
BEFORE THE AIR QUALITY CONTROL COMMISSION, STATE OF COLORADO

In the Matter of Proposed Revisions to Ambient Air Quality Standards Regulation, Regulation Numbers 3, 7, and 11 for the Denver Metropolitan and North Front Range Ozone Action Plan

FINAL JOINT PREHEARING STATEMENT OF ANADARKO PETROLEUM CORPORATION, NOBLE ENERGY, INC., and WILLIAMS PRODUCTION RMT COMPANY

Anadarko Petroleum Corporation (“Anadarko”), Noble Energy, Inc. (“Noble”), and Williams Production RMT Company (“Williams”) (collectively the “Well Operators”) jointly submit this Final Prehearing Statement (“Final Statement”) pursuant to the Air Quality Control Commission’s (“AQCC” or the “Commission”) procedural rules, 5 CCR 1001-1, Section 1.5.5(5)(c), in connection with the Commission’s consideration of proposed revisions to the Ambient Air Quality Standards Regulations, Regulation Numbers 3, 7, and 11, for the Denver Metropolitan and North Front Range Ozone Action Plan (“Ozone Action Plan”).

Some of the Well Operators have been actively involved in the rulemaking process surrounding ozone dating back to adoption of controls to meet the obligations of the former 8-hour ozone Early Action Compact (“EAC”) in 2004, and have supported Colorado’s prior efforts to achieve compliance with the 8-hour ozone NAAQS in the non-attainment area (“NAA”). The Well Operators continue to support Colorado’s goal of achieving long-term compliance, and wish to promote Environmental Protection Agency’s (“EPA’s”) future classification of the Denver Metropolitan and Northern Front Range areas as “attainment” for the 8-hour ozone National Air Ambient Quality Standard. They have participated in most, if not all, of the numerous stakeholder meetings held as part of the ozone State Implementation Plan (“SIP”) development process for more than a year, and while the Well Operators do support many aspects of the Ozone Action Plan, they oppose the adoption by this Commission of other portions for reasons set forth and to be set forth in their witnesses testimony, their exhibits, and this Final Statement.

This Final Statement contains: an Executive Summary (Section I); statement of factual and legal issues (Section II); a list of issues to be resolved by the Commission (Section III); a list of the exhibits that will be introduced at the hearing, including the Well Operators’ Alternate Proposals and supporting documentation (Section IV); a list of witnesses submitting written testimony, some or all of whom may be called to summarize that testimony and respond to questions at the hearing (Sections V and VI); a brief description of the Alternate Proposals advocated by the Well Operators (Section VII); reservations made by the Well Operators (Section VIII); and a brief conclusion (Section IX).

I. EXECUTIVE SUMMARY

A. The Well Operators

1. Denver-Julesburg Basin (“DJ Basin”) Operators.

Anadarko and Noble are two of the largest oil and gas producers in DJ Basin northwest of Denver, a more than 600-square-mile area that is the sixth-largest natural gas producing field in the country. Their combined production accounts for approximately 65% of the gas and condensate production in the DJ Basin.

Anadarko operates over 3,600 active natural gas wells, over 2,000 wellhead tank batteries and multiple compressor stations with various types of natural gas compression, dehydration, and condensate removal and storage equipment. Anadarko currently has installed and operates approximately 808 flares and 15 vapor recovery units (“VRU”) to comply with the present Regulation Number 7 requirements. Anadarko currently installs approximately five (5) emission control devices (“ECD”) per week (to control new wells and refracs) at a cost of \$15,000.00 per ECD, for a total of \$75,000.00 per week. On average it costs Anadarko \$3,500.00 per week to maintain compliance with Regulation Number 7, which includes reporting, inspections, and spreadsheet maintenance, but excludes the capital and installation costs of ECDs.

Noble operates over 5,000 active natural gas wells and over 2,700 wellhead tank batteries in the DJ Basin. Noble currently has installed and operates approximately 1,288 flares at a total capital cost of \$13,722,500.00 and installation cost of \$2,060,800.00. In addition to the flares, Noble has installed 113 VRUs at a total capital cost of \$2,825,000.00 and installation cost of \$452,000.00. Including these costs, maintenance, inspection, reporting and spreadsheet maintenance costs, Noble estimates its total costs for complying with the present Regulation Number 7 at \$2,100,000.00 per year.

2. West Slope Operators.

Williams operates active natural gas wells in the Piceance and San Juan Basins located on the Western Slope of Colorado and its facilities include, among others, wellhead tank batteries that collect and store natural gas condensate. Williams operate reciprocating internal combustion engines (“RICE”) to drive compressor units in its natural gas gathering systems, compressor stations and gas processing plants in the Piceance Basin.

Noble also operates over 150 natural gas wells in the Piceance Basin located in Garfield and Mesa Counties on the Western Slope of Colorado. Its facilities there include, among others, wellhead tank batteries that collect and store natural gas condensate.

B. Rulemaking Considerations

As this Commission well knows, there are a number of legal requirements to which its rulemaking is subject. Although the Commission is to have “maximum flexibility in developing an effective air quality control program,” any adopted regulations must still be “economically reasonable so as to reduce, prevent, and control air pollution,” and “the air pollution control measures utilized [must] bear a reasonable relationship to the economic, environmental, and

energy impacts and other costs of such measures.” Colorado Air Pollution Prevention and Control Act (“State Act”), C.R.S. § 25-7-102. In reviewing the proposed Ozone Action Plan and the alternative proposals that will come before the Commission, the Commissioners must bear this in mind, taking a careful look at the estimated ozone benefits to be realized from each of the proposals in relation to the estimated costs, as well as whether the proposal(s) fall squarely within the scope of this rulemaking.

Moreover, the Commission should be mindful of the initial scope of this rulemaking as set forth in the Commission Notice of Proposed Rulemaking:

The Air Quality Control Commission will consider a proposal from the Denver Metropolitan Area’s Air Quality Council, the North Front Range Transportation & Air Quality Planning Council and the Colorado Department of Public Health and Environment Air Pollution Control Division to adopt an ozone action plan for the Denver Metropolitan and North Front Range 8-house ozone nonattainment area.

In order to evaluate the estimated ozone benefits to be realized in relation to the estimated costs, the Commission should rely on the best scientific data available to first identify the problem to be addressed by the proposed rule(s). Of course, high ozone concentrations in the non-attainment area are the overarching problem, and the first question to ask is what are the sources that actually contribute most to ozone formation in the non-attainment area? Secondly, the Commission must carefully evaluate the proposed controls to ensure that they address the core problem in a reasonably efficient and cost-effective manner. A very significant tool available to the Commission in meeting these requirements is the Ozone Source Apportionment Tool (“OSAT”) analysis derived from the CAMx photochemical modeling outputs. The OSAT results show in dramatic fashion why lower cost-per-ton controls in one sector that contributes much less to ozone formation may be less effective than higher cost-per-ton controls of sources that contribute more greatly to ozone formation. Those results are summarized and graphically displayed in a number of the Well Operators’ exhibits, identified below, and to be filed with their Final Statement.

C. Proposed Ozone Action Plan Measures Supported by the Well Operators

The Well Operators do support many of the measures proposed in the Ozone Action Plan, including:

1. Incorporating more stringent cut-points adopted last February by AQCC for the Inspection and Maintenance (“I/M”) Program in the seven-county Denver Metropolitan Area (“DMA”) into the SIP.
2. Requiring 7.8 pounds per square inch Reid Vapor Pressure (“RVP”) gasoline be sold exclusively in the entire NAA, also as a SIP requirement.
3. Requiring low-bleed control devices on all new and existing pneumatic devices for oil and gas facilities in the NAA by 2009, except where their

installation is technically infeasible or not warranted due to safety concerns.

4. Expanding current Regulation Number 7 to require the installation of reasonably available control technology on VOC stationary sources across the entire NAA, except where inconsistent with system-wide tank controls.
5. Removing current Regulation Number 3 APEN exemptions for selected small sources of VOCs, except to the extent inconsistent with system-wide tank controls.
6. Implementing a motor vehicle I/M program in the North Front Range (“NFR”), except the Well Operators support implementing that program starting January 1, 2010.
7. Continuing to implement the high-emitter pilot program in the DMA.
8. Tightening the collector car license plate requirements under state law to limit it to true collector motor vehicles thereby closing a loophole that allows high-emitting vehicles to more easily escape testing and repair.
9. Requiring the installation of auto-igniters on combustion systems controlling condensate tank emissions.

D. SIP Proposed Measures Not Supported

The Well Operators do not support the following portions of the Ozone Action Plan proposed for inclusion in the SIP on multiple grounds, one of which being that proposed changes are not supported by the State’s own data and modeling. More specifically, the Well Operators oppose:

1. Abandoning the present system-wide control approach to regulating condensate storage tanks in favor of mandatory controls for all tanks with emissions above 2 tpy, which will significantly burden operators and complicate the scheme for regulating tanks, while delivering few, if any, additional emission reduction benefits in the 2010 attainment year relative to the existing regulatory approach at an increased control percentage of 85% for tanks emitting 1 tpy or more;
2. Requiring the installation of electronic surveillance systems (“ESS”), in addition to auto-igniters, on combustion systems controlling condensate tank emissions;
3. Establishing the proposed ESS requirements by the proposed effective date for all tanks to be controlled under the Division’s proposal, because they can simply not be achieved by then; and

4. Revising the definition of a “modified” source for condensate tanks to include any well refracting or stimulation, because it is unnecessary, unprecedented and unjustified.

E. State-Only Proposed Measures Not Supported

1. RICE Controls: The Well Operators oppose the inclusion of state-wide RICE controls in the Ozone Action Plan that focus solely on existing and modified lean-burn and rich-burn natural gas fired reciprocating internal combustion engines (“ICE”) of 500 horsepower (“HP”) or greater. The Well Operators oppose these state-wide RICE controls because they exceed the scope of the notice of rulemaking, they are not tailored to doing what this Commission has intended to do in its oil and gas strategy (“keeping clean areas clean”), and the controls will not appreciably contribute to improvements in ozone as modeled by contractors for the Division and the Regional Air Quality Council (“RAQC”). Additionally, the Division has failed to accurately quantify the emission reduction benefits such a state-only rule would deliver, and will arbitrarily require the installation and operation of control devices irrespective of an engine’s ability to comply with emission limitations. Furthermore, the Division has failed to account for emission reduction benefits that are already built into two recently adopted United States EPA New Source Performance Standards (“NSPS”) applicable to ICE. Specifically, NSPS IIII and JJJJ (“Quad I” and “Quad J”) establish emission limitations for both compression ignition (“CI”), and spark ignition (“SI”) ICE. Quad I, which became effective March 2008, regulates engines as far back as June 2006 and will produce quantifiable emission reductions as early as 2009. Finally, the Division’s rush to control certain specific natural gas RICE is inconsistent with the Division’s planned comprehensive review of all or most NOx sources starting as early as the first quarter of 2009.

2. NFR Motor Vehicle I/M: Although the Well Operators fully support the implementation of a vehicle I/M program in the NFR, some or all of the Well Operators propose moving up the implementation date of the program from January 1, 2012 to January 1, 2010. This is the subject of an alternate proposal that is separately described below at Section VII of this Final Statement and contained in exhibits submitted with this Final Statement. The State’s own I/M program contractor has stated that the program can be up and running by January 1, 2010, which would allow the NAA to begin to benefit from substantial emissions reductions in the NFR during the all-important 2010 ozone season. Moreover, some or all of the Well Operators believe it would be inconsistent with the Governor’s letter directive of July 26, 2007 to delay the full implementation of this I/M program until 2013 or 2014, essentially ignoring one of the largest contributors to ozone formation in the NAA, as graphically confirmed by the state’s own OSAT results.

F. Time Needed to Present Testimony

The Well Operators have provided written testimony for nine (9) witnesses in support of their positions and alternate proposals, the full text of which is submitted with this Final Statement. At the hearing, the Well Operators’ witnesses will verbally present a brief summary of their written testimony to provide the proper context for the Commission regarding this rulemaking and further provide the opportunity for limited questions and possible cross-examination. In light of this approach, the Well Operators anticipate they will need two and one-

half (2.5) hours to present testimony and introduce exhibits, inclusive of their rebuttal testimony, and exclusive of possible cross-examination by the Division's counsel or other parties, or significant questioning by the Commission.

II. THE WELL OPERATORS' STATEMENT OF FACTUAL AND LEGAL ISSUES

A. Generalizations About Growth in Oil and Gas Industry Emissions State-Wide are not Consistent with the Hard Data on DJ Basin Gas Production and the Industry's Major Reductions in Emissions Since 2004.

The DJ Basin is a mature natural gas field. While high gas prices fuel the drilling of new wells to keep production up, new wells in the DJ Basin are "infill" wells under applicable COGCC rules, and frequently produce to existing, consolidated tank batteries that are already controlled under Regulation Number 7. Such growth in the number of wells does not translate directly into growth in emissions for the DJ Basin. The Division's simplified approach that growth in production has outpaced reductions in emissions, is therefore inaccurate and misleading with respect to the DJ Basin. *See* Well Operators' Exhibit Numbers 1 and 3, displaying DJ Basin gas production and flash emission reductions over time. Oil and gas industry emissions of VOCs have been reduced more since 2004 than they have grown as a result of increased production, especially if voluntary pneumatic device control replacement is taken into account.

B. SIP Proposed Measures

1. The Proposed Changes in the Ozone Action Plan are Inconsistent with the State's Own Data and Modeling.

Because the control measures in the Ozone Action Plan were developed before source apportionment results became available on September 4, 2008, they do not reflect the unexpectedly heavy contribution of NOx emissions to ozone formation that was identified. Indeed, the September 8, 2008 Draft Final OSAT Report describes several trends that emerged from the source apportionment results. First, more than two-thirds of ozone contribution to the NAA comes from outside the 12 km domain. Second, the largest and most significant contributors to ozone formation in the DMA are mobile and non-road mobile sources. Third, at the two Ft. Collins monitors and the Greeley monitor, the largest contributors again are mobile sources, followed by non-road mobile sources, and then oil and gas sources. *See* September 8, 2008 Draft Final OSAT Report, pp. 3-9. Nevertheless, the Ozone Action Plan is predominantly focused on controlling VOC emissions from the oil and gas industry, seeking a reduction of 109 tons per day ("tpd") and a NOx reduction of only 10 tpd. This is completely opposite to the source apportionment results, which show many times more ozone attributed to anthropogenic sources of NOx than to anthropogenic sources of VOCs. And when it comes to VOCs, source apportionment also shows that lower reactivity VOCs from oil and gas sources play a much smaller role than higher reactivity VOCs from on-road and non-road mobile sources. *See* Testimony of Bruce Macdonald, and the Well Operators' exhibits referred to therein. Thus, the Ozone Action Plan is far less effective than it would be if it contained more NOx controls than VOC controls, and did not rely so heavily, if not exclusively, on oil and gas sources of VOCs,

which are a comparatively minor contributor of VOCs that actually form ozone, according to the best available modeling results.

The OSAT analysis, employing outputs from the CAMx model, with its refined gridded data and various physical and chemical algorithms embedded in the model, represents the best approach to evaluating sources and impacts related to ozone generation currently available. The Division's "weight of evidence" ("WOE") analysis is not as technically sound as the CAMx modeling results. While the WOE may be required for USEPA evaluation, the implementation of a control strategy should focus on the CAMx OSAT analysis. The following issues are raised regarding the technical and WOE analysis:

- Comparing tons of VOCs from different source categories without regard to their photochemical reactivity is misleading, and has contributed to our almost total reliance on oil and gas VOC controls as an ozone reduction strategy;
- Back trajectory analysis employing the NOAA HYSPLIT model tells us nothing about the conversion of ozone precursors in a parcel of air as it moves around, and its use over complex terrain is not recommended; and
- The observed correlation of high ozone events and 500 millibar (pressure) heights within the atmosphere is also inconclusive, and does not provide a basis for ignoring OSAT results.

Concerns about emission inventory accuracy affecting modeling results are appropriately raised, but weigh as heavily (if not more heavily), for mobile source VOC emissions as for oil and gas VOC emissions. In fact, a prior evaluation of doubling and tripling mobile source VOCs showed better model performance. *See* the testimony of Dr. Bruce Macdonald concerning these and related issues.

2. Abandonment of the System-Wide Control Approach to Regulating Condensate Storage Tanks in Favor of Mandatory Controls for all Facilities with Emissions above an Applicability Threshold is not Warranted.

The current regulatory framework for Regulation Number 7 is based on a "system-wide" control approach that requires each company to achieve a percentage-emission reduction level during the ozone season and a slightly lower percentage-emission reduction level during the non-ozone season (to enable periodic maintenance of control devices in the "off-season"). The system-wide approach provides oil and gas operators needed flexibility to service and reposition their ECDs as production levels in the field change, and that approach was adopted by the Commission in 2004 with the strong support of the oil and gas industry. Each and every year thereafter under the system-wide approach, the oil and gas industry has met and exceeded the required emission reductions, even as that requirement increased from 37.5% in 2004 to the present 75%. And while the required emission reductions stayed at 75% in 2007-2008, the oil and gas industry continued to increase its overall reductions from 79% in 2007 to 84% in 2008, which is further evidence of the strong incentive to over-control at work in the existing regulatory approach.

The Ozone Action Plan would abandon the system-wide control approach in favor of a threshold approach. This represents a fundamental shift that is more onerous for industry and would not generate any greater environmental benefit in 2010 than the Well Operators' Alternate Proposal, which is described in detail in Section VII.A. The Ozone Action Plan mandates controls on all facilities above an applicability threshold, plus it requires controls on all tanks during the first 90 days of production. Due to the fluctuating and dynamic nature of oil and gas production, the threshold-based approach will require that operators constantly evaluate production and emission levels to determine whether the applicability threshold has been triggered for any given tank. As a result of this ongoing need to evaluate condensate production levels at all tanks and add more controls as necessary based on those changes, the Ozone Action Plan's threshold approach is more burdensome to operators than the system-wide approach. It also represents a wholesale change from the existing Regulation Number 7 requirements, after only four years since their adoption, and thus is likely to promote greater confusion and compliance uncertainty in the regulated community, especially over the next four years.

Additionally, because it appears that any burner outage or correction of condensate production data indicating the need for controls on a tank that has none may be a violation under the proposed rule, the Ozone Action Plan will: (1) require industry and the Division to devote more resources to reporting outages under the upset provisions of Regulation Number 3; and/or (2) result in multiple minor violations for companies, again requiring company and Division resources to resolve them. As an example, Noble estimates that even at a very respectable 0.27% flare downtime, a figure it has worked very hard to achieve in recent months, the Company would have on average 4.6 violations per day to report to the Division under the threshold approach. This sort of penalty exposure is arbitrary, in that it does not deter bad conduct, but merely punishes the statistically inevitable. In contrast, the system-wide approach encourages companies to over-comply, resulting in lower levels of actual emissions while reducing an operator's risk of noncompliance due to isolated burner malfunctions or production data corrections.

Under the system-wide approach, operators also have an incentive to engage in pollution prevention and/or pursue more expensive alternatives to VOC emissions control, like vapor recovery, reducing line pressure (which lowers flash emission potential) or condensate stabilization. The Ozone Action Plan removes such flexibility and incentives without producing greater environmental benefit. Instead, the Ozone Action Plan will inefficiently force industry to monitor production at thousands of unmanned remote production facilities and will likely lead to a higher focus on enforcement by the Division. Such a result is neither necessary, nor desirable, in the Well Operators' view.

This fundamental change in the regulatory approach to condensate storage tanks will not lessen the burden on operators, large or small. Operators will need to constantly reevaluate where to install controls on tanks as emissions fluctuate due to production changes. Also, this change will require enforcement for every minor flare outage even if field-wide compliance remains high. Most importantly, the proposed change will eliminate the present flexibility and incentives for operators to "over-comply" and engage in pollution prevention. Accordingly, the Well Operators have prepared and submitted with this Final Statement an Alternate Proposal that retains the system-wide control approach for condensate storage tanks, but at the higher emission control level of 85% for tanks emitting 1 tpy or more of VOCs. That Alternate Proposal is

described below at Section VII.A. of this Final Statement, and is fully documented in the Well Operators' Exhibit Numbers 43, 44, and 45.

In addition to the above factors favoring system-wide tank controls, there are important "disbenefits" associated with pushing the control of VOCs down to very low-emitting tanks, and those disbenefits have not been adequately addressed by the Division. The disbenefits concern (1) the increased carbon footprint associated with the flaring of flash emissions, relative to emitting those emissions, and consideration of these disbenefits by the Commission also weighs in favor of the Well Operators' alternate proposal for condensate tank controls, rather than putting a flare on every tank emitting as little as 2 tpy of VOCs, or even less; and (2) the increased NOx emissions associated with flare controls on very low-emitting tanks.

Examination of available data reveals that, on average, there is a 40% greater emission of greenhouse gases ("GHGs") associated with the flaring of condensate tank flash emissions, and this disbenefit is ignored or discounted by the Division. As the Commission well knows, the Colorado Climate Action Plan calls for a 20% reduction in GHG emissions by 2020, as measured against 2005 emissions. Because 2005 is the year in which tank controls were first required at 37.5% for the ozone season, the increases associated with flaring of tank emissions in the DJ Basin are quite significant in the aggregate since that baseline year. *See* the Well Operators' Exhibit Numbers ___ and ___ regarding GHG disbenefits associated with flaring tank emissions of VOCs from condensate.

Additionally, although the NOx emissions associated with flaring tank emissions are significantly lower than the tons of VOCs controlled through flaring, they are not insignificant, especially when adjusted to reflect the OSAT results that account for ozone formation potential and photoreactivity. See the written testimony of Curtis O. Rueter regarding NOx disbenefits associated with flaring tank emissions of VOCs. Moreover, the flaring of tank emission for low-emitting tanks, between 5 tpy and 2 tpy, entails the combustion of significant volumes of fuel gas to keep pilots lit between intermittent periods of "slug" production to wellhead tanks. These NOx emission increases contribute to ozone formation and therefore diminish further the asserted benefits of attempting to control the lowest emitting condensate tanks operating in the DJ Basin.

3. The Division's Proposal Requires the Installation of Both Auto-Igniters and ESS on Combustion Systems Controlling Condensate Tank Emissions.

The Well Operators believe the requirement to install both auto-igniters and ESS is burdensome, redundant and unnecessary. By design, auto-igniters should provide essentially continuous operation of burners, unless a well, tank battery and burner is shut down by operating personnel. The ESS just tracks pilot light temperature and does not provide any direct air quality benefit.

ESS will generate a staggering amount of data. As proposed, an ESS will record a temperature measurement every 15 minutes, 24 hours a day, 7 days a week. This equates to 672 data points per week for one flare. Anadarko estimates that it will need to install ESS on 2,000 control devices in 2009, and Noble estimates it will need to install 1,288 ESS in 2009, both based

upon the threshold approach proposed in the Ozone Action Plan Exhibit Numbers 23 and 24. If installed, Anadarko's ESS will produce 1,344,000 data points weekly, and Noble's will produce 865,536 data points each week. That is 2,209,536 data points *every week*, from just two operators in the DJ Basin. Once an ESS generates the data, it still has to be collected and analyzed to determine if any flare outages are indicated. Regardless of who will have to collect and/or analyze it, that much data will create a substantial burden on the operators and further strain the Division's limited resources.

In addition, the cost of purchasing and installing the ESS are quite significant. Anadarko estimates capital costs at \$3,800.00 per flare and Noble at \$3,600.00 per flare. Based upon the numbers above, Anadarko's total cost for purchasing and installing ESS would be \$7,600,000 by 2011 and Noble's would be \$4,636,000 in 2009. That is an extraordinary expense for a piece of equipment that will not provide any direct air quality benefit, and is not providing data that are dispositive of the question whether emissions are being controlled, *i.e.*, the data only indicate if the flare pilot light is on.

4. The Proposed Monitoring Requirements Simply Cannot be Achieved by the Effective Date of the Proposed Revisions.

The Ozone Action Plan would mandate controls on all new and modified tanks greater than 2 tpy by 2009, all existing tanks greater than 10 tpy by 2010, all existing tanks greater than 5 tpy by 2011, and all existing tanks greater than 2 tpy by 2012. To meet these proposed requirements, the oil and gas industry would need to install approximately 2,000 to 4,000 data loggers plus 2,000 to 4,000 auto-igniters in 2009. Moreover, an additional complement of control devices, possibly numbering in the hundreds, would be required by the Division's proposed "first 90 days" control requirement.

Based on their own actual compliance experience with the current Regulation Number 7, the Well Operators do not believe that data logger and auto-igniter manufacturers can provide enough devices and/or that industry will be able to adequately test and install such systems as well as procure and install the necessary data management systems within the timeline proposed in the Ozone Action Plan. Nor does the Ozone Action Plan provide any flexibility on the proposed deadlines should the manufacturers fail to meet demand or if complications arise from installing and testing the ESS, which have not been field-proven for conditions in the DJ Basin. Such an approach further exposes the oil and gas industry to enforcement for unavoidable circumstances, making compliance virtually impossible.

5. The Proposed Definition of a Modified Source for Condensate Tanks to Include Well Refracting.

The Well Operators believe that a well or condensate tank should only be considered a modified source if refracting results in a net increase in emissions above the originally permitted or APENed emissions level. This approach to well/tank modification protects the environment because it acknowledges that, in most cases, the original registration and/or permitting of condensate tanks will reflect their highest levels of production, when a new well is initially brought into production. It does not exempt condensate tanks from being considered "modified" if reworking a well does, in fact, result in a net emissions increase above initially permitted or

registered levels, which does occur from time to time. This approach is also consistent with other states in which oil and gas sources are significant, such as Texas and Oklahoma.

Well reworking and refracing that does not result in emissions above initially permitted or registered levels should not be considered a modification, and changing the definition of source modification in this unprecedented manner will just increase the paperwork burden on operators and the Division without providing any air quality benefits. Moreover, this unprecedented departure from the long-established definition of “modification” of a source is only necessitated by the Division’s desire to move to a threshold-based regulatory scheme from the established and effective system-wide approach followed for the last four years. Retention of the system-wide approach at a higher control percentage, as proposed by the Well Operators, will eliminate the need to tinker with this universal air quality definition and will eliminate a substantial paperwork burden for operators and regulators alike.

C. State-Only Proposed Measures

1. Proposed State-Wide RICE Controls.

The proposed adoption of state-wide engine controls should be deferred for consideration among a broad range of NOx controls in 2009. The Well Operators oppose the proposed adoption of state-wide RICE controls at this time for a variety of reasons, including:

- The ozone reduction benefits of such controls have not been properly estimated and would appear to be negligible;
- Recently adopted federal NSPSs will help “keep clean areas clean,” as intended by the AQCC, without overlap of and potential inconsistency with state engine requirements proposed by the Division;
- The Division has failed to account for the benefits of the federal engine NSPSs in making its case for state-wide RICE controls; and
- The proposed RICE controls would arbitrarily require specific engine technology regardless of emissions performance, which are not mandated under the noted NSPS.

These and other problems are addressed in greater detail below.

As proposed, the state-wide RICE controls would single out the oil and gas sector by requiring those who own or operate modified and existing stationary SI lean-burn and rich-burn natural gas-fired ICE of greater than or equal to 500 HP to control emissions from those engines and install and operate after-treatment control devices on those engines. The majority of larger natural gas-fired ICE in Colorado are in service in the oil and gas industry. The Division’s proposed rule does not impose similar requirements on SI ICE fired with other fuels (like the NSPSs), nor does it impose similar requirements on CI ICE (like the NSPSs). Even the Division’s proposed retention of a previous emission limitation for those stationary SI natural gas ICE of greater than 100 HP excludes SI ICE fired with other fuels and all CI ICE. These

shortcomings, coupled with negligible or non-existent ozone benefits, weigh heavily in favor of deferring state-wide RICE controls for further consideration by the Commission in 2009.

- a. The proposed state-wide RICE controls are outside the scope of the noticed rulemaking.

As an initial matter, the proposed state-wide RICE controls are outside the scope of the notice of the proposed OAP, in violation of the Colorado Administrative Procedure Act. Finally adopted rules must be consistent with the subject matter as set forth in the notice of proposed rule-making. C.R.S. § 24-4-103(4)(c). The OAP rulemaking notice focused specifically and exclusively on the consideration of a proposal “to adopt an ozone action plan for the *DMA and the NFR 8-hour ozone non-attainment area*.” See Commission Notice of Proposed Rulemaking. The proposed state-wide RICE control rule is just that—*state-wide*. The proposed state-wide RICE control rule does not limit its application to the DMA and NFR area, but instead extends to the far reaches of the four corners of our state. Even the RAQC modeling indicates that emission reductions from state-wide RICE controls will not appreciably improve ozone in the NAA. See Testimony of Martha Hyder. Thus, the adoption of such a state-wide rule under the proposed notice is clearly outside the scope of the rule-making and should not be considered in this rule-making.

Additionally, a related issue concerns the definition of the NAA itself, and how air quality control regions are supposed to develop a SIP to bring those regions into attainment with federal NAAQS. As the Well Operators have previously noted, the State of Colorado opposed EPA’s attempt to expand the NAA even more than it last did, and in so doing made a cogent argument about the sources contributing most significantly to ozone being primarily within a smaller NAA. See the Well Operators’ Exhibit Number 40, memo dated May 20, 2008 regarding NAA boundary designation for the Denver and NFR areas. Of course, Colorado prevailed in keeping the NAA boundary where it is today, and the Division has not proposed expanding it as part of the 8-hour ozone SIP development process. Accordingly, state-wide RICE controls should not be included in the Ozone Action Plan.

- b. The Division has failed to adequately characterize the emission benefits of its proposed state-wide RICE controls.

The Division has been unable to provide a specific estimate of the emission reductions to be delivered by several standards that are already “on the books,” including the federal NSPSs and the state’s own existing Regulation Number 7 requirements for new and relocated engines. At best, the Division has shown a “marginal” benefit from state-wide reductions in NO_x emissions from oil and gas and point sources through its sensitivity analyses. See testimony of Martha Hyder. Modeling of the Division’s state-wide control scenario, which included not only overestimated NO_x emissions reductions from engines, but also: (1) additional VOC reductions in the NAA due to condensate tank controls that will not be effective until 2011 and 2012, well after the 2010 attainment date; and (2) vehicle I/M program benefits as though fully implemented by 2010 when discontinued in 2006 showed only minor improvements in ozone in the NFR area.] *Id.* Based on the sensitivity analyses and OSAT results, such improvements are most likely due to the 2011 and 2012 condensate tank controls and/or vehicle I/M program controls rather than the state-wide RICE controls. *Id.* The modeling, in fact, showed large areas with

small ozone increases over most of the Western Slope, undoubtedly due to the additional NO_x controls in that NO_x limited region. *Id.* Finally, the OSAT modeling showed that very little of the ozone at NAA monitors can be ascribed to emissions outside of the NAA. *Id.* Thus, it is remarkably unclear as to what benefits will accrue relative to ozone formation in the NAA, if any, through the adoption of the Division's state-wide RICE control proposal.

- c. The Division requires the installation and operation of after-treatment control devices irrespective of compliance with the proposed emission limitations.

The installation and operation of after-treatment control devices on stationary lean-burn and rich-burn natural gas SI ICE with greater than 500 HP are required under the Division's proposal as of May 1, 2010, regardless of whether an engine applicable emission standards without such controls. Many of the engines in place can meet or exceed the current Regulation Number 7 emissions limitations that apply to new and relocated engines, without after-treatment control devices. *See* Testimony of Dr. Daniel B. Olsen, P.E. Requiring specific after-treatment technology for existing and modified engines is therefore arbitrary, wasteful and unwise. By mandating specific after-treatment technology, the Division is taking operational field decisions away from the owner and operator, who is in a better position to know what operational modifications or other types of control technology may be cost-effective and efficient to comply with an identified emission limitation. *Id.* For example, certain after-treatment may create additional NH₃, which will effectively neutralize any NO_x emission reduction benefits. *Id.* Moreover, other technologies are available for lean-burn engines to reduce emissions, and the installation and operation of exhaust after-treatment is expensive and imposes additional backpressure on engines, which results in efficiency loss. *Id.* If any control of existing and modified engines is warranted, it should be in the form of a performance standard, not the arbitrary imposition of a specific control technology, as prescribed by the Division's proposal.

- d. The Division did not consider or account for projected emission reductions realized through EPA's Quad I and Quad J.

Surprisingly, the Division did not factor in or account—in any way—for the emission reduction benefits that Colorado would see—both in attainment areas and its NAA—through the installation, reconstruction, modification, and operation of CI and SI ICE of various sizes and fuel types regulated under the fully-promulgated and effective NSPSs. *See* the Well Operators' Exhibit Number 33. Irrespective of the State's failure thus far to adopt Quad I and Quad J through incorporation into the AQCC's rules, owners and operators are obligated to comply with these federal regulations, and their compliance will most certainly result in significant emission reduction benefits. Any emission reduction benefits that the Division hoped to attain through the proposed state-wide RICE controls will be largely realized through the two previously promulgated and fully effective NSPS. *See* Testimony of Martha Hyder and Dr. Olsen.

EPA's NSPS JJJJ in 2009 alone is estimated to provide more than a 60,000 tpy reduction of NO_x, 29,000 tpy reduction of CO, 800 tpy of VOC, and 311 of HAP nationally. *See* Memorandum from Tanya Parise, Alpha-Gamma Technologies, Inc. to Jaime Pagan, EPA Energy Strategies Group (Dec. 18, 2007). Even assuming Colorado accounts for only five percent of the national emission reductions, the State would still realize a projected emission

reduction benefit of 3,000 tpy for NO_x, 1,450 tpy for CO, 45 tpy of VOC, and 15.5 tpy of HAPs. By 2015, EPA estimates that the two NSPSs will reduce NO_x by 115,000 tpy, CO by 63,000 tpy, VOC by 2,000 tpy, HAP by 800 tpy, PM by 3,000 tpy, NMHC by 600 tpy, and SO₂ by 9,000, nationally. *See* 71 Fed. Reg. 39154, 39168 (July 11, 2006); 73 Fed. Reg. 3568, 3586 (Jan. 18, 2008). Again, even assuming that Colorado accounts for only five percent of the national emission reductions to be realized through Quad I and Quad J, the State would realize a projected emission reduction benefit of 5,750 tpy of NO_x, 3,150 tpy of CO, 100 tpy of VOC, 40 tpy of HAP, 150 tpy of PM, 30 tpy of NMHC and 450 tpy of SO₂.

In light of the foregoing, the Division's proposed state-wide RICE controls should not be promulgated. Instead, the Division should acknowledge and consider the projected emission reduction benefits associated with NSPSs Quad I and Quad J in advance of any further sector-specific emission reduction strategies for which it cannot meaningfully articulate ozone reduction benefits. State-wide engine controls are more appropriately reserved for the Division's proposed 2009 plan to more thoughtfully consider and comprehensively review a variety of NO_x sources.

2. Implementation of the I/M program in the NFR should be moved forward to January 1, 2010.

The Ozone Action Plan proposes to expand the existing motor vehicle inspection and maintenance (I/M") program currently applicable in the seven county DMA to the AIR Program area in Larimer and Weld Counties. The Well Operators generally support this proposal and agree that the establishment of an I/M program in the NFR is an important component of any serious effort to demonstrate: (1) attainment with the 0.08 ppm ozone standard, and (2) further progress toward attaining a lowered ozone NAAQS of 0.075 ppm.

The OSAT results indicate that on-road mobile sources in the NFR are one of largest source contributors to ozone formation in that area, due to their VOC and NO_x emissions. The OSAT results further indicate that the majority of ozone formed is attributed to anthropogenic NO_x sources. These two conclusions underscore the need to reduce NO_x emissions from mobile sources in the NFR sooner rather than later.

The Well Operators assert that it is unwise to delay implementation of a reinstated I/M program in the NFR until 2012. Waiting until January 1, 2012 to begin to implement a vehicle I/M program in the NFR means that the full ozone reduction benefits of the program will not be realized until the beginning of 2014. This is hardly consistent with Governor Ritter's directive to begin to work toward attaining a lowered 8-hour ozone standard, and it flies in the face of this Commission's well-documented resolve to move quickly to address our ozone non-attainment status and protect public health. There is simply no good reason for such delay, and no more important task at hand for the Mobile Source Program of the APCD. By moving up the implementation date to 2010 as described in the Well Operators' Alternate Proposal in Section VII.B., the first half of the vehicles brought into the program will be tested in that year, and the remaining vehicles will be tested in 2011. By January 1, 2012 the program will be fully implemented.

Perhaps ironically, it is this very Commission that acted to dissolve the prior I/M program in the NFR just two years ago, over the objections of the NFRMPO and others, and that unfortunate decision most certainly contributed to our collective failure to avoid non-attainment designation via the EAC. It is well-documented that the vehicle fleet in the NFR is older and higher-emitting than in the DMA, and since dissolution of mandatory testing and repair, the NFR vehicle fleet is likely even dirtier, and not much newer. It is also well documented that a significant portion of the NFR vehicle fleet, perhaps as high as 20%, commutes into the DMA on a routine basis, and should therefore be tested under existing law, but we have failed to enforce that requirement! Delaying the reinstatement of an I/M program in the NFR under these circumstances simply can't be justified, and the state's own experience implementing the former NFR I/M program in the early nineties, and the contractor's experience here and in other states, indicates that 2010 implementation is achievable. In light of the foregoing, the Well Operators urge the Commission to reject the Division's proposed 2012 start date for an NFR I/M program and instead adopt the Well Operators' Alternate Proposal, as described in Section VII.B. to start this important program in 2010.

These factual and legal issues are the subject of written testimony, live testimony and exhibits to be presented by the Well Operators prior to and at the hearing, as summarized and listed below.

III. LIST OF ISSUES TO BE RESOLVED BY THE COMMISSION

A. SIP Proposed Measures

1. Source Apportionment Results are not Adequately Reflected in the Ozone Action Plan Controls.
2. NAA Tank Controls: System-Wide v. Threshold Approach.
3. NAA Tank Controls: Whether ESS in Addition to Auto-Igniters is Beneficial.
4. NAA Tank Controls: ESS Compliance Schedule.
5. Whether Inclusion of Well Refracting in Definition of Modified Source is Necessary or Helpful.

B. State Only Proposed Measures

1. Adoption/Deferral of State-wide RICE Controls.
2. Implementation Date of I/M program in NFR.

IV. EXHIBITS THAT WILL BE INTRODUCED AT THE HEARING

A. Oil and Gas Production Growth and Emission Reductions

1. Well Operator (“WO”) Exhibit 1: Graphic of John D. Wright, Ph.D., President, Oil & Gas Services and Chief Petroleum Engineer of Norwest Corporation, showing growth from 1999 to 2007 and projected future growth through 2012 of natural gas condensate production in Weld County, Colorado.
2. WO Exhibit 2: Graphic showing 8-Hour Denver Ozone Design Values from 1993 – 2007, based on data from the Division.
3. WO Exhibit 3: Graphic showing the levels of controlled emissions during the ozone season for the DJ Basin Operators and all operators in the DJ Basin, from 2005 - 2008.
4. WO Exhibit 4: Chart showing the expenditures to date by the DJ Basin Operators on ECDs to control condensate tank VOC emissions in the DJ Basin.
5. WO Exhibit 5: March 11, 2008 letter from Anadarko to Mr. Kenneth H. Lloyd, Executive Director of the Regional Air Quality Council, agreeing to voluntarily replace high-bleed pneumatics with low-bleed pneumatics, as well as other voluntary measures to reduce ozone impacts in the NAA.
6. WO Exhibit 6: March 11, 2008 letter from Noble to Mr. Kenneth H. Lloyd, Executive Director of the Regional Air Quality Council agreeing to voluntarily replace high-bleed pneumatics with low-bleed pneumatics, as well as other voluntary measures to reduce ozone impacts in the NAA.

B. Source Apportionment Results

1. WO Exhibit 7: Maps of the NAA and location of air monitors within the NAA.
2. WO Exhibit 8: Comments submitted to the Regional Air Quality Council on March 11, 2008, providing Guiding Principles for the Adoption of Ozone Controls.
3. WO Exhibit 9: Ozone Source Apportionment Modeling Results, Appendix C—Bar Charts demonstrating source apportionment results at each air monitor for each day modeled.
4. WO Exhibit 10: Graphic showing average contribution of O3N and O3V to Ozone formation at the Ft. Collins air monitor.

5. WO Exhibit 11: Graphic showing average contribution of O3N and O3V to Ozone formation at the Ft. Collins West air monitor.
6. WO Exhibit 12: Graphic showing average contribution of O3N and O3V to Ozone formation at the Weld County Tower air monitor.
7. WO Exhibit 13: Graphic showing average contribution of O3N and O3V to Ozone formation at the Rocky Flats North air monitor.
8. WO Exhibit 14: Graphic showing average contribution of O3N and O3V to Ozone formation at the CAMP air monitor.
9. WO Exhibit 15: Graphic showing average contribution of O3N and O3V to Ozone formation at the Chatfield Reservoir air monitor.
10. WO Exhibit 16: Graphic showing average contribution of O3N and O3V to Ozone formation in the NAA.
11. WO Exhibit 17: Chart summarizing occurrences of Design Value Days from June – July 2006 in the Ozone Modeling/OSAT Results.
12. WO Exhibit 18 & 19: Did not use.

C. System-Wide v. Threshold Tank Controls

1. WO Exhibit 20: Graphic demonstrating oil and gas operator compliance under system-wide approach from 2005 to 2008 based upon Regulation Number 7 spreadsheets.
2. WO Exhibit 21: Chart showing the requirements of the Colorado Climate Action Plan.
3. WO Exhibit 22: Graphic & charts showing the green house gas disbenefit from flaring, as opposed to venting, flash gas from condensate tanks.

D. Auto-Igniters and ESS for Tanks

1. WO Exhibit 23: Graphics/charts demonstrating the total cost and cost per ton of emissions reduced of installing and maintaining ESS as proposed under the threshold approach.
2. WO Exhibit 24: Chart demonstrating the number of data points generated every day, week and month by ESS as proposed under the threshold approach.
3. WO Exhibit 25: Charts demonstrating the estimated number of flares in non-compliance under the threshold approach on a daily basis assuming a 0.5% downtime rate.

E. Modified Source

1. WO Exhibit 26: Memorandum documenting the regulatory approach taken by several other oil and gas producing states regarding when a well or wellhead tank becomes a modified source.

F. State-Wide RICE

1. WO Exhibit 27: Graphic from OSAT results demonstrating origin of regional anthropogenic ozone precursors for an average of days with elevated ozone at Rocky Flats North monitor.
2. WO Exhibit 28: Graphic from OSAT results demonstrating origin of regional anthropogenic ozone precursors and boundary conditions for an average of days with elevated ozone at Rocky Flats North monitor.
3. WO Exhibit 29: Graphic from OSAT results demonstrating origin of regional anthropogenic ozone precursors for an average of days with elevated ozone at Fort Collins West monitor.
4. WO Exhibit 30: Graphic from OSAT results demonstrating origin of regional anthropogenic ozone precursors and boundary conditions for an average of days with elevated ozone at Fort Collins West monitor.
5. WO Exhibit 31: OSAT results Figure ES-2 showing projected 2010 8-hour ozone design values.
6. WO Exhibit 32: OSAT results Figure ES-3 showing the differences in ozone concentrations (future design values) for the two control scenarios and the 2010 base case.
7. WO Exhibit 33: November 3, 2008 APCD response to Emissions Inventory Questions.
8. WO Exhibit 34: December 18, 2007 Memorandum from Tanya Parise, Alpha-Gamma Technologies, Inc. to Jaime Pagan, EPA Energy Strategies Group.
9. WO Exhibit 35: June 20, 2005 Memorandum from Tanya Parise, Alpha-Gamma Technologies, Inc. to Sims Roy.
10. WO Exhibit 36: Regulatory Impact Analysis for the Standards of Performance for the Stationary Spark Ignition New Source Performance Standard and New Area Source NESHAP EPA-452/R-07-015 (Dec. 2007).
11. WO Exhibit 37: Regulatory Impact Analysis for the Standards of Performance for the Compression Ignition New Source Performance

Standard and New Area Source NESHAP EPA-452/R-06-003 (June 2006).

12. WO Exhibit 38: W-mail from Amnon Bar-Ilan, Ph.D, Environ International Corporation, Doug Henderer, Buys and Associates, and Kathleen Sgamma, IPAMS (Nov. 7, 2008, 13:21:36 MST).
13. WO Exhibit 39: M. DeFoort, D, Olsen, and B. Wilson, The Effect of Air-Fuel Ratio Control Strategies on Nitrogen Compound Formation in Three-Way Catalysts, International Journal of Engine Research (Aug. 6, 2003).
14. WO Exhibit 40: Comments submitted to the Regional Air Quality Council on May 20, 2008, providing comments on behalf of the DJ Basin Operators on the Role of Non-Attainment Boundaries in Ozone SIP Development.

G. Rebuttal Exhibits

1. Rebuttal exhibits will be identified in the Well Operators' Rebuttal Statement.

H. Vehicle Inspection and Maintenance Program

1. WO Exhibit 41: Graphics demonstrating that by not implementing a vehicle inspection and maintenance program in the NFR in 2010, the state is allowing mobile sources to emit 1018.35 tons of ozone precursors every year and demonstrating that VOC emissions from mobile and non-mobile sources are approximately two times more photoreactive the oil & gas VOC emissions.
2. WO Exhibit 42: Graphic demonstrating that by delaying a vehicle inspection and maintenance program in the NFR from 2010 until 2012, a total of approximately 3000 tons of ozone precursors will be released in the NAA by mobile sources.

I. Alternate Proposals

1. WO Exhibit 43: Alternate Proposal for System-Wide Tank Controls in the NAA (redline and strikeout of existing affected provisions).
2. WO Exhibit 44: Economic Impact Statement for Alternate Proposal for System-Wide Tank Controls in the NAA.
3. WO Exhibit 45: Statement of Basis and Purpose for Alternate Proposal for System-Wide Tank Controls in the NAA.
4. WO Exhibit 46: Alternate Proposal for NFR Vehicle I/M program (2010 implementation)(redline and strikeout of Division's proposal).

5. WO Exhibit 47: Economic Impact Statement for NFR Vehicle I/M program (2010 implementation).
6. WO Exhibit 48: Statement of Basis and Purpose for NFR Vehicle I/M program (2010 implementation).

V. THE WELL OPERATORS PLAN TO CALL THE FOLLOWING WITNESSES AT THE HEARING IN THIS MATTER

1. Brian Lockard, Air Quality Manager, Noble Energy, Inc.—testimony on compliance with Regulation Number 7; on the estimated costs of condensate tank controls, ESS auto-igniters required by the Ozone Action Plan; amount of data generated by ESS under the Ozone Action Plan; problems with compliance under the Ozone Action Plan; NO_x and green-house gas disbenefits of the threshold approach; benefits of the Well Operators’ Alternate Proposal; on the flexibility and incentives to over comply afforded by the Well Operators’ Alternate Proposal and its system-wide control approach; and reasons to refrac a well and any increase of emissions there from.
2. Phil Schlagel, Environmental and Regulatory Supervisor, Anadarko Petroleum Corporation—testimony on compliance with Regulation Number 7; on the estimated costs of condensate tank controls, ESS auto-igniters required by the Ozone Action Plan; amount of data generated by ESS under the Ozone Action Plan; problems with compliance under the Ozone Action Plan; benefits of the Well Operators’ Alternate Proposal; on the flexibility and incentives to “over comply” afforded by the Well Operators’ Alternate Proposal and its “system-wide control approach”; and reasons to refrac a well and any associated increase of emissions.
3. Rick Matar, Air Quality Practice Manager, Williams Production RMT Company—testimony on the costs and operational burdens of the Division’s proposed state-wide RICE controls and their comparison with the likely benefits of recently adopted federal engine standards (NSPS Quad J) in greatly reducing engine emissions from new and reconstructed engines in gas-producing basins that are undergoing rapid development within Colorado.
4. Curtis O. Rueter, P.E., Air Quality Manager for North America, Noble Energy, Inc.—testimony on NO_x and green-house gas disbenefits of the Division’s threshold approach to control of condensate tanks in the NAA, in contravention of the Colorado Climate Action Plan.
5. Dr. Bruce C. Macdonald, Regional Vice President for the Air Quality Practice Area, AECOM Environment (a subsidiary of AECOM, Inc., formerly ENSR Inc.)—testimony on ozone modeling, including results, modeling assumptions, parameters, inputs, results, and sensitivity analyses

including OSAT results, with analysis of the Division’s prior use of air mass modeling to perform “back-trajectory analyses” in connection with the Weight of Evidence analysis.

6. Martha Hyder, Wind River Environmental Group LLC—testimony on ozone modeling, including results, modeling assumptions, parameters, inputs, results, sensitivity analyses including OSAT results, and agreement and/or disagreement with ambient monitoring and meteorological data, and specific analysis of the Division’s intention to regulate state-wide RICE through limited application of controls to natural gas fired ICE and exclusion of emission reduction benefits associated with Quad I and Quad J.
7. Dr. Daniel P. Olsen, P.E.—testimony on the Division’s intention to regulate state-wide RICE through the: (1) limited application of natural gas fired ICE; (2) required installation and operation of control technology devices regardless of the ICE’s ability to meet emission limitation requirements; and (3) exclusion of emission reduction benefits associated with Quad I and Quad J.
8. Dr. Lisa A. McDonald, Senior Economist, Louis Berger Group, Inc.—testimony on the incremental costs associated with increasing pollution control requirements for flash emissions from condensate tanks as proposed by the Division and by the Well Operators’ Alternate Proposal; on the incremental costs associated with implementing the I/M program in the NFR beginning in 2010 as opposed to 2012 (the latter date proposed in the Ozone Action Plan).
9. Dr. John D. Wright, Ph.D., Norwest Questa Engineering Corp.—testimony concerning historic and projected growth in condensate production in the DJ Basin.

VI. WRITTEN TESTIMONY

Th written testimony/expert reports of the Well Operators’ witnesses listed above are submitted with this Final Statement.

VII. ALTERNATE PROPOSAL

The following Alternate Proposals, along with a redline and strike-through of affected provisions of AQCC Rule a proposed Statement of Basis and Purpose and an Economic Impact Analysis for each, will be attached as exhibits to the Well Operators’ Final Statement.

A. The Well Operators’ Alternate Proposal for Condensate Tank Controls in the NAA

The Well Operators propose that condensate tank controls in the NAA under Regulation Number 7 keep the current system-wide approach, but increase the required control percentage

for all tanks emitting 1 tpy or more to 85% by May 1, 2010. The current requirement is 75% system-wide control for tanks emitting approximately 5 tpy or more. Supplemental modeling of this control scenario confirms that it produces the same or greater benefits than the proposed Ozone Action Plan in the attainment year 2010. The Well Operators have attached their proposed rule language, economic impact statement and statement of basis and purpose as exhibits to this Final Statement.

B. I/M 2010

Some or all of the Well Operators propose moving forward the commencement date of the NFR vehicle I/M program from January 1, 2012 to January 1, 2010. Under the Ozone Action Plan's proposal, vehicles in the NFR will not begin being tested until January 2012, which means that the program will not be fully implemented until January 1, 2014. Under this alternate proposal, vehicles would begin being tested in 2010 and the program would be fully implemented by January 1, 2012. To delay this control strategy until 2012, as the Ozone Action Plan proposes, is inconsistent with Governor Ritter's directive to begin working toward attaining the lowered ozone standard, and essentially ignores thousands of tons of ozone precursor emissions from one of the largest contributing sources to ozone in the NAA, the on-road mobile source category.

VIII. RESERVATIONS

The Well Operators reserve the right to present additional testimony, witnesses and exhibits for purposes of rebuttal, to use demonstrative aids at the hearing that contain information already provided in exhibits and testimony, and to address very recent changes and any future changes to the Division's proposal and any alternate proposal(s) of the Division or any other party in their rebuttal filings and at the hearing, as necessary.

IX. CONCLUSION

The Well Operators urge the Commission to consider the data and modeling results carefully in their deliberations on the proposed Ozone Action Plan and various alternative proposals, along with the testimony of fact and expert witnesses. If the Commission members do this, being mindful of the legal requirements for rulemaking by a regulatory authority, the Well Operators believe the Commission should adopt the Ozone Action Plan in part, but should defer state-wide RICE controls, and adopt the Well Operators' alternate proposals concerning tank controls and the NFR vehicle I/M program. Those alternate proposals will preserve the current system-wide approach to condensate tank controls, but at a control percentage requirement of 85% for tanks emitting 1 tpy or more, and will implement an I/M program for the NFR beginning in 2010, instead of 2012. Such a result is better supported by the CAMx modeling results and OSAT results, and more likely will make progress toward attainment of a lowered 8-hour ozone NAAQS of 0.075 ppm, consistent with Governor Ritter's directive.

Dated this 17th day of November, 2008.

Respectfully submitted,

s/ John R. Jacus

John R. Jacus, Esq
Todd A. Weaver, Esq.
Abby J. Gaffney, Esq.
DAVIS GRAHAM & STUBBS LLP
1550 Seventeenth Street, Suite 500
Denver, Colorado 80202
Telephone: 303-892-9400
Facsimile: 303-893-1379
john.jacus@dgsllaw.com
todd.weaver@dgsllaw.com
abby.gaffney@dgsllaw.com

ATTORNEYS FOR ANADARKO PETROLEUM
CORPORATION, NOBLE ENERGY, INC., AND
WILLIAMS PRODUCTION RMT COMPANY

CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the attached **FINAL JOINT PREHEARING STATEMENT OF ANADARKO PETROLEUM CORPORATION, NOBLE ENERGY, INC., and WILLIAMS PRODUCTION RMT COMPANY** was filed and served by electronic mail on the 17th day of November, 2008, upon the following:

Air Quality Control Commission Barbara Roberts, barbararoberts@gmail.com Ashley Campsie, ashley.campsie@ch2m.com Rad Byerly, hrbyerly@gmail.com Douglas Lempke, douglas.lempke@state.co.us Theresa Martin, theresa.martin@state.co.us	Air Pollution Control Division Mike Silverstein, mike.silverstein@state.co.us Kirsten King, kirsten.king@state.co.us
North Front Range Metropolitan Planning Organization Suzette Mallette, smallette@nfrmpo.org	Office of the Attorney General Jerry Goad, jerry.goad@state.co.us William Allison, william.allison@state.co.us Thomas Roan, tom.roan@state.co.us
Regional Air Quality Council Kenneth Lloyd, klloyd@raqc.org	Richard L. Griffith, ricklgrif@aol.com for Colorado Ethanol Group, including: ERAS, Inc.; Pacific Ethanol, Inc.; Sterling Ethanol LLC; and Yuma Ethanol LLC
Orf & Orf, P.C., law@orfco.net Ted Orf Dianna L. Orf for Colorado Mining Association	Fulbright & Jaworski LLP Kenneth A. Wonstolen, kwonstolen@fulbright.com Benjamin Vetter, bvetter@fulbright.com for Colorado Oil & Gas Association Meg Collins, meg.collins@coga.org
Colorado Petroleum Association Stan Dempsey, Jr. stan@coloradopetroleumassociation.org	Carver Schwarz McNab & Bailey, LLC Jeffrey W. Schwarz, jschwarz@cksmb.com for DCP Midstream, LP
Denver Regional Council of Governments Steve Cook, scook@drcog.org	Daniel J. Schnee, daniel.schnee@elpaso.com for El Paso Western Pipelines consisting of: Colorado Interstate Gas Company; El Paso Natural Gas Company; Wyoming Interstate Company, Ltd.; Cheyenne Plains Gas Pipeline Company, L.L.C.; and Mojave Pipeline Company; who are all subsidiaries of: The El Paso Corporation
Holme Roberts & Owen LLP Colin G. Harris, colin.harris@hro.com for EnCana Oil & Gas (USA) Inc. Diane M. Blieszner, diane.blieszner@EnCana.com	Environmental Defense Fund, Rocky Mountain Office Kevin Lynch, klynch@edf.org

<p>Hale Friesen, LLP Allan L. Hale, ahale@halefriesen.com Amanda A. Bradley, abradley@halefriesen.com Matthew W. Spengler, mspengler@halefriesen.com for Environmental Systems Products, Inc.</p>	<p>Boulder County Public Health Pamela H. Milmoie, pmilmoe@bouldercounty.org Denver Environmental Health Gregg Thomas, gregg.thomas@denvergov.org Sabrina M. Williams, sabrina.williams@denvergov.org for Local Government Coalition representing: Denver Environmental Health; Boulder County Public Health; City of Aspen; and City of Boulder</p>
<p>Faegre & Benson, LLP Linda L. Rockwood, lrockwood@faegre.com Eric J. Triplett, etriplett@faegre.com for Public Service Company of Colorado d/b/a Xcel Energy Lauren C. Buehler, lauren.c.buehler@xcelenergy.com</p>	<p>Suncor Energy (U.S.A.) Inc. Michael E. Korenblat, mkorenblat@suncor.com Jay Christopher, jchristopher@suncor.com</p>
<p>WildEarth Guardians Jeremy Nichols, jnichols@wildearthguardians.org</p>	

s/ Christine M. Thompson