



D a v i s G r a h a m & S t u b b s L L P

May 20, 2008

Via Electronic Mail

Ms. Theresa Amoroso
Colorado Department of Public Health and Environment
Air Pollution Control Division
4300 S. Cherry Creek Boulevard
Building B
Denver, Colorado

Re: Comments of Anadarko Petroleum Corporation and Noble Energy, Inc. on
Proposed Rule Language Development for Selected Oil and Gas and VOC
Stationary Source Control Strategies

Dear Ms. Amoroso:

I am writing on behalf of our clients Anadarko Petroleum Corporation (“Anadarko”) and Noble Energy, Inc. (“Noble”) to provide you with comments on matters discussed and materials circulated at the May 13, 2008 ozone stakeholder meeting hosted by the Regional Air Quality Counsel (“RAQC”). We appreciate the opportunity to submit these comments on such issues, and set forth below provide you with both general and more specific comments. We also wish to note that the requested response in just seven days from the referenced meeting and the circulation of the noted materials is very turn around, and so we reserve the right to provide further comment to the RAQC, APCD and other involved stakeholders, as we are able in the near term.

General Comments

As a general comment, we believe control strategies should be designed to bring the area into attainment with the 8-hr. ozone standard and should be based on good data and good science; Developing explicit rule language for possible VOC control strategies prior to completing ozone modeling runs counter to this position (see our prior “Guiding Principles” comment of March 12, 2008), and is not appropriate at this stage of the process. The modeling results will assist in identifying the most appropriate VOC sources to control, at which time strategies should be developed. Additionally, developing rule language only for oil and gas sources while not proceeding on an identical path for other source categories creates the perception that the regulatory community has already determined its control strategy approach, irrespective of the modeling results, and that further control of oil and gas sources of VOCs will contribute

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significantly to NAAQS attainment, even though substantial controls have been imposed in the last four years without significant improvements in ozone concentrations.

Additionally, we wish to renew our prior comment on confining the ozone SIP development stakeholder process to the consideration of control strategies to be implemented within the boundaries of the expanded 8-hour ozone non-attainment area agreed to by EPA and upon which the state of Colorado also has a well-documented position. We enclose a separate memorandum addressing this issue, for your consideration.

Anadarko and Noble object to the consideration of VOC controls specific to oil and gas sources outside the non-attainment, since it has not been demonstrated that such measures would promote attainment of the 8-hour ozone NAAQS within the non-attainment area, and also on the basis that other source categories that contribute VOCs to ambient air outside the non-attainment area are not being considered for such control, as well.

With respect to proposed AQCC Regulation No. 3 revisions, we note that permit exemptions are typically written for sources deemed insignificant sources of air pollutant emissions. Bullet two on slide 10 of Mike Silverstein's May 13th presentation states: "Eliminate Exemptions for Significant Categories". How did the agency define "*Significant Categories*?" We would like to obtain a copy of the supporting documentation for the agency's determination of significant categories.

We also question the equity in the agency's rationale for eliminating specific permit exemptions for oil and gas equipment when like equipment in other sectors will still be exempt (see, for example, Part A II.D.1.k. and Part B II.D.1 e, concerning fuel burning equipment, where heater treaters, separators, and dehy reboilers would not be able to take the exemptions available to similarly sized equipment of other types).

Finally, there are no enforceable reductions associated with the proposed Reg. No. 3 APEN exemption changes in the cases where a permit exemption has been retained, and therefore such changes should not be part of the SIP process but a separate, state only rule making process.

Specific Comments:

Controlling condensate tanks to 98% as proposed by APCD at the last stakeholder meeting on May 13th, will 1) require producers to control every tank battery in the DJ Basin and 2) will raise the current accepted control level of flares and vapor recovery units (VRU) from 95% to 98%. This brings up several issues.

- The current system-wide control requirement of 75% established the incentive to over control system-wide beyond 75% to account for intermittent control downtime at system batteries. The requirement to control every tank battery would not provide for any over-

control flexibility. Every instance of control downtime would also result in a potential non-compliance event. The Division alluded to allowing for 100 hours of downtime per year under upset provisions; however, the agency needs to clarify this point and what will be deemed a non-compliance event if the threshold approach is adopted.

- The requirement to control every tank battery will increase emissions of CO₂, a greenhouse gas (GHG), because a significantly larger number of flares will be installed, especially on smaller tank batteries (for which the costs of a VRU are even more prohibitive). RAQC and the Division should seriously evaluate the tradeoff between what is likely an incrementally small ozone reduction (measured in the tenths of ppb) versus a doubling or tripling of CO₂ emissions from these sources (see attached table evaluating the GHG disbenefit of combustion controls for two Noble wells in the D-J Basin). This is also in direct conflict with the Governor's directive to reduce GHG emissions by 20% by 2020. The agency has been silent on the GHG disbenefit of controls and needs to clarify its position on this matter. We believe serious consideration should be given to a lower level of VOC control (e.g., 80-85% rather than 95-98%) to balance these conflicting environmental drivers, while preserving operational flexibility and the incentive to over control.
- The proposal to increase the capture/control efficiency from 95% to 98% has not addressed the original rationale for selecting 95% rather than 98% and whether that rationale is no longer valid. Additionally, the proposed odor control measures that CDPHE staff has testified in support of as part of the ongoing COGCC rulemaking would establish a 95% control threshold for tanks and other sources across the state. Having differing levels of control required for the same types of sources by two separate state agencies is inappropriate, in our view.
- In reference to the proposed 98% rolling 12-month limit under *XII.D.1.B.*, a long standing policy of APCD is that "short term limits" (i.e. less than annual) are only applied to major and synthetic minor sources. The rolling 12-month limit would cause more recordkeeping requirements for true minor sources, many approaching the 1 tpy level, the smallest of "true minor" sources. APEN reporting is defined based on a calendar year basis. If tank control requirements are triggered based on APEN levels, then the control should also be based on a calendar year basis, not a rolling 12-month period. We request that the agency specifically address this divergence from agency policy. Alternatively, all minor VOC sources within the ozone non-attainment area should be required to track emissions on a rolling 12-month basis, not just oil and gas minor sources.
- In addition to achieving 98% control, the agency is proposing the requirement to install auto-igniters and continuous monitoring surveillance (data loggers) in order to ensure flare pilots are lit and pilot light outages are documented. There are significant capital

and operational costs associated with the installation, operation and maintenance of auto-igniters and electronic data loggers, and we do not see a practical air quality benefit in the requirement to install both auto-igniters and surveillance equipment. Noble and Anadarko have invested significant resources in their flare maintenance program(s). For example, Noble has two burner maintenance crews with a specific purpose to install and maintain control equipment at its battery locations. Noble also has pumper and operations training programs where pumper crews are trained on evaluating control equipment operation, restart of control equipment that has gone down and maintaining field logs of control equipment downtime. Auto-igniters relight pilots when necessary, and Anadarko and Noble's current flare maintenance programs ensure control equipment operates at acceptable levels. We believe the proposed rule language should be flexible enough to allow for operators to choose between auto-reigniters and continuous monitoring. Both are not needed or justifiable, in our view.

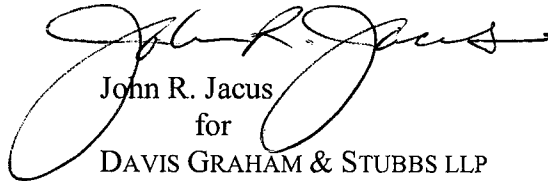
- The proposed rule language will define refracing and well stimulation operations as a new/modified source requiring controls for the first 90 days after first production, regardless of gas flow rate. Mike Silverstein explained that agency experts have collected data indicating the first 90 days of production after a refrac can be a significant source of air emissions. Although Anadarko and Noble as a standard practice already control new and, in many cases, re-stimulated well batteries upon start of production, they request that the agency provide the technical back up justifying the rationale described by Mike Silverstein at the last meeting.
- The agency's March 2008, Oil and Gas Exploration & Production Condensate Tank Guidance indicates a re-frac is not a modification; however, the new draft rule language defines a re-frac as a new/modified source. The agency has not provided any justification for this change in definition. Please explain the rationale for such a change.
- Finally, we note that the proposed language does not appear to encourage use of vapor recovery units that, by the nature, may experience downtime greater than 2% of the time a tank battery is operating (100%-98%). Given the state's Climate Action Plan, we question the wisdom of not encouraging the use of VRU's in proposed regulatory language, where feasible.

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Once again, we appreciate the opportunity to provide these comments and reserve the right to submit additional comments as we are able.

Respectfully submitted,



John R. Jacus
for
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Attorneys for Anadarko Petroleum
Corporation/Noble Energy, Inc.

Enclosure

cc: Ken Lloyd, RAQC
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