

February 8, 2008

Ms. Patty Lee Kusek Environmental Coordinator  
Kern Oil and Refining Company  
7724 E. Panama Lane  
Bakersfield, CA 93307-9210

**Response to Kern Oil and Refining (Kern) Comments for Policy COM 2171  
Refinery Components, and Comments for Policy COM 1151 – Volatile  
Organic Compound Analyzers, Use of EPA Method 21**

**Component Tallies**

District Inspectors have been reminded during a staff meeting to ensure that the component counts are accurately recorded during this critical part of fugitive inspections, including those subject to Rules 4455 and 4409. In some circumstances verbally calling out the component will help, and staff were reminded that this was an option. However, it may not help and is not practical in many industrial facilities with high ambient noise levels. The second inspector should be able to differentiate the components being checked and keep an accurate count, with or without verbalizing the components. The policy is implicit that an accurate count is required, and it is thought that it is not necessary to modify the wording at this time.

**Purpose of District Inspections**

Based on this suggestion, there appears to be a fundamental disagreement between Kern and the District as to the purpose of these rules. It is the District's position that the purpose of the rules and policy, is to minimize VOC emissions (this is clearly stated in both the rules and policy). District inspections conducted according to these rules are not designed to determine if the source's fugitive emission program is effective, but to determine if the facility is in compliance with the rule requirements. In order to ensure that the emissions are limited as much as possible, the inspection must include those components and units with the highest potential to emit. Compliance is defined in Rules 4409 and 4455 both as a percentage of components sampled, and by a total number of leaks if fewer than that number of components are sampled. There is no requirement in either Rule 4455 or Rule 4409 to sample a certain number of components. Although

there was a requirement for a statistically representative sample in Rule 4403 (the predecessor to Rule 4409), that requirement is not in Rule 4409 and was never in the refinery fugitive component rules. Sources, including Kern, are well aware of the components with a high leak potential. It is incumbent upon the source to stay in compliance, and incumbent on the District to ensure compliance with the rules.

That said, District annual inspections are designed to determine compliance for the facility. Such an inspection will not be considered complete without including a significant number of components from the facility. In this sense the facility and District both benefit from a thorough inspection; the facility by ensuring that many components are checked offset any leaking components, and the District by ensuring that the entire facility is being maintained.

### **Multiple Day Inspections**

Results from multiple-day inspections are to be tallied together to determine the leak percentage. This is and has been standard practice, and is a requirement of these rules.

In order to clarify this requirement, the following revision is suggested for the policy under Section C.

3. To determine the leak percentage for each component type, divide the total number of minor and major (10,000 to 50,000 ppm) leaking components by the total number of that component inspected during the entire inspection. For an annual inspection at a larger facility this may be several days of data from several different units. For a start-up inspection of a single unit or an inspection at a smaller facility, this may be a much smaller number of components from a single day's inspection.

### **Comments for Policy COM 1151 – Volatile Organic Compound Analyzers Use of EPA Method 21**

District Rules reference EPA Method 21 for leak detection, and unless the rules are changed, this method must be followed. Method 21 is specific in Section 8.3.1 about which reading to use to determine if a leak has occurred. This section requires that the instrument probe be moved slowly in an area where an increased reading has occurred. It then states that the probe should be moved to and left at the point of the maximum reading for twice the instrument sampling time. The point of this section is to ensure that a maximum reading is measured, and Method 21 requires that this *maximum reading* be used to determine if a leak has occurred. In the reference material cited in your letter, the author refers to Method 21 several times, even stating the measurements must be taken according to that method, but then inserts the requirement that the leak be sustainable which is not found in the EPA method.

The policy will be modified to include leaving the probe at the leak site for approximately twice the instrument response time. The last sentence of the first paragraph on Page 3 of the policy will be changed to read, "It is important to keep the probe at a potential leak source long enough to ensure the maximum reading is attained, this should be approximately 2 times the instrument response time."

The policy reflects a common field question about a leak having to be repeatable. This is not a requirement in Method 21 and therefore is not a requirement of the rules or policy.

### **Accuracy of District Instruments**

Language will be included in the policy to address a situation where the District instrument fails a calibration check in the field with the source's appropriate calibration gas, and staff have been advised that the instrument should not be used for further inspections until checked in the office. The following will be added after the last sentence on page 3, "If the instrument does not read the calibration gas within 10% of the gas value (as is required in Method 21) that instrument will not be used for further inspection until checked in the District office."

The policy does allow a test with appropriate source gas. This can be used to verify instrument accuracy in the field. Staff have been reminded that this is a requirement of the policy with appropriate gas. It is thought this is adequate to address a source's request for an instrument check.

Please let me know if you have further questions about these or other policies.

Sincerely,

Mike Oldershaw  
Manager  
Southern Region Compliance Department