



BAY AREA  
AIR QUALITY  
MANAGEMENT  
DISTRICT



# PUBLIC WORKSHOP NOTICE

**September 30, 2005**

TO: INTERESTED PARTIES  
FROM: EXECUTIVE OFFICER / APCO  
SUBJECT: **FURTHER STUDY MEASURE 9: REFINERY  
WASTEWATER TREATMENT SYSTEMS; and  
FURTHER STUDY MEASURE 8: REFINERY  
BLOWDOWN SYSTEMS**

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The staff of the Bay Area Air Quality Management District will conduct a public workshop to presents the results from Further Study Measure 9: Refinery Wastewater Treatment Systems, and Further Study Measure 8: Refinery Atmospheric Blowdown Systems, from **6:00 pm to 8:00 pm** on the date and at the location shown below:

**Thursday, October 27, 2005**

Martinez City Council Chambers  
525 Henrietta Avenue  
Martinez, California 94572

## **Wastewater Treatment Systems**

The District has now completed the second phase of Further Study Measure 9, an investigation of whether there are potential significant VOC emissions from the refineries' secondary wastewater treatment components. The secondary wastewater treatment components treat wastewater either using chemical and/or biological methods to separate the organics from the water prior to discharge into San Francisco Bay Area waters.

To measure the emissions, the District and the California Air Resources Board conducted a field investigation to collect direct vapor measurements and wastewater samples from processes located at two refineries. The field-collected data were used in addition to refinery-specific process information to develop individual refinery-specific emission models. The District ran the model for each refinery and calculated potential emissions from each secondary treatment unit at each refinery.

The estimated emissions are as follows:

- A total of 0.23 tons per day (tpd) of VOC emissions was estimated from all units studied at the refineries;
- For Shell, Chevron, Tesoro, and Valero refineries, all of the emissions were produced from the biological treatment unit;
- Uncontrolled process units (i.e., equalization ponds and clarifiers) that followed the biological treatment unit had negligible emissions; and
- ConocoPhillips had VOC emissions of (0.1 tpd) from an open trench and Dissolved Air Flootation (DAF) unit.

The District has determined that, at this time, only minimal reductions can be achieved from controls of refinery secondary treatment systems, and that these systems do not warrant additional regulation.

### **Atmospheric Blowdown Systems**

Blowdown systems function to allow the safe disposal of materials in the event of an operational upset in a petroleum refinery. To prevent over-pressurization of process vessels during upsets, a pressure relief device vents gases and liquids into a blowdown system where the liquids can be recovered and gases can be sent to a control system such as a flare. There are four uncontrolled, or atmospheric, blowdown systems in the District, all at the Tesoro Refinery. District staff has evaluated the various inputs into each of the atmospheric blowdown systems at Tesoro. The inputs consist of pressure relief devices or manually operated valves used during maintenance operations, for flushing or cleaning process vessels during maintenance.

The emissions from each input stream are subject to existing District rules, including Regulation 8, Rule 28 which regulates pressure relief devices, Rule 10 which regulates vessel depressurization, and Rule 2 which limits emissions from miscellaneous operations. The District has determined that these existing regulatory controls are sufficient and that a second level of regulatory controls on the atmospheric blowdown systems are not warranted.

The purpose of the workshop is to receive comments and answer questions on the reports. For copies of the workshop reports, visit the District website at <http://www.baaqmd.gov/pln/ruledev/workshops.htm>. For questions or comments on Further Study Measure 9 regarding wastewater systems, please contact Virginia Lau, Senior Air Quality Specialist, at (415) 749-4696, or via e-mail at [vlau@baaqmd.gov](mailto:vlau@baaqmd.gov). For questions or comments on Further Study Measure 8 regarding blowdown systems, please contact Victor Douglas, Senior Air Quality Engineer, at (415) 749-4752 or via e-mail at [vdouglas@baaqmd.gov](mailto:vdouglas@baaqmd.gov).

## **DIRECTIONS TO THE WORKSHOP**

Martinez City Council Chambers  
525 Henrietta Avenue  
Martinez, California 94572

### **From Richmond, Berkeley and Oakland**

Take I-80 East toward Vallejo / Sacramento  
Take CA-4 East Exit onto John Muir Parkway toward Stockton, Go 8.6 miles  
Take the Alhambra Avenue Exit, Go 0.2 miles  
Turn Left onto Alhambra Avenue (heading north), Go 1.7 miles  
Turn Right onto Henrietta Avenue, Go <0.1 miles

### **From Benicia and Vallejo**

Take I-680 South toward Martinez / San Jose  
Take the Marina Vista/Martinez Exit, Go 0.2 miles  
Turn Left onto Marina Vista Avenue, Go 1.7 miles  
Turn Left onto Berrellesa Street, Go 0.3 miles  
Turn Left onto Henrietta Street, Go <0.1 miles

### **From Martinez and Concord**

Take I-680 North toward Sacramento  
Take CA-4 West Exit toward Martinez / Richmond, Go 3.3 miles  
Take the Alhambra Avenue Exit, Go 0.3 miles  
Turn Right onto Alhambra Avenue (heading north), Go 1.6 miles  
Turn Right onto Henrietta Avenue, Go <0.1 miles

## **PUBLIC TRANSIT via THE COUNTY CONNECTION**

116 Amtrack / Martinez from Pleasant Hill BART stops on Berrellesa Street at Mellus Ave. (1 block)

108 Amtrack / Martinez from North Concord BART stops along Escobar, Pine and Court Streets

118 Amtrack / Martinez from Concord BART stops along Escobar, Pine and Court Streets

For Bus Schedules, see [www.ccctc.org/wb/pages/bus-schedules.php](http://www.ccctc.org/wb/pages/bus-schedules.php)