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ENGINEERING BUREAU MEMORANDUM

**SUBJECT: Non-Standard Oil
Well Locations**

April 15, 1998



NEW MEXICO ENERGY, MINERALS
& NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION
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ENGINEERING BUREAU MEMORANDUM

TO: Ms. Lori Wrotenbery, Director N.M.O.C.D.

FROM: Michael E. Stogner, Engineer *MS*

SUBJECT: Non-Standard Oil Well Locations

DATE: April 15, 1998

Section 70-2-11, NMSA 1978, of the Oil and Gas Act ("Act") empowered the New Mexico Oil Conservation Division ("Division") to prevent waste and to protect correlative rights. In order to carry out this assignment Section 70-2-12 directed the Division to make rules, regulations, and orders that: (i) require wells to be drilled, operated, and produced in such a manner as to prevent injury to neighboring leases or properties; and, (ii) fix the spacing of wells. The placement of oil and gas wells is the single most elementary and fundamental aspect of oil and gas conservation law.

Currently in New Mexico all oil wells, unless otherwise provided in special pool rules, are spaced on 40 acres being a single governmental quarter-quarter section [see Division General Rules 104.B(1)(b) and 104.C(1)]. Oil well locations, unless otherwise provided in special pool rules, can be no closer than 330 to the boundary of the 40-acre drilling tract or spacing unit [also refer to Rules 104.B(1)(b) and 104.C(1)]. This 330-foot set-back requirement has essentially been in existence since 1931 when 40-acre spacing and the 330-foot distance were adopted by the State Geologist as standard operating procedures for the industry. In 1935, when the Act was enacted and the New Mexico Oil Conservation Commission ("Commission"), now the Division, was formed, identical rules were adopted and accepted as satisfactorily meeting all requirements of the Act.

Immediately after the Division adopted these rules and since that time industry has sought exceptions to the 330-foot rule where warranted. In the beginning all exceptions required Commission approval after notice and hearing. Rules and regulations were quickly adopted by the Division and accepted by industry allowing operators to seek administrative exceptions in certain cases without a hearing. Until 1996 these administrative exceptions were granted only for:

(i) topographical reasons; (ii) the recompletion of existing wells to shallower zones; and, (iii) the purpose of completing an efficient production/injection pattern within secondary recovery projects. All administrative exceptions required notice to all off-set operators. Geological-based exceptions and opposed administrative applications required a hearing before a duly appointed Division Examiner with technical competency, expertise, and experience.

By Division Order No. R-10533, issued by the Commission in Case 11,351 on January 18, 1996, sweeping changes were made to the rules and regulations pertaining to administrative exceptions to the 330-foot rule. These changes, accepted by the industry, primarily served to streamline the administrative process for operators. It also allowed for greater flexibility in the Division's application review process since it now requires that notice be provided only to those affected operators and/or off-set mineral interest owners. This change alone allows operators to plan and implement primary "infill" drilling projects within single leases and in areas where mineral interests are common throughout. In secondary recovery projects where a great many exceptions were needed and sought prior to 1996, operators can now obtain approval on those wells located at least 330 feet from the outer boundary of such a project area by the appropriate District supervisor by simply submitting the proper information on Division Form C-102.

With the advent of "3-D" seismic and advances in computer-enhanced geological evaluation tools, Order No. R-10533 allowed for the administrative processing of unorthodox oil well locations based on geology. A good example of this is in Lea County in and around Lovington, New Mexico where a large number of independent small algal reef mound structures within the Strawn formation have been discovered. Unorthodox locations within these pools are the "norm" as opposed to the exception. Many opposed cases have resulted in this area when operators cannot agree with each other as to well locations when these structures are encountered. Prior to 1996 this information, considered proprietary by most operators, was subject to public review and scrutiny in the hearing process. Although this proprietary information is still required for geologic exceptions, the operator no longer is required to make this information readily available to all parties off-setting the subject 40-acre tract, but only to the nearest affected off-setting interest owners. This information is still in the public domain and is available to anyone who wishes to investigate or research this technical data further.

Currently such non-standard oil well location exceptions are governed by Division General Rule 104.F. Each and every application received by the Division, either for administrative review or for hearing, is reviewed and many times researched for technical thoroughness, engineering competency, geological merit, and accuracy. Also, each application is thoroughly evaluated and analyzed as to the effects, both adverse and beneficial, that such an unorthodox location would have on the affected off-setting acreage. A mandatory 20-day waiting or suspense period is given so the affected off-setting mineral interest can object to an application.

If during this 20-day period no off-setting or interested party objects to the application, the Division Director grants approval for the unorthodox oil well location. When an objection is received, that application is either denied or set for hearing. These decisions can be appealed to the Commission, then to District Court, and then to the New Mexico Supreme Court.

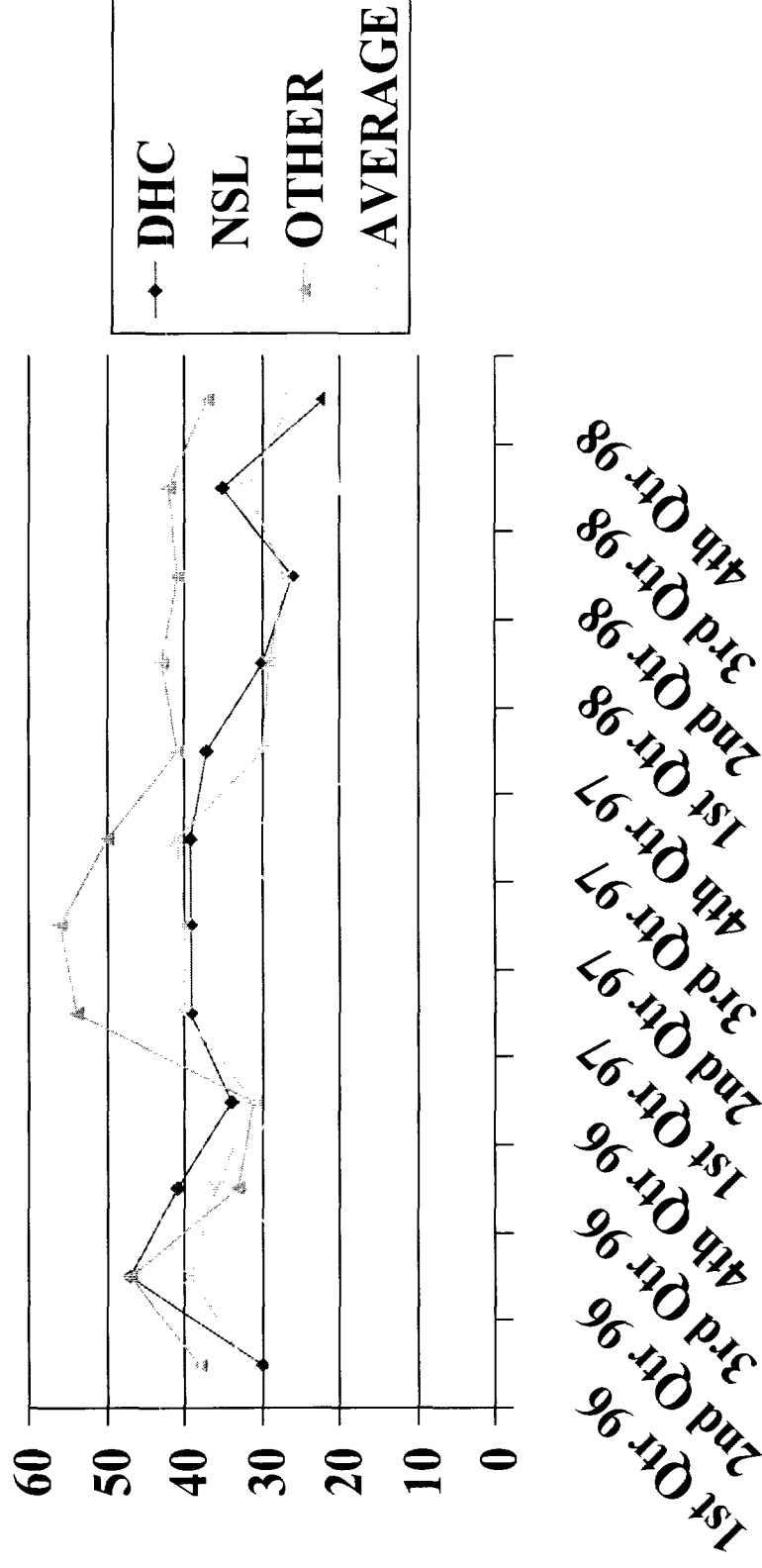
Well spacing today remains among the most needed and effective means of preventing all forms of waste and protecting correlative rights. Consistency in our review process throughout the entire state is essential for the Division to carrying out these mandates in the most practical and efficient manner possible.

A joint Division/industry committee has recently been established to review the current spacing rules and review process in order to: (i) reconfirm that both Division and industry personnel are fully aware of the reasons for such rules and regulations; (ii) assure that the current rules of this Division are adequate; and, (iii) to identify possible changes to these rules without compromising the Act's mandates of preventing waste and protecting correlative rights.

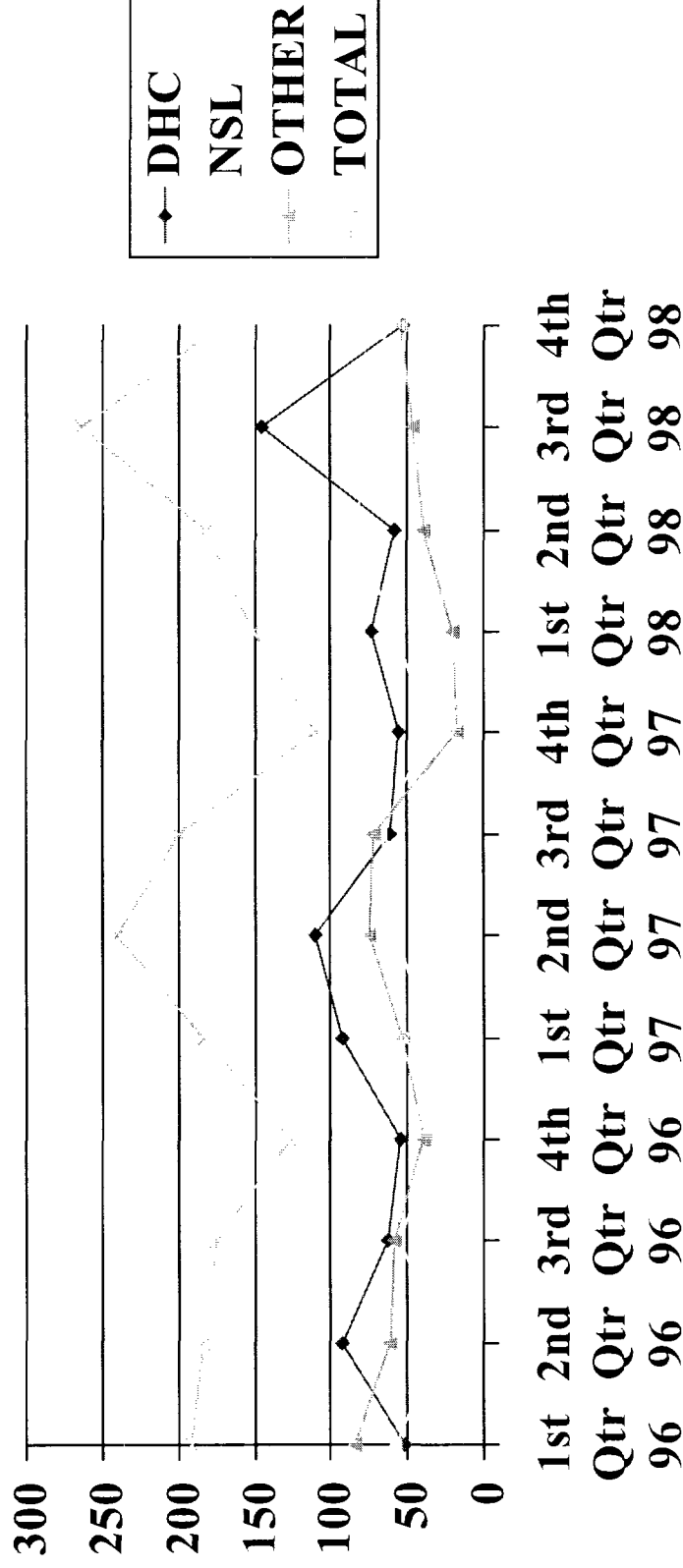
DIVISION ADMINISTRATIVE ORDERS

**CHARTS: Average Turnaround
Time and Number of Order
Issued by the Division in
1996, 1997, and 1998.**

Average Turnaround (days)



Number Issued



REPORT TO THE GOVERNOR

**SUBJECT: *"Industry Speaks,
OCC Listens"* Meeting;
Artesia, New Mexico**

September 9, 1998

**“Industry Speaks, OCC Listens” Meeting
Artesia, New Mexico
September 9, 1998**

Report to the Governor

Prepared by:

**Lori Wrotenbery, Director
Oil Conservation Division
Energy, Minerals and Natural Resources Department**

Introduction

The Oil Conservation Commission (OCC) met on September 9, 1998, in Artesia, New Mexico. All three members of the OCC were in attendance. They are: Lori Wrotenbery, Chairman; William LeMay, Member; and Jami Bailey, Member.

The purpose of the meeting was to allow operators and other interested parties to communicate their concerns and suggestions directly to the OCC. Of specific interest to the OCC was how the state can assist industry in this period of low oil prices.

As requested by Governor Johnson, this report summarizes the industry's suggestions about the state's role in helping the industry survive the current crisis caused by low oil prices. It describes the actions being taken by the Oil Conservation Division (OCD) and contains recommendations on further actions that should be considered administratively, legislatively, or both.

Current Initiatives at OCD

The "Industry Speaks, OCC Listens" meeting began with a status report from Chairman Wrotenbery on actions being taken by the Oil Conservation Division (OCD) to address comments and suggestions previously made. She noted the following initiatives to make OCD activities more effective and efficient.

ONGARD data quality

OCD, the ONGARD Service Center, and the other state agencies that participate in ONGARD are continuing their efforts to increase the reliability, timeliness, and usefulness of the information in the ONGARD system. OCD activities include:

- Implementing a pre-edit procedure that allows OCD to work with operators to resolve errors before they enter ONGARD. This procedure adds only one week to the process, but has helped reduce errors entering ONGARD by 92%. The current error rate is much less than one percent.
- Encouraging electronic filing of production reports. Reports filed electronically enter the system faster. OCD is working with companies that operate more than 100 wells to ensure they file electronically as required by Division rules, and is assisting smaller companies who wish to file electronically.
- Instituting a notification process to ensure operators file timely reports on all wells. OCD now notifies operators of late or incomplete reports on a monthly basis.

Electronic availability of OCD records

OCD is exploring ways to eliminate paperwork and speed up regulatory processes by making more information available on the Internet and increasing use of the Internet for communication with industry. OCD has recently hired a web-site administrator who will assist in coordinating document imaging and other electronic information exchange activities. Recent orders are already posted on OCD's web site, and OCD is conducting two pilot imaging projects. Division staff is currently meeting with the ONGARD Service Center, New Mexico Tech, and industry representatives to explore opportunities and coordinate activities.

Efficiency of permitting processes

OCD has taken several steps to reduce the processing time for permit applications and keep it down. A Division geologist has been reassigned to the Engineering and Geological Services Bureau to assist in processing applications. OCD is also making process adjustments to eliminate unnecessary delays. For example, the Director delegated authority to the Bureau to approve routine administrative applications.

This year OCD's goal was to decrease the average turnaround time on administrative permit applications to 30 days. This goal was exceeded during the first two quarters of 1998. The average turnaround time increased to 32 days in the third quarter of 1998, primarily due to an almost threefold increase in the number of downhole commingling applications, but the Bureau expects to meet or exceed the 30-day goal for the year as a whole.

The new geologist in the Engineering and Geological Services Bureau is being trained to conduct hearings as well as process administrative applications. This increase in the number of hearing examiners—from two to three—will ensure the timely issuance of hearing orders.

Finally, OCD is holding practice and procedure seminars for operators and their personnel four times a year. A major goal of these seminars is to ensure that filings are accurate and complete, which in turn speeds up the permitting process. The exchange of information at these seminars has proven valuable to both the agency and the industry. OCD encourages continued industry participation in the seminars.

Rule revisions

Effective May 30, 1998, the OCC amended the gas proration and well testing rules for the San Juan Basin. These amendments modified the proration rules for pools in the northwest part of the state to eliminate unnecessary requirements and reflect current operating conditions. They eliminated shut-in pressure testing of wells in non-prorated pools and deliverability testing of marginal wells in prorated pools. In addition, gas proration units are now classified as marginal by default unless substantial evidence indicates a well should be reclassified as non-marginal.

The Engineering and Geological Services Bureau is currently working with industry representatives to review the spacing rules and the permitting process for unorthodox locations. They will propose changes to update and streamline the rules and procedures by the end of this year.

The Environmental Bureau is reviewing comments received from industry on draft rules that would transfer discharge permitting authority from the Water Quality Control Commission to the Oil Conservation Commission in order to promote one-stop shopping. A second draft will soon be available for review. The Bureau is also drafting amendments to Rule 711 that would streamline procedures for disposal of oil-field waste by eliminating the requirement for OCD approval of certain documentation prepared by waste generators. In addition, the Bureau is working with a contractor to develop a best management practices manual, which will be completed this fall. Under some circumstances, operators will have the option of adopting best management practices in lieu of complying with state discharge permitting requirements.

Suggestions by Industry

At its meeting in Artesia, the Oil Conservation Commission heard presentations from the following industry representatives: Richard E. Foppiano, OXY, USA, representing the New Mexico Oil and Gas Association; Elizabeth Bush, ARCO Permian; and Randy Patterson, Yates Petroleum Corporation. The OCC also received a letter from Dugan Production Corporation, which was read at the meeting. Following these presentations, the OCC and the meeting participants engaged in an open discussion of issues.

A number of suggestions were explored during the meeting. The following summary highlights the major issues. Following a description of each issue is a note on OCD's current activities in *italic*.

Electronic information exchange

Huge volumes of paper flow between the industry and OCD. Tremendous opportunities for improvement are presented by converting this paper communication into electronic form and by making the information already existing in OCD files available to industry over the Internet. With increased access to more accurate information, the industry can make better, faster decisions and file complete, accurate applications. The information that should be readily accessible over the Internet includes production information, well data, orders, and the application tracking system. NMOGA is also developing a forms-help tutorial for placement on the OCD web site.

ONGARD data availability is another key concern, as is the accuracy of data in ONGARD. If ONGARD were more readily accessible to industry, errors could be corrected faster.

OCD and the ONGARD Service Center are working to increase the availability of ONGARD data to operators and to eliminate errors of all kinds. Production data is already available over the Internet through the Petroleum Recovery Research Center at New Mexico Tech. By the end of this year, well data contained in ONGARD will be made available on OCD's web site. Many discrepancies between operator records and the ONGARD system are being resolved through the notices sent operators when OCD does not receive a production report for each well in the ONGARD system.

As part of its FY2000 budget request, OCD has submitted a special appropriations request for consideration by the administration and the legislature. This request would fund the first year of a two-year project to use scanning technology to convert approximately 88,000 hard-copy documents (1.5 million pages) into electronic format. The scanned images would be linked to the ONGARD system and made available to operators over the Internet.

Regulatory process improvements

The industry has encouraged OCD to continue challenging existing practices and to change or eliminate unduly burdensome or unnecessary practices. Examples cited as areas of potential improvement include:

- Revising the spacing rule (Rule 104) to eliminate unnecessary applications and improve turnaround time on remaining applications. For example, OCD should look at relaxing the interior well setback requirements thereby allowing operators greater flexibility in locating wells. OCD should also examine the possibility of shifting the authority to approve some types of uncontested unorthodox locations to the district offices. In addition, OCD should consider changes to its current rules to allow the drilling of more than one gas well on a spacing unit in non-prorated gas pools.
- Revising notice requirements. Notice should be consistent for administrative applications and for hearings, and consideration must be given to costs and benefits.
- Streamlining the downhole commingling process by authorizing certain commingling practices by rule. For example, a specific suggestion has been made to commingle every formation from the surface to the top of the Empire-Abo Pool in north Eddy County. There are multiple zones above the Abo that might be produced if operators were allowed to commingle them.
- Revising Rule 107 to eliminate unnecessary applications for tubingless completions.
- Simplifying the administrative application cover sheet.
- Shifting authority from Santa Fe to the district offices for review and approval of some uncontested applications, including surface and downhole commingling, salt water disposal,

dual completions, deviating directional wells, and unorthodox locations.

- Eliminating proration and depth bracket allowable rules as outdated, burdensome, and generally arbitrary.

OCD has established or is in the process of establishing workgroups to address most of these areas of potential improvement. Each of these workgroups includes industry representatives. The Rule 104 Workgroup and the Notice Workgroup intend to submit preliminary recommendations to the Oil Conservation Commission by the end of this year. Workgroups are currently being established to address downhole commingling (Rule 303.C) and tubingless completions (Rule 107). These workgroups will submit their recommendations to the Commission by the middle of next year. In addition, the OCD district office in Artesia is in the process of consolidating pools in certain areas of Eddy County, thereby eliminating the necessity for downhole commingling applications there. NMOGA's Regulatory Practices Committee is reviewing the administrative application cover sheet and will present suggested changes to the OCD by the end of this year. OCD also anticipates receiving suggestions from the industry concerning changes to the proration rules. OCD will examine the feasibility of transferring authority to approve certain types of administrative applications to the district offices.

Education of industry on OCD rules and procedures

Operators want to know as much as possible about OCD regulatory processes and requirements both because they want to comply with the rules and because they want to maximize their opportunities under the rules. The exchange of information at OCD seminars has helped both the industry and OCD. As a result, the industry is submitting better applications and OCD is processing them faster. NMOGA urged OCD to continue holding seminars and requested as much advance notice as possible to ensure full participation by the industry.

OCD plans to continue holding seminars. At the suggestion of the industry, OCD has expanded the seminars to include hearing processes and some types of applications requiring hearings. The next seminar is scheduled for Midland, Texas on November 3-4, 1998. Notice of this seminar has been given through the Internet and the docket mailing list. In the future, as suggested in Artesia, OCD will set seminar schedules at the beginning of the year so that industry personnel will have plenty of time to plan to attend. OCD will continue to coordinate with the industry associations to notify the industry of upcoming seminars and will explore the possibility of establishing an e-mail list for that purpose.

Incentives

Industry representatives offered several suggestions for renewing or improving existing incentives:

- The workover incentive program needs to be streamlined to reduce the administrative burden to operators. The administrative burden has been prohibitive, particularly for low-rate wells

or wells in which the workover did not significantly increase production. The current process, which involves going first to OCD and then to the Tax and Revenue Department, needs to be evaluated. It has also been suggested that the workover incentive be changed to apply to all production, not just incremental production, because the calculation of incremental production is costly and the base production does not last long anyway.

- The production restoration incentive should be renewed. It applied only to wells that were inactive during 1993-1994. The legislation should be revised to apply the incentive to any well that is brought back into production after a two-year period of inactivity.
- The State Land Office should provide an easier method for continuing the reduced royalty rate for stripper wells on state leases beyond a two-year period, and should extend the program to cover gas as well as oil.

In addition, industry representatives have offered suggestions for new incentives:

- An incentive for a different use of existing technology or the use of new technology would encourage exploration and production and also research.
- Tax and royalty reductions for marginal oil and gas wells could keep these wells producing during times of low prices. One suggestion was a moratorium on severance tax and royalties for low-volume wells tied to the price of oil.
- A gross receipts tax deduction for natural gas used to generate electricity for resale would facilitate development of coal-bed methane resources in the northeast part of the state, as would an incentive for the construction of pipeline capacity.

To assist them in developing incentive proposals, the industry associations and their members are currently reviewing the report published by the Interstate Oil and Gas Compact Commission and the Energy Council entitled *Investments in Energy Security: State Incentives to Maximize Oil and Gas Recovery*. This report summarizes incentives adopted by states throughout the nation and evaluates the economic impacts of selected incentives.

OCD has drafted legislation that would revise the production restoration incentive (copy attached) and looks forward to working with NMOGA, IPANM, and other industry representatives to develop incentive proposals that would benefit both the industry and the state. OCD will work with TRD to evaluate the implementation procedures for the workover incentive.

Advocacy

Industry representatives expressed the opinion that, in addition to policing the industry, OCD should champion the industry. They believe OCD should play a more prominent role at both the state and federal level in supporting industry issues before legislators, the public, and the media. OCD's work in natural gas marketing was cited as an example of effective advocacy. In some

cases OCD may be a better spokesman for the industry than the industry, because OCD's concerns are broader based and more balanced. The industry would like to see an effort at the state level to promote the positive aspects of the mineral industry to help offset the generally negative public image.

OCD recognizes that it stands in a unique position to educate others on the industry and the contribution the industry makes to the State of New Mexico. OCD can play an advocacy role on particular issues when there is strong consensus within the industry and a strong correlation between the industry's interests and OCD's mission. OCD addresses these kinds of issues by participating in the activities of the Interstate Oil and Gas Compact Commission as well as by presenting testimony before the state legislature and responding to media and public inquiries. OCD has also established an Environmental Merit Award program to highlight the efforts of the industry to protect and enhance the environment.

Federal lands and Indian lands

Industry representatives voiced strong support for continued dialogue on the transfer of regulatory functions from the Bureau of Land Management (BLM) to the OCD. One operator asked the OCD to withdraw from the memorandum of understanding (MOU) with BLM concerning the use of OCD hearing procedures in matters involving Indian lands.

The Interstate Oil and Gas Compact Commission is working to transfer oil and gas regulation on federal lands from BLM to the states. OCD is participating in that effort. Legislation has been filed, but Congress has not yet acted on it. In the meantime, OCD has initiated discussions with BLM's New Mexico office concerning possible regional agreements to eliminate duplication and avoid conflict.

OCD has also reviewed with BLM the MOU concerning Indian lands. BLM and OCD have asked for comments from the industry and will be meeting with the industry and the tribes in October. Jennifer Salisbury, Secretary of the Energy, Minerals and Natural Resources Department, must make a decision whether to ratify the MOU. It could be ratified in its original form or with amendments.

Royalty in kind

The industry's position is that RIK will benefit both the state and the industry.

In New Mexico, the Energy, Minerals and Natural Resources Department, the Tax and Revenue Department, and the Department of Finance and Administration have worked together to review the federal RIK legislation and provide technical comments to the sponsors and the industry.

Plugging requirements

One producer suggested that OCD ease off requirements to plug old wells during the period when oil prices are low. It was also suggested that OCD review the requirements for TA (temporarily abandoned) wells, especially as those requirements apply upon a transfer from one operator to another. And a small independent producer suggested that small independents be allowed to form a co-op in order to get bonding at reduced cost.

OCD will consider requests from operators on an individual basis to adjust schedules for plugging wells in light of the current oil-price crisis. Regarding the transfer of TA wells, OCD will continue to work with operators to establish reasonable schedules for bringing the wells into compliance taking into consideration the level of risk posed by the wells.

A workgroup led by Rand Carroll, OCD's Legal Counsel, is being established to review OCD plugging rules and procedures to ensure they strike the proper balance between preserving wells as assets and minimizing the state's plugging liabilities. The workgroup, which will start by reviewing NMOGA's previous study of this issue, will submit its recommendations to the Oil Conservation Commission by the middle of next year.

Recap of Recommendations

Make more OCD information available electronically. OCD and the industry should take advantage of the opportunities for improvement presented by converting paper communication into electronic form and by making the information in OCD files available to industry over the Internet. With increased access to more accurate information, the industry can make better, faster decisions on oil and gas operations that support the state's economy.

Continue efforts to improve OCD regulatory processes. OCD should continue to review current regulatory practices and change or eliminate outdated, unduly burdensome, or unnecessary rules and procedures. OCD, like the industry it regulates, must continually strive to operate better, cheaper, and faster.

Continue to conduct seminars on OCD rules. Operators need to understand regulatory requirements and procedures in order to comply with them and to use them effectively. The exchange of information and ideas at OCD seminars helps both the industry and OCD.

Evaluate current tax incentives and pursue new ones. Carefully designed and administered incentives maximize revenues for both the industry and the state. OCD has drafted legislation to renew the production restoration incentive and looks forward to working with industry and other agencies to develop other mutually beneficial incentive proposals for consideration by the legislature.

Eliminate duplication and avoid conflict on federal lands. The state will continue to participate in efforts of the Interstate Oil and Gas Compact Commission to transfer federal oil and gas

regulatory responsibilities to the states. In the meantime, OCD will continue its dialogue with BLM to address regional issues.

Review OCD rules and procedures on plugging and temporary abandonment. OCD must ensure that its requirements strike the proper balance between preserving wells as assets and minimizing the state's plugging liabilities. OCD will continue to work with operators to establish reasonable schedules for bringing wells into compliance considering the level of risk posed by the wells.

