

**Bay Area Air Quality Management District  
Draft Petroleum Refining Emissions Tracking Rule  
March, 2013**

**Why is the Air District developing this new rule?**

As high quality crude oil becomes less available over time, petroleum refineries may increase their use of lower quality crude oil (i.e., oil that is harder to “refine” into useable products and/or that contains more impurities like sulfur). Refining lower quality crude oil could increase air emissions for several reasons, including: (1) a longer refining process uses more energy, which may cause more air emissions, (2) when oil with more impurities is refined, some of those impurities could be emitted into the air, and (3) more impurities in the oil could mean more corrosion of refinery components leading to accidents that cause emissions.

The new Air District rule would go further than existing rules and require that if emissions from a refinery increase by more than a small amount for any reason, either from normal operations or accidents, the refinery do everything feasible to bring emissions back down to previous levels. The rule would also require new monitoring systems to help better quantify and understand how refinery air emissions affect the public.

**How would refinery emissions be measured and compared over time?**

Refineries would be required to prepare annual emissions reports using state-of-the-art measurement technologies and estimation methodologies that will be specified by the Air District for each type of refinery equipment and pollutant emitted. Changes in emissions over time will be determined by comparing an initial “baseline” emissions inventory with annual “on-going” inventories.

**What will happen if emissions increase over time by more than a small amount?**

If emissions from a refinery increase over time by more than a specified amount, the refinery would have to prepare and comply with an “emission reduction plan.” The specified amounts are described in the rule as “trigger levels,” and will be different for each type of pollutant. For some pollutants the trigger-levels would be specified quantities of emissions, while for other pollutants the trigger-levels would be based on analysis of how emissions are predicted to impact surrounding areas based on modeling techniques.

**How would emission reduction plans work?**

Emission reduction plans have to be approved by the Air District. Under the new rule, the District can only approve a plan if it adequately explains the causes of an emissions increase. A plan also needs to describe specifically how emissions will be lowered back below trigger-levels within two years. If reducing emissions to that extent is not possible, then the refinery would have to do a facility-wide audit and identify in the plan “all feasible

measures” to expeditiously reduce emissions of pollutants that have increased above trigger-levels. The new rule would require that feasible air emission reduction measures identified in the emission reduction audit be implemented on an expeditious schedule.

### **What if “all feasible measures” do not reduce emissions below trigger-levels?**

If a refinery cannot demonstrate that “all feasible measures” will reduce emissions back below trigger levels, the refinery would have to update their emission reduction plan each year by identifying any additional air emissions reduction measures that become feasible based on changes in technology, the costs of emission controls, or other considerations. Additional actions may also be required as a result of other existing rules.

### **What new monitoring would the new rule require?**

The new rule would require two types of air monitoring. First, there must be a “fence-line” monitoring system that measures air pollutant concentrations along the property boundary of the refinery. The “fence-line” monitoring will help detect and measure “fugitive emissions”, gas leaks, and other emissions. Second, there must be a community air monitoring system that measures how emissions are affecting nearby areas where people live or spend significant time. Community air monitoring data can be used to estimate air pollutant exposures and health risks, and to determine trends in pollutant concentrations over time.

Refineries would have to submit for the Air District’s approval an “air monitoring plan” that follows guidelines published by the Air District. In developing these guidelines, the Air District will consider recommendations from a panel of monitoring experts.

### **How can the public influence the reports and plans required by the new rule?**

There will be a public comment period for each report and plan submitted to the Air District, and the Air District must consider public comments before approving or disapproving any report or plan.

### **What are the next steps leading to adoption of the new rule, and how can I get additional information?**

The Air District will be holding public workshops and then convening a Technical Working Group as the proposed rule is developed. The proposed rule will be considered for adoption by the Air District’s Board of Directors, most likely in the first half of 2014. Individuals may find additional information on the Air District’s website at [www.baaqmd.gov](http://www.baaqmd.gov), or by contacting Brian Bateman at (415) 749-4653, or [bbateman@baaqmd.gov](mailto:bbateman@baaqmd.gov).