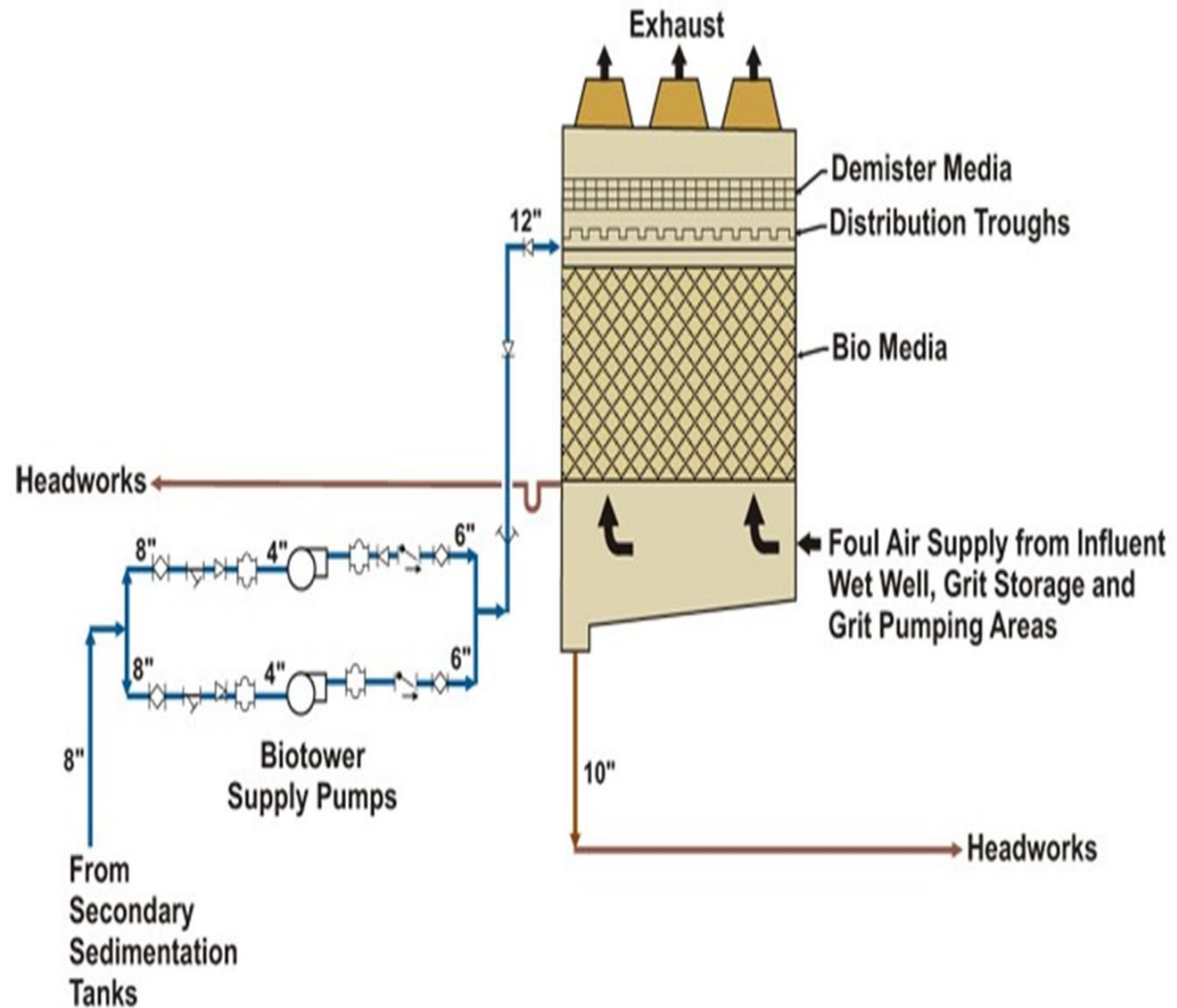
Thickener



Odor Control Facilities



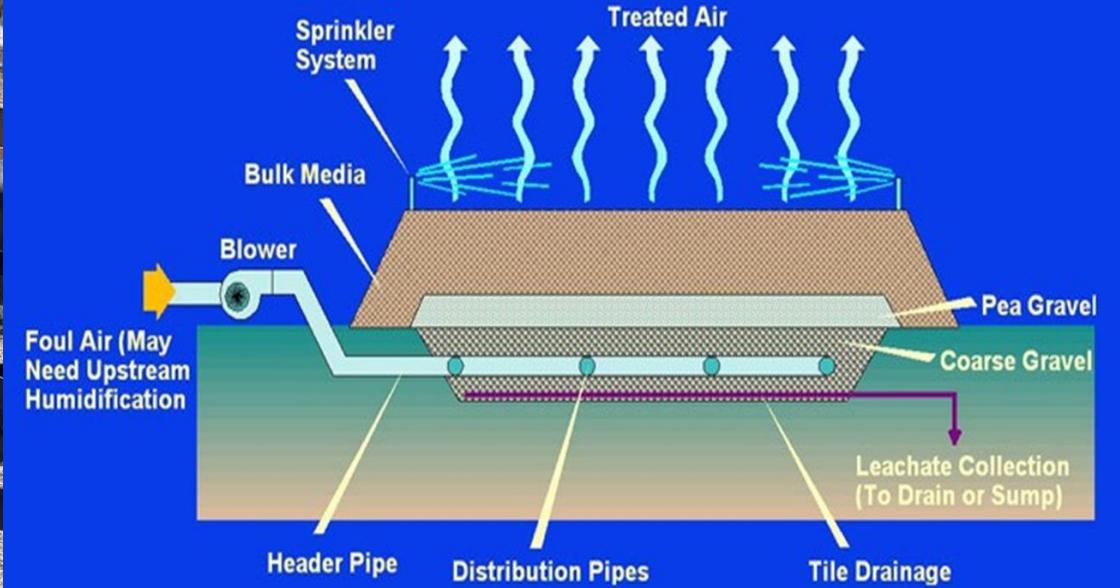
Odor Reduction Tower



Odor Reduction System Flow Schematic



Soil Bed Biofilters



Response to Odor Concerns



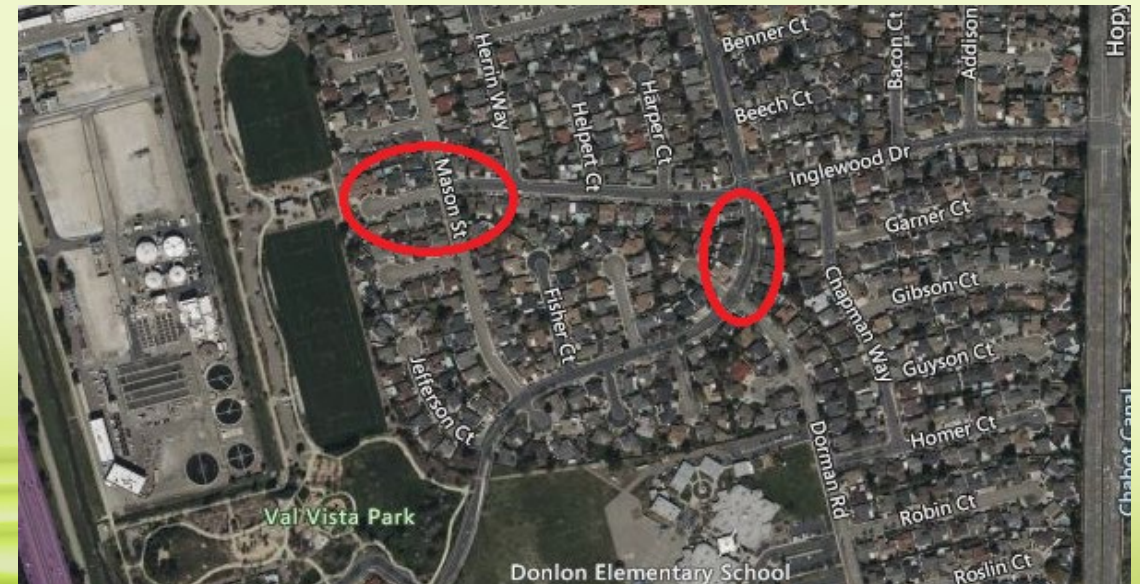
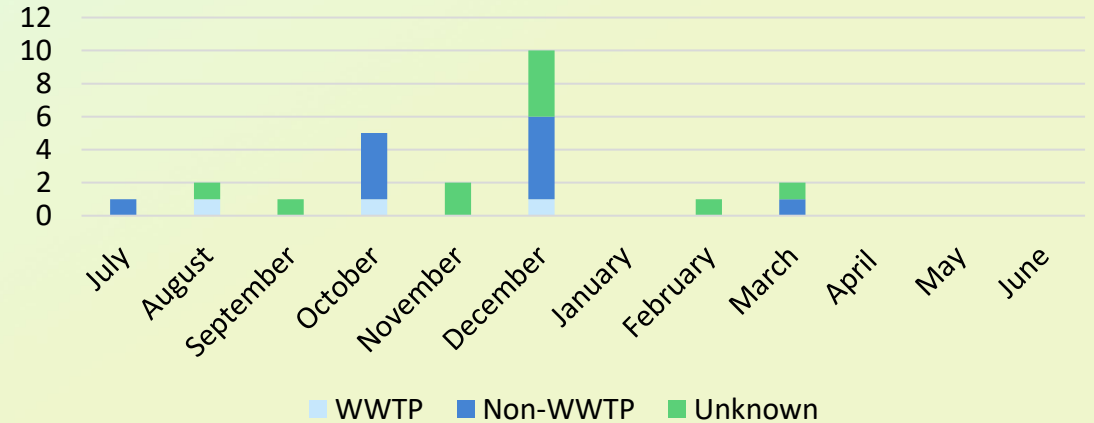
- 24/7 Odor Control Hotline
- Conduct Vicinity "Odor Checks"
- Investigate Findings
- Contact Source & Resolve



Odor Concerns

- 24 concerns received between July 2023 and June 2024
- All concerns were from the Val Vista neighborhood
 - Most from Inglewood & Mason area
 - Denker between Inglewood & Dorman.
- Example odor causes and responses

Reported Odor Concerns by Month
(July 2023-June 2024)





Upcoming Plant Improvements

Fencing and Landscaping Improvements



Fencing and Landscaping Improvements



New Fencing

Fencing Repairs by Others

New Landscaping

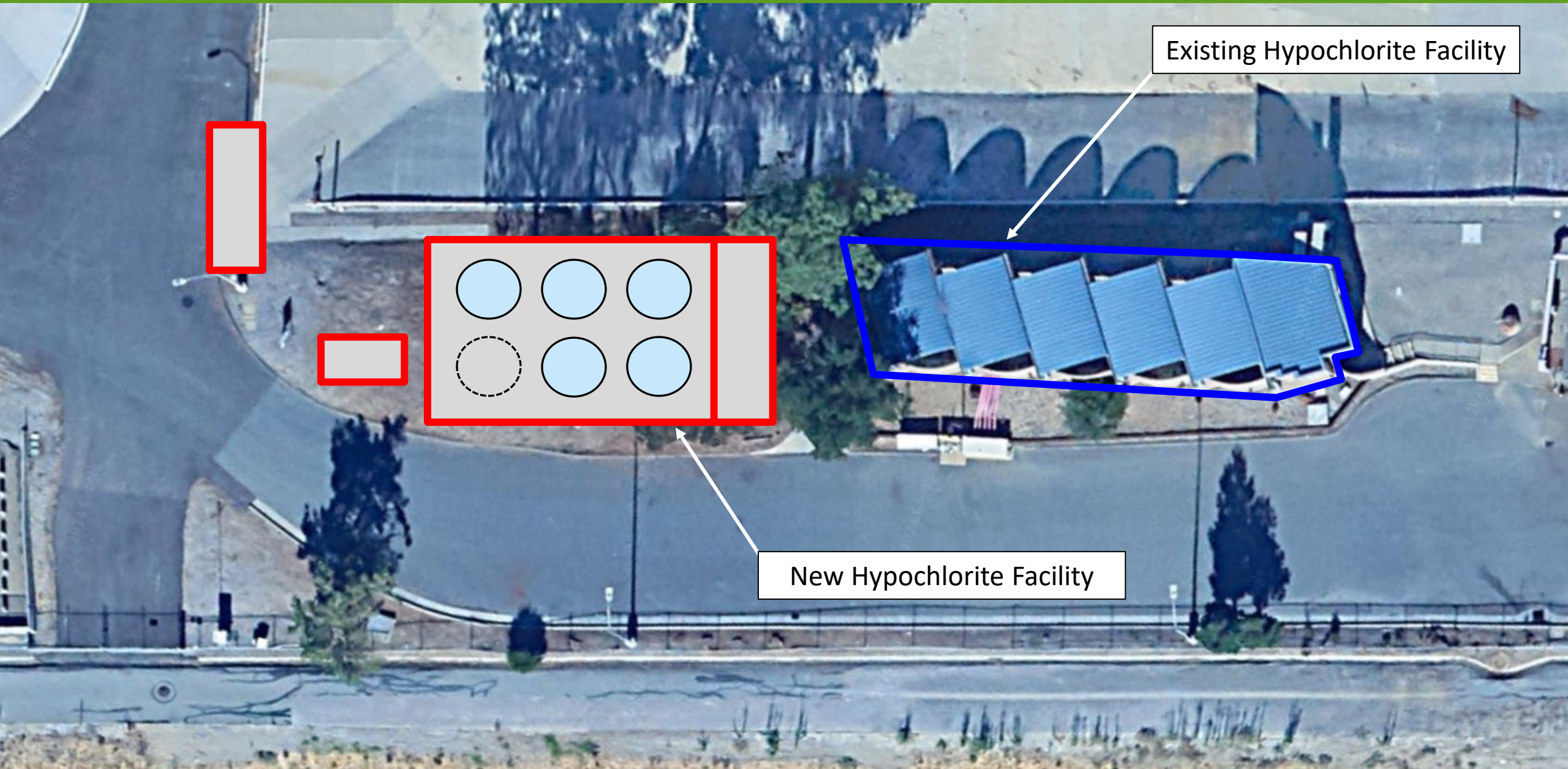


New WWTP Disinfection Facilities



Existing Hypochlorite Facility

New WWTP Disinfection Facilities



Existing Hypochlorite Facility

New Hypochlorite Facility



Energy Policy

- Energy Diversification, Reliability and Resiliency
- Regulatory Compliance
- Reduce Energy Consumption, Enhance Energy Efficiency, and Reduce Greenhouse Gas Emissions
- Offset Future Energy Demands and GHG Emissions through Renewable Energy
- Fleet Management
- Funding Opportunities

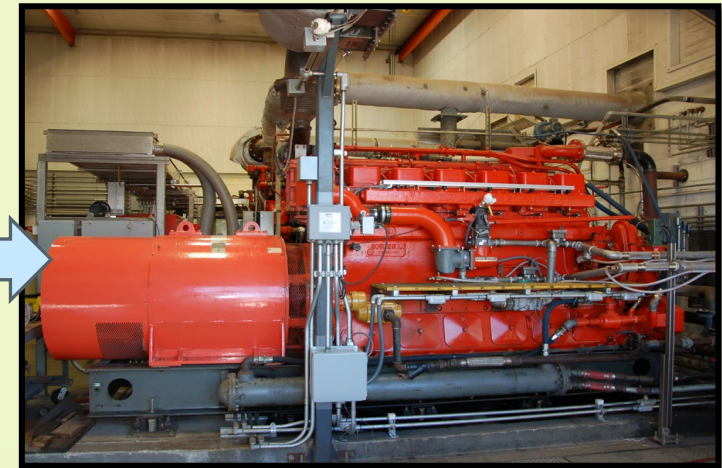
Biogas Management



Anaerobic Digesters



Biogas Conditioning System



Cogeneration Engines

- Combustion of biogas ensures compliance with air quality permits and regulations
- Significant Energy Savings

PG&E
(CY 2023)

\$0.36
per kWh

Cogeneration:
Fueled w/ Biogas + PG&E Natural Gas

\$0.08
per kWh

Biogas Management

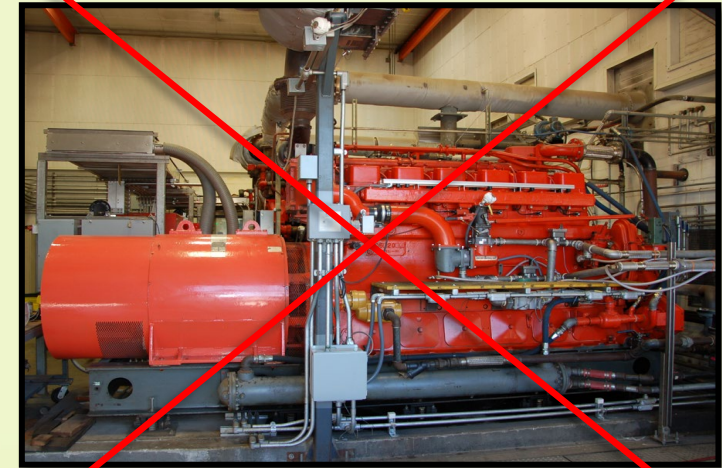


Anaerobic Digesters



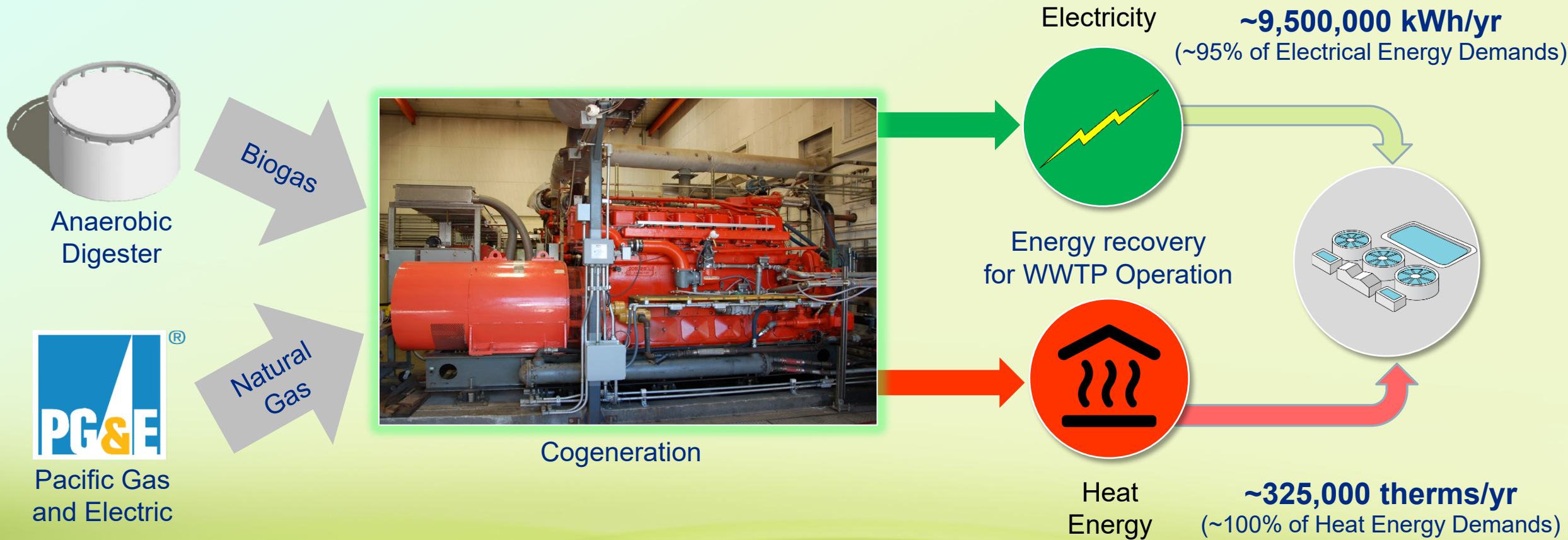
Waste Gas Burner
(Biogas Flare)

Maintenance Activities



Cogeneration Engines

Energy Generation through Biogas



Energy Facilities Master Plan: Replacement of the cogeneration engines in the next 5 to 7 years

Biogas Treatment System Improvements



Biogas Conditioning System Upgrades



Biogas Flare Replacement

PV Solar Power



Potential Solar Arrays

Regional Wastewater Treatment Facility



DERWA Water Recycling Plant

The image is an aerial photograph of a large industrial facility, identified as a Regional Wastewater Treatment Facility. The facility is situated in a valley, with a city and rolling hills in the background. In the foreground, a multi-lane highway, labeled 'HIGHWAY 680', runs diagonally from the bottom left towards the center. The facility itself consists of several large, light-colored industrial buildings, numerous circular tanks, and various pipes and structures. Two callout boxes with arrows point to specific parts of the facility: a purple box labeled 'DERWA Water Recycling Plant' points to a large, flat, light-colored area on the left side of the facility, and a blue box labeled 'DSRSD Wastewater Treatment Plant' points to a cluster of circular tanks and buildings on the right side. The overall scene is captured during the day, with soft lighting suggesting early morning or late afternoon.

DSRSD Wastewater Treatment Plant

HIGHWAY 680

Reducing Nutrient Impacts to the Bay

Recycled water program supports a healthy San Francisco Bay



Up to 80% nitrogen reduction during dry weather



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Services District**

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Questions?

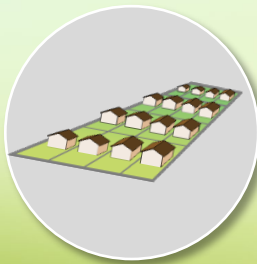
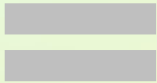
**Odor Control Hotline
(925) 519-0557**

Electrical Energy Demand



Total
Electrical
Demand:

~15 M kWh/year



~2,500 Homes

