

Bay Area Air Quality Management District

939 Ellis Street
San Francisco, CA 94109
(415) 771-6000

Permit Evaluation and Statement of Basis for Major Facility Review Permit Reopening - Revision 3.5

for
**Chevron Products Company
Facility #A0010**

Facility Address:
841 Chevron Way
Richmond, CA 94802

Mailing Address:
Post Office Box 1272
Richmond, CA 94802

October 2006

Application
15235

Application Engineer: Greg Solomon

The Bay Area Air Quality Management District (“District”) is proposing to revise the Title V permit for the Chevron Richmond Refinery to implement NSPS Subpart J (40 CFR §§ 60.100 *et seq.*) at two refinery flares. This statement of basis provides factual and procedural background as well as legal rationale for this proposal. The revision would add a schedule of compliance to the permit, pursuant to which Chevron would have to install and operate either continuous monitoring or an approved alternative for the two subject flares.

This revision is responsive to the March 15, 2005 Order from EPA, which stated that the District must either require Chevron to comply with the monitoring for the H₂S standard of Subpart J or impose federally enforceable monitoring to verify compliance with a permit condition intended to assure that the flares remain exempt from the H₂S standard.

The following discussion begins by recounting relevant history leading up to this proposal. Viewed from the District’s perspective, the discussion of this issue between the District and EPA has evolved over time, and at times has lacked clarity. To promote greater clarity going forward, the District will set forth its understanding of both the evolution and the present state of the issue.

General Background

NSPS Subpart J regulates fuel gas combustion devices, including flares, at petroleum refineries. It is undisputed that two Chevron refinery flares (denoted S-6015 and S-6039) are “affected facilities” for purposes of NSPS Subpart J, because they are fuel gas combustion devices constructed or modified after June 11, 1973. Section 60.104(a)(1) limits H₂S content of fuel gas burned in an affected facility, except for process upset gas that results from relief valve leakage or other emergency malfunctions. Section 60.105(a)(3) requires continuous monitoring to determine compliance with the substantive standard of section 60.104(a)(1). Chevron’s Title V permit initially stated that the Chevron flares were exempt from the H₂S standard. This was an inaccurate restatement of the exemption, which applies to flare events rather than flare equipment, and the permit was revised to correctly state the criteria for gases to be exempt.

Given that the flares are affected facilities and in that sense subject to the rule, the more difficult question has been whether the Title V permit must, either as a function of Title V, or as a function of Subpart J itself, contain monitoring for these flares relative to the H₂S standard of Subpart J. In other words, the issues have been whether and when the monitoring specified in Subpart J must be implemented and reflected in the permit, and whether Title V requires monitoring to fill the gap prior to the time Subpart J monitoring must be implemented.

Does Title V Require Monitoring for Exempt Flaring Activity?

At times, the District has understood EPA to have asserted that Title V and Part 70 require monitoring to be established to determine whether the exemption of section

60.104(a)(1) has been validly claimed at the Chevron flares (in other words, that the Chevron flares have and continue to burn only exempt gases). The District has stated its view that no such requirement exists in Title V, Part 70, or District Regulation 2-6. Activities that are exempt from a standard are not subject to the standard. Title V only concerns itself with monitoring to determine compliance by activities actually subject to a standard, which is another way of saying that Title V monitoring attaches to “applicable requirements.” The District’s concerns regarding this asserted theory were based both on legal defensibility and on implementation issues that would arise regarding the many exemptions in federal and District standards. Thus, the District’s concerns about Title V monitoring for exemptions were much broader than Subpart J.

In the Subpart J context, this dialogue has created semantic confusion, because Subpart J denominates a universe of sources as “affected facilities” which, by virtue of configuration and date of origin, may be subject to the substantive requirements of the rule, but then excludes certain activities at these sources. Specifically, it exempts flaring that is done for certain purposes. The legal question could thus be stated as whether a standard is a Title V “applicable requirement,” and therefore within the scope of the monitoring requirement of 40 CFR 70.6(a)(3)(i)(B), for flares that are affected facilities but that have not been known to engage in flaring other than exempt flaring. The District maintains the position that Title V monitoring does not attach in those situations. This position is noted as background and as explanation from some of the discussion found in correspondence regarding Subpart J and the Chevron flares. However, since it appears that EPA is no longer pressing this theory as a basis for requiring monitoring at the Chevron flares, it will not be discussed further here.

On the theory that if the Title V monitoring issue could not be resolved, it might be rendered moot, the District imposed in the Chevron Title V permit conditions that prohibited the flares from being used for other than burning of process upset gases. In other words, the conditions prohibited flaring that would be subject to the substantive requirements of Subpart J. The idea behind this was that if permit conditions enforceable by the District in state court prevented the use of flares in a manner inconsistent with the exemption of section 60.104(a)(1), it might no longer be necessary to decide whether additional monitoring attached, either as a function of Title V or of Subpart J itself. In retrospect, this approach was ill-conceived on a number of grounds. The District ultimately decided that these prohibitory conditions were more a distraction than a solution, and that, since there was no requirement to have these conditions, they should be deleted.

When Must the Monitoring of Subpart J be Implemented?

The preceding discussion explains why today’s proposal to add monitoring to the Title V permit for the H₂S standard of Subpart J is not based on Title V authority. The remainder of this discussion explains the District’s conclusion that the monitoring requirements of section 60.105(a)(3) must be complied with at two Chevron refinery flares (S-6015 and S-6039). If today’s proposal is finalized, then this conclusion will be implemented through a schedule of compliance in the Title V permit.

Regarding the question of when the monitoring of section 60.105(a) applies, the District believes there are two possible interpretations. One interpretation is that the monitoring must be implemented only after there has been combustion of a non-exempt gas (i.e., gas that is not the result of startup, shutdown, or process upset). This will be referred to below as the “event-based interpretation.” The other possible interpretation is that monitoring must be implemented at any flare that is configured such that it can burn non-exempt gases. This will be referred to below as the “design-based interpretation.”

Section 60.105(a) states that monitoring “shall be installed . . . by the owner or operator subject to the provisions of this subpart.” Again, the question is whether a flare is “subject” that is configured to burn non-exempt gases, but as a factual matter has never been known to burn non-exempt gases. If, as it appears to the District, the choice between the two interpretations discussed above is not answered by the plain language of the rule, then it may be that either interpretation is permissible.

In this context, the District views its role as being somewhat akin to that of a court of appeal. As a Title V permitting authority, the District must implement, enforce, and possibly defend the applicability of EPA regulations. Where there is ambiguity in the regulation, the District looks to EPA for interpretation of its own standard. The District’s role in evaluating that EPA’s interpretation is somewhat limited. It may be that the District would not apply the same interpretation to a similarly-worded District rule. However, if EPA’s interpretation of the standard is permissible, it is not the District’s role to substitute a different interpretation.

The District is not aware of any written interpretation, determination, or policy that explicitly addresses this choice of interpretation. However, since EPA is here taking the position that the H₂S standard is applicable at the two Chevron refinery flares identified above, and since these flares are not known to have burned non-exempt gases, it follows that the assertion of applicability is not based on the factual premise necessary to support the event-based interpretation. Since the event-based interpretation can be ruled out in this situation, the design-based interpretation must be what underlies the assertion of applicability in EPA’s March 15 Order.

The District initially discounted the design-based interpretation because of the absence of a record of applicability determinations at flares that have been configured to burn non-exempt gases.¹ It is inherent in the design of most refinery flares that can receive and burn gases from routine operations, if the decision is made to do so. Using the design-based interpretation, EPA could have established a record of enforcement of the Subpart J monitoring requirements at Chevron and at other refineries. The absence of

¹ The District has reviewed EPA’s published NSPS Subpart J applicability determinations, but has not found discussion of the specific question at issue here, i.e., under what conditions monitoring for the H₂S standard are triggered at a flare that burns exempt gases. Recent judicial consent decrees between EPA and various refineries address the topic of monitoring for Subpart J. However, to the extent these consent decrees represent determinations that the monitoring for the H₂S standard has been triggered at certain refineries, it is not clear which of the two theories discussed above would have been the basis for those determinations.

such a record until recently could reasonably have supported the conclusion that the event-based interpretation was correct.

Dormant enforcement of the design-based interpretation does not, in and of itself, mean the interpretation is unavailable, or that it should not now be implemented.² At the least, however, the absence of a record of enforcement and the notice it would have provided to regulated refineries, is a consideration in establishing a schedule of compliance. To the extent the design-based interpretation is emergent, rather than longstanding, more time should be allowed to comply with the new interpretation. Based on the District's current understanding that this interpretation has not been readily available until very recently, the District is allowing a substantially longer schedule for compliance than it otherwise would.

The proposed schedule of compliance would take into account two alternative pathways to compliance. Compliance could be achieved by installing and operating the monitoring of section 60.105(a)(3), which allows the option of continuously monitoring either SO₂ emissions or H₂S fuel gas content. However, authority also exists for approval of alternative monitoring. The District's understanding is that, although authority to implement and enforce Subpart J has been delegated to the District, authority for approval of alternative monitoring remains with EPA. Though the District will not be evaluating a proposal for alternative monitoring, the District believes it likely that some alternative will be deemed appropriate. Chevron maintains that only exempt gases are burned at the flares. In theory at least, a system for verifying that the exemption is validly claimed would seem a reasonable alternative to the expense and technical challenges that would follow from requiring the continuous monitoring of section 60.105(a) at a refinery flare.

The proposed compliance schedule would allow Chevron 18 months from the date this permit revision is finalized to install the monitoring of section 60.105(a)(3). Any permit applications necessary for installation of the monitoring must be submitted to the District within 14 months (i.e., four months prior to the date it must be operating). Alternatively, Chevron may, within 12 months, submit an alternative monitoring plan to EPA. If an alternative monitoring plan is submitted, the compliance date for installing the monitoring of section 60.105(a) is essentially held in abeyance while EPA considers the plan. If EPA rejects the proposed alternative, then Chevron would have 12 months from the date of rejection by EPA to install the monitoring of section 60.105(a)(3), and the necessary permit applications would be due four months prior to that date. If EPA approves the alternative monitoring plan, then Chevron would have 8 months from the date of approval to implement the plan, and would have to submit any necessary permit applications four months prior to that date.

² The H₂S standard is set forth in a New Source Performance Standard, the applicability of which hinges on there being a construction or modification of a flare. However, as a practical matter, compliance with the H₂S standard does not depend on the design or operation of the flare itself. H₂S fuel content will typically be the result of upstream processes and gas purification systems. It is therefore not the case that compliance will be more difficult to achieve after a flare has been constructed or modified than before it is constructed or modified.

Schedule of Compliance

The following language is proposed to be incorporated in the permit as a Schedule of Compliance.

-To achieve compliance with NSPS Subpart J (40 CFR §§ 60.100 *et seq.*) at flares S-6015 and S-6039, the owner/operator shall meet the requirements of either section A or B below:

A) By no later than [18 months after effective date of this revision], the permit holder shall install and operate monitoring that complies with 40 CFR § 60.105(a)(3).
By no later than [14 months after effective date of this revision], the permit holder shall submit to the District any permit applications necessary to achieve this result.

B) By no later than [12 months after effective date of this revision] the -permit holder shall submit to EPA a request for an alternative monitoring plan to comply with the monitoring requirements of 40 CFR § 60.105(a)(3).

1) If EPA disapproves the alternative monitoring plan submitted pursuant to Section B above, then the permit holder shall install and operate monitoring that complies with 40 CFR § 60.105(a)(3) by no later than 12 months after the disapproval. By no later than 8 months after the date of disapproval, the permit holder shall submit to the District any permit applications necessary to achieve this result

2) If EPA approves the alternative monitoring plan submitted pursuant to Section B above, then the permit holder shall comply with the alternative monitoring plan by no later than 8 months after the approval. By no later than 4 months after the approval, the permit holder shall submit to the District any permit applications necessary to achieve compliance with the alternative monitoring plan.