## Title 40 CFR Part 191 Compliance Certification Application for the Waste Isolation Pilot Plant

**DEL Attachment 3** 

U.S. Bureau of Land Management Instruction Memorandum No. NM-95-022 on Temporarily Abandoned Wells (September 30, 1996)

## UNITED STATES DEPARTMENT OF THE INTERIOR

BUREAU OF LAND MANAGEMENT NEW MEXICO STATE OFFICE
1474 Rodeo Road
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December 16, 1994

Instruction Memorandum No. NM-95-022

Expires: 9/30/96

To: DM's and AM's (except Las Cruces)

From: Acting Deputy State Director, Resource Planning, Use,

and Protection

Subject: Producing and Non-Producing Well Test Policy

ISSUE: In March of 1992, the Bureau of Land Management's (BLM) Washington Office issued IM No. 92-149, instructing all Field Offices to implement the Inspector General's (IG) recommendation to review shut-in and temporarily abandoned wells. The review was to determine if the shut-in and temporarily abandoned wells have further economic use, and if not, direct the operators to plug and abandon them. The IG also recommended casing mechanical integrity testing for all inactive wells that are approved.

BACKGROUND: In response to this issue and other environmental concerns, in October of 1993, BLM New Mexico formed a committee to develop a well test policy for producing and non-producing wells. The goal of the committee was to develop a policy for inactive well approval and testing requirements, i.e., casing mechanical integrity testing, production testing for long term shut-in wells, and bradenhead testing for all wells in areas where groundwater protection is at issue. Committee members were industry representatives nominated by the New Mexico Oil and Gas Association, officials from the State of New Mexico Oil Conservation Division, and BLM New Mexico State and District Office Oil and Gas Specialists.

After several meetings, a DRAFT policy was developed and was issued for a public comment period in August, 1994. In November of 1994, the committee reconvened to review the comments received. The DRAFT policy was revised to incorporate the comments, where possible. The revised DRAFT policy is in two parts. The first part is titled "General Requirements For Non-Producing Wells on Federal Oil and Gas Leases" and covers the requirements for shut-in and temporarily abandoned wells. The second part is titled "General Requirements For Producing and Non-Producing Wells on Federal Oil and Gas Leases" and pertains to bradenhead testing requirements.

<u>POLICY:</u> The revised DRAFT policy has been reviewed by the BLM New Mexico State Office and is approved as FINAL. It is to be implemented effective January 1, 1995. This FINAL policy is attached for your reference (Attachment 1). Please ensure all personnel with lease operations review and approval responsibilities are provided a copy of this LM and the attached well test policy.

ACTION REQUIRED: When reviewing applications for temporary abandonment or continued shut-in, there are several points to consider before approval can be granted.

When an operator requests temporary abandonment for a particular well, he is required to submit justification why the well should be temporarily abandoned and to demonstrate casing mechanical integrity. He must provide evidence that the well has a future use and is not just trying to delay the permanent abandonment of the well. The ability to demonstrate casing mechanical integrity is not, by itself, justification for approval of temporary abandonment.

When an operator requests continued shut-in approval, he must demonstrate a well's ability to produce in paying quantities. If a well is capable of production in paying quantities, why should we grant a shut-in approval? One possible reason is where a remote gas well is miles from any pipeline. Another is where an operator is waiting for concurrence from a working interest owner(s) to repair surface or downhole equipment. According to the policy regarding shut-in wells, Section II, we are giving the operator a "grace period" of 1 year before we will require him to do something with the well, i.e., return to production, plug and abandon, convert to beneficial use, etc. If it is a profitable well, the working interest owner(s) approval for expenditures will (normally) be given within the 1 year "grace" period and the well will be repaired and returned to production. If the well is marginal, approval for expenditures may take longer or may not be given at all during the 1 year period.

After a well has been shut-in for 1 year, the operator must request approval for continued shut-in and demonstrate that the well is capable of production in paying quantities. The applicant must provide valid justification why the well should be shut-in rather than returned to production, converted to beneficial use, or permanently plugged and abandoned. Similar to temporary abandonment, when an operator requests continued shut-in approval, casing mechanical integrity must be demonstrated, and that by itself, is not a sufficient reason for granting approval.

Under this new policy the Authorized Officer may grant continued shut-in approval for 1 year intervals. The policy also states that shut-in approval for up to 5 years may be granted with additional justification. We cannot think of any circumstances or situations where granting a shut-in approval for 5 years is justified. That does not necessarily mean that there are none. The Authorized Officer is urged to use discretion in considering any request for continued shut-in approval.

In the event that the shut-in request is for the last producible well on the lease, and the lease is in it's extended term held by production, the procedures outlined in BLM Manual Section 3107 and Handbook H-3107-1, Continuation, Extension, or Renewal of Leases, shall be followed.

This policy, as written, does not apply to Indian Tribal or Allotted leases. Indian lease terms may not allow for leases to be in a non-productive status. Several Tribes have been briefed on this new policy and may want us to apply the requirements, all or in part, to wells on their leases. You will be advised when certain Tribes concur with this policy and want the requirements applied to their leases.

MANUAL AND HANDBOOK SECTION: 3107, H-3107-1, Continuation, Extension, and Renewal of Leases.

CONTACTS: If you have any questions, please contact Steve Salzman at (505) 438-7409, or Larry Bray at (505) 438-7406.

Edwin L. Roberson

1 Attachment:
 1 - General Requirements for Non-Producing
 Wells on Federal Oil and Gas Leases (3 pp)

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Distribution
WO (610), LS, Rm. 510 - 1
SC-214 - 1
NM (015) - 1
NM (040) - 1
NM (047) - 1
NM (060) - 1
NM (066) - 1
NM (067) - 1
NM (067) - 1
NM (070) - 1
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NM (951A, Binder) - 1 w/o attachment
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## General Requirements for Non-Producing Wells On Federal Oil and Gas Leases

- I. TEMPORARY ABANDONDENT: A temporarily abandoned well is defined as a completion that is not capable of production in paying quantities but which may have value as a service well. Pursuant to 43 CPR 3162.3-4(c), no well may be temporarily abandoned for more than 30 days without the prior approval of the Authorized Officer. When justified by the operator, the Authorized Officer may authorize additional delays, no one of which may exceed an additional 12 months.
- A. Any temporary abandonment request must be submitted on a Sundry Notice (Form 3160-5) and include the following:
- 1. Justification why the well should be temporarily abandoned rather than permanently plugged and abandoned.
  - 2. Description of the temporary abandonment procedure.
  - 3. A complete wellbore diagram shown as temporarily abandoned.
- 4. The anticipated date the operations will occur.

  Chief, Branch of Inspection and Enforcement, MUST BE NOTIFIED A MINIMUM OF 48 HOURS PRIOR TO COMMENCING ANY ABANDONMENT SO THAT THE OPERATIONS MAY BE WITNESSED. (phone no.)
- B. The following terms and conditions will apply to all wells approved for temporary abandonment:
- 1. The temporary abandonment method must provide for the installation of an isolation device (such as a retainer or bridge plug) within 50' to 100' of the top perforation or a cement plug that extends at least 50 feet above each set of open perforations. Unless prior approval is granted by the Authorized Officer, the well bore must be filled with conditioned, non-corrosive fluid and shut-in at the surface. If a cement plug is used, the top of the cement must be verified by tagging. If the wellbore had more than one producing horizon, the lower set(s) of perforations or open hole must meet the requirements for permanent plug to abandonment, unless justification is provided by the operator not to do so.
- 2. A test demonstrating casing mechanical integrity is required. An approved method is a pressure test of the casing and uppermost plug. The pressure test conduted shall be a minimum of 500 psi surface pressure with less than 10 percent pressure drop within thirty (30) minutes. In no event shall the pressure test required exceed seventy (70) percent of the internal yield of the casing. In the case of a plug or casing failure, the operator shall either correct the problem or plan to plug and abandon the well. Alternative methods demonstrating casing mechanical integrity may be approved by the Authorized Officer on a case-by-case basis.
- 3. A bradenhead test will be conducted. If the test indicates a problem exists, a remedial plan and a time frame for remediation will be submitted within ninety (90) days from the date of the test.
- C. A subsequent report Sundry Notice (Form 3160-5) is required to be submitted within thirty (30) days upon the completion of the work.
- D. Approval will be granted for one (1) year and renewed annually, upon receipt of a proper request. All temporarily abandoned wells are required to demonstrate casing mechanical integrity every five (5) years, unless the Authorized Officer determines, on a case-by-case basis, more frequent testing is required.

- II. SHUT-IN WELL: A shut-in well is defined as a completion that is physically and mechanically capable of production in paying quantities or capable of service use. No well may be shut-in for more than one (1) year without prior approval from the Authorized Officer. Any well with a known or suspected casing leak is to be repaired immediately.
- A. Any request for continued shut-in status must be submitted on a Sundry Notice (Form 3160-5) and include the following:
- 1. Justification why the well should be shut-in rather than activated as a producer or a service well.
- 2. The anticipated date(s) that casing mechanical integrity and/or production testing will occur. Chief, Branch of Inspection and Enforcement, MUST BE NOTIFIED A MINIMUM OF 48 HOURS PRIOR TO COMMENCING ANY TESTING SO THAT THE TEST(S) MAY BE WITNESSED. (phone no.)
- B. The following terms and conditions will apply to all wells approved for continued shut-in:
- 1. Approved shut-in wells are to demonstrate casing mechanical integrity initially and thereafter every five (5) years. An approved method is to pressure test. The test pressure shall be a minimum of 500 psi surface pressure with less than 10 percent pressure drop within 30 minutes. In no event shall the pressure test required exceed seventy (70) percent of the internal yield of the casing. If the casing fails, it is required that the casing be repaired or the well plugged and abandoned. Alternative methods demonstrating casing mechanical integrity may be approved by the Authorized Officer on a case-by-case basis.
- 2. Approval for shut-in is also contingent upon conducting a production verification test. A production test will be conducted for a period of 24 hours. Depending on the circumstances, the Authorized Officer may require a longer test period, or may approve a shorter test period, to demonstrate the well's ability to produce in paying quantities. Supporting documents will be submitted with the request. Recent production history demonstrating production capabilities may be accepted in lieu of conducting the test.
- 3. A bradenhead test will be conducted and if the test indicates a problem exists, a remedial plan and a time frame for remediation will be submitted within ninety (90) days of the test.
- 4. Close all valves on the wellhead. All disconnected lines shall have bull plugs installed.
- 5. For oil wells with pump jacks, the operator will be allowed to leave the pump and rods in the hole and close all valves at the surface. The operator must request approval to remove the pumping unit before it is removed.
- C. A subsequent report Sundry Notice (Form 3160-5) is required to be submitted within thirty (30) days upon the completion of the work.
- D. Shut-In approval will be granted for a one (1) year period. A period of up to five (5) years may be granted by the Authorized Officer, with justification.
- All of the above are minimum requirements. Failure to comply with the above conditions of approval may result in an assessment for noncompliance being issued pursuant to 43 CFR 3163.1. You are further advised that any instructions, orders, or decisions issued by the Bureau of Land Management are subject to administrative review pursuant to 43 CFR 3165.3 and appeal pursuant to 43 CFR 3165.4 and 43 CFR 4.700.

## General Requirements for Producing and Non-Producing Wells on Federal Oil and Gas Leases

BRADENHEAD TESTING: A bradenhead is defined as the annular space between the surface casing string and the next innermost casing string. Bradenhead testing will be required and conducted according to State Field or Pool rules or local area policy.

- A. In the absence of State Field or Pool rules or local area policy, the Authorized Officer shall determine the applicable criteria for requiring wells to be tested. Bradenhead testing shall be accomplished in the following manner:
- 1. Indicate whether the well is shut-in , temporary abandoned or producing. Record the pressures measured on each casing string, including intermediate casing, using deadweight or calibrated pressure gauge.
- 2. Open the bradenhead valve to the atmosphere. If gas or water flow is observed or indicated, flow the bradenhead for a minimum of fifteen (15) minutes and record pressures at five (5) minute intervals on the production, intermediate and surface casing. Describe in detail any fluids flowing from the bradenhead including measured or estimated rates of flow. At the discretion of the Authorized Officer, or his representative, a water and/or gas analysis may be required.
- B. The following terms and conditions will apply to all wells bradenhead tested:
- 1. The BLM shall be notified of the anticipated date the testing will occur.

  Chief, Branch of Inspection and Enforcement, MUST BE NOTIFIED A

  MINIMUM OF 48 HOURS PRIOR TO COMMENCING ANY TESTING SO THAT THE TEST(S) MAY BE
  WITNESSED.

  (phone no.)
- 2. The results of the test are to be submitted on a Sundry Notice (Form 3160-5) or the appropriate State form (one (1) original signature and two (2) copies) and submitted to the local BLM office.
- 3. The report submitted shall contain a statement by the operator indicating if a problem does, or does not, exist. If the bradenhead test indicates a problem exists, a remedial plan and timeframe for remediation shall be submitted within ninety (90) days of the test.
- All of the above are minimum requirements. Failure to comply with the above conditions of approval may result in an assessment for noncompliance being issued pursuant to 43 CFR 3163.1. You are further advised that any instructions, orders or decisions issued by the Bureau of Land Management are subject to administrative review pursuant to 43 CFR 3165.3 and appeal pursuant to 43 CFR 3165.4 and 43 CFR 4.700.