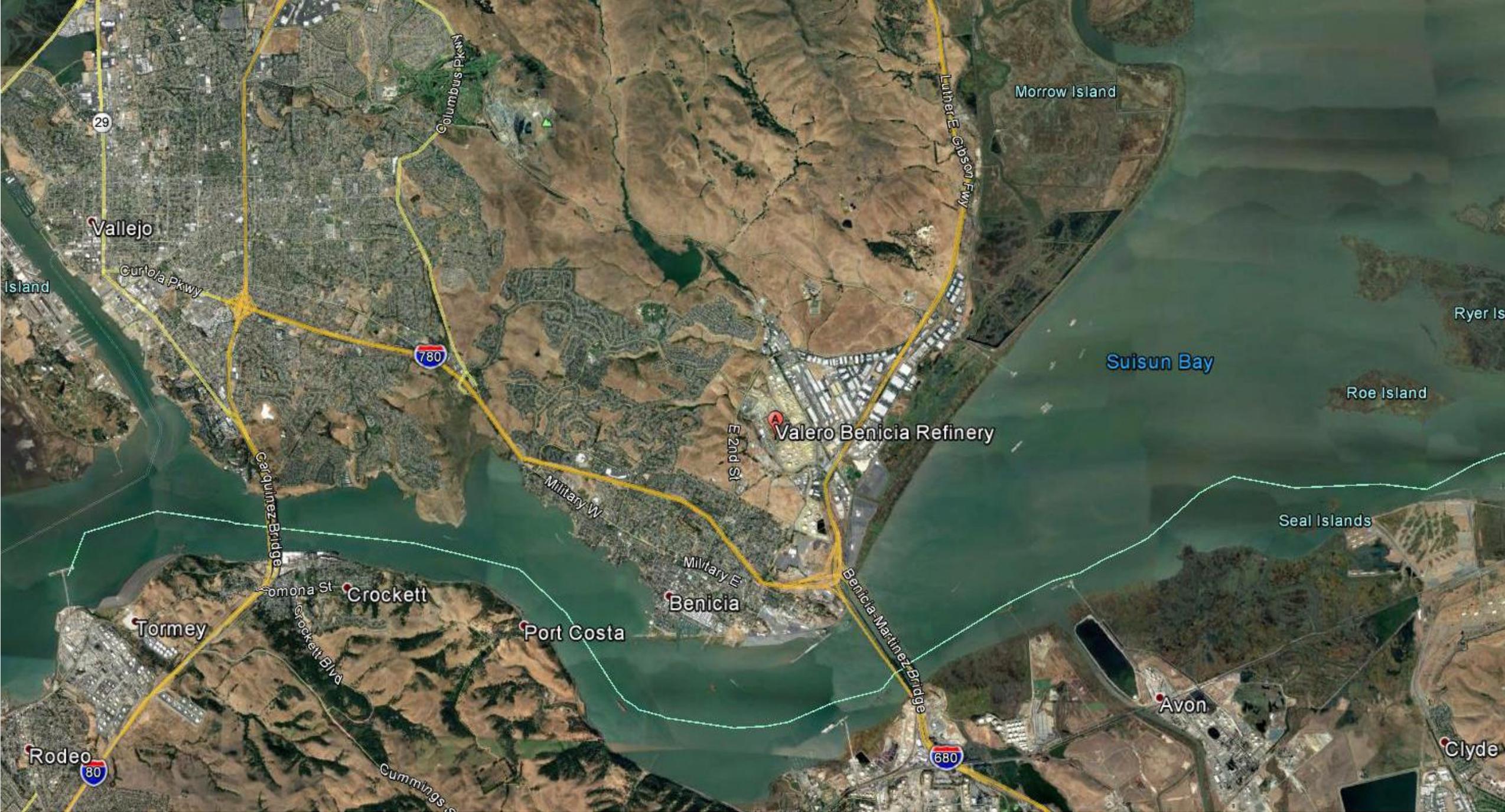




# Briefing on the Valero Benicia Refinery Incident of May 5, 2017

Board of Directors Regular Meeting  
May 17, 2017

Wayne Kino, Director  
Compliance and Enforcement Division



# Incident Overview

- May 5, 2017 at approximately 6:45 a.m.—  
Refinery-wide power failure occurred
- Complete loss of steam for combustion  
control
- Emergency shutdown and  
depressurization of process units  
occurred
- Process gasses routed to refinery flares  
and various process stacks



# Response

- Multi-agency response to the incident
  - Air District
    - Inspection staff immediately mobilized to the site
      - Incident Assessment
      - Complaint Response
    - Air monitoring van mobilized to the site
  - City of Benicia Fire and Police
    - Issued a shelter-in-place for some residents within vicinity of the refinery
    - Two Benicia elementary schools were sheltered-in-place;
      - Robert Semple Elementary School at Hillcrest and 3<sup>rd</sup> St, and
      - Matthew Turner Elementary School on Rose Drive
    - Ordered evacuation of businesses directly downwind of the refinery in the Industrial Park
    - Road closures at Highway 680 off-ramps to Lake Herman and Bayshore Roads
  - Solano County Health Department
  - Federal EPA
    - Collecting air samples/monitoring downwind of refinery and at nearby schools
  - California Resources Board
    - Collecting air samples/monitoring downwind of refinery
  - Benicia's City Manager's Office
    - Coordination of public works infrastructure



# Air Quality Impacts

- Ambient air monitoring conducted by the Air District, Air Resources Board and the EPA
- Numerous community complaints received and investigated by the City and Air District

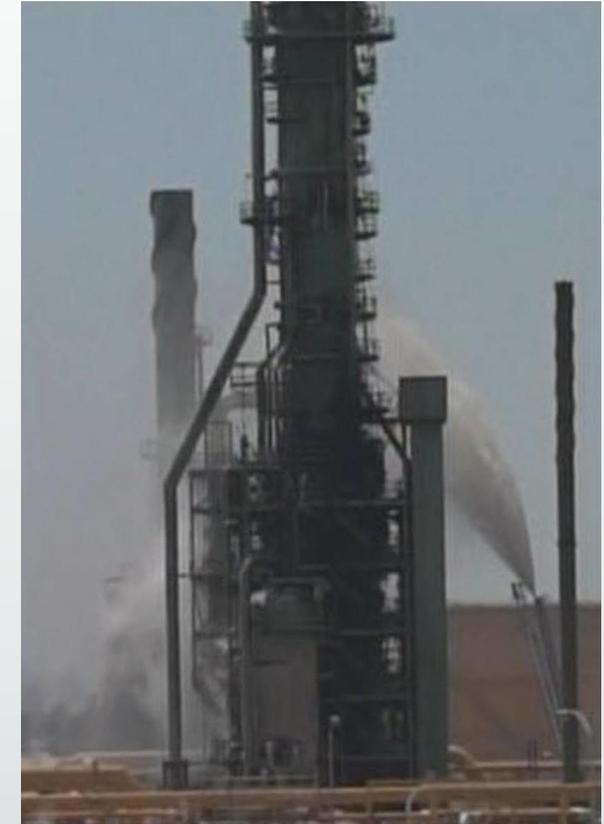
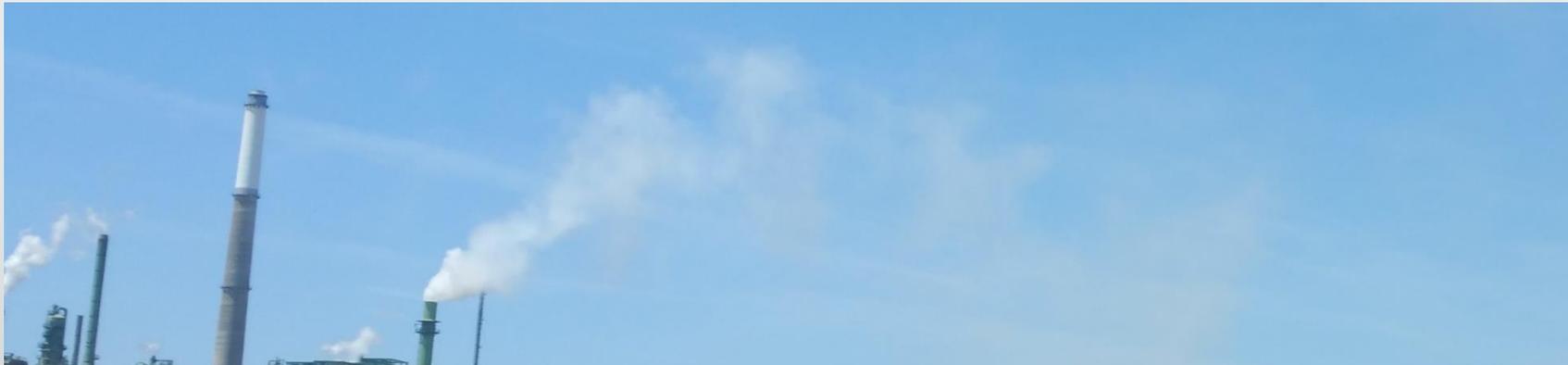




Agency	Pollutants	Equipment	Location	Results (Highest Readings)
BAAQMD	Benzene	Mobile Gas Chromatograph	Location 3 - Industrial Way	3.2 ug/m <sup>3</sup>
	H2S & SO2	Mobile Monitoring Van	Location 1 - Industrial and Bayshore	H2S: Non-Detect SO2: 0.086 ppm/3 mins & 0.086ppm/60mins
			Location 2 - Industrial Way	H2S: Non-Detect SO2: 0.024 ppm/3 mins
			Location 3 - Park Road	H2S: Non-Detect SO2: 0.011 ppm/3 mins
	Visible Emissions	Visible Emission Evaluations	East 2nd Street	Ringelmann 5
			Valero Gate 4	Ringelmann 5
Total Petroleum Hydrocarbon/toxics	Suma Canister samples	Location 3 - Park Road	Pending Lab Results	
Air Resources Board	PM 2.5 Particulate Monitoring	Two Mobile (E-BAM)	Benicia Caltrans Yard, 100 Industrial Ave	All readings - good to moderate AQI range
			Benicia Fire Station, 150 Military West Rd	
Fed EPA	H2S, SO2, VOC	Area Rae (PID measures in ppm)	Matthew Turner Elementary	All readings were non-detect
			Robert Semple Elementary	
			Industrial Way	

# Investigation

- Notices of Violation Issued
  - Currently, six notices of violation have been issued to Valero
- Investigation is ongoing
  - Air District inspection staff to further investigate the incident for additional air quality impacts
  - In conjunction with the other agencies, the Air District will investigate and determine the primary cause of the power failure



# Summary of Ozone Seasons

Year	National 8-Hour	State 1-Hour	State 8-Hour
2014*	5	3	10
2015*	5	4	11
2016	15	5	15
2017	0	0	0

**Spare the Air Alerts: 5/3/17**

**Days > 0.070 ppm 8-hour NAAQS:** None to date.

**\*Based on NAAQS of 0.075 ppm that was in place during those years**