



BAY AREA
AIR QUALITY
MANAGEMENT
DISTRICT

AGENDA: 10

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



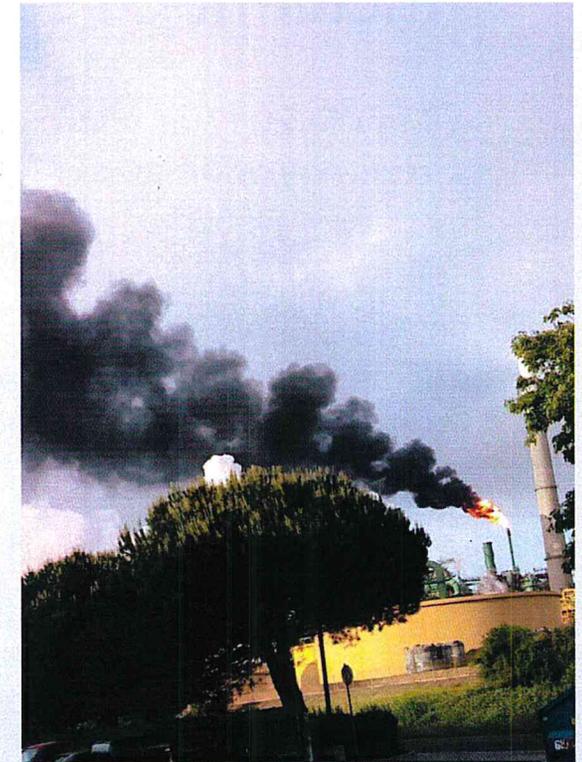
Incident Overview

- 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

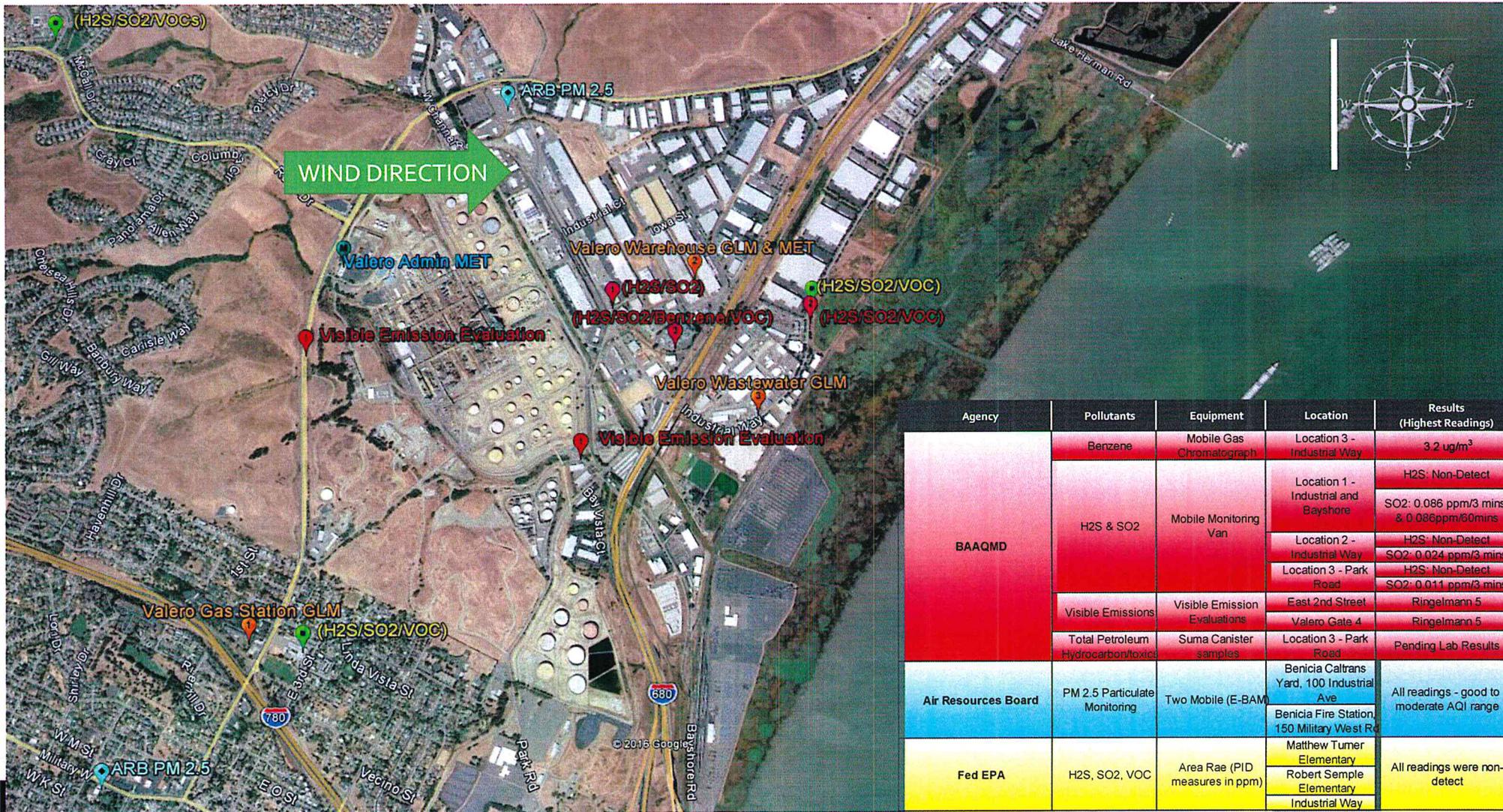
- Multi-agency response to the incident
 - Air District
 - Inspection staff immediately mobilized to the site
 - Incident Assessment
 - Complaint Response
 - Air monitoring van mobilized to the site
 - City of Benicia Fire and Police
 - Issued a shelter-in-place for some residents within vicinity of the refinery
 - Two Benicia elementary schools were sheltered-in-place;
 - Robert Semple Elementary School at Hillcrest and 3rd 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 ³
	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
			East 2nd Street	Ringelmann 5
	Visible Emissions	Visible Emission Evaluations	Valero Gate 4	Ringelmann 5
Total Petroleum Hydrocarbon/toxic	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

