

INTERAGENCY AGREEMENT (IA)
Between the
UNITED STATES DEPARTMENT OF ENERGY (DOE)
OFFICE OF LEGACY MANAGEMENT
and the
UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT (BLM)
FARMINGTON FIELD OFFICE
and the
UNITED STATES DEPARTMENT OF AGRICULTURE (USDA)
FOREST SERVICE
CARSON NATIONAL FOREST

TITLE: Gasbuggy Site on the Carson National Forest

Property Description

The Gasbuggy Site is in northwestern New Mexico in Rio Arriba County, approximately 55 miles east of the city of Farmington, New Mexico, and approximately 12 miles southwest of Dulce, New Mexico, in the Carson National Forest. The Gasbuggy Site consists of 640 acres withdrawn under Public Land Order (PLO) 4232 (Sec. 36, T. 29N, R. 4W, NMPM). On December 10, 1967, the U.S. Atomic Energy Commission (AEC), a predecessor agency of DOE, detonated a 29-kiloton-yield nuclear device 4,240 feet below ground surface. The detonation was known as Project Gasbuggy. Project Gasbuggy was the first natural gas reservoir stimulation project in the Plowshare Program.

Current Site Status

It is understood that the withdrawal of the Gasbuggy Site, as stated in PLO 4232, remains in force because monitoring and use restrictions are still required on the withdrawn property. The withdrawal notice states that the PLO will not alter the surface jurisdiction of the Secretary of Agriculture, as administered by the Forest Service. PLO 4232 states that the terms and conditions of AEC's use of the Forest Service lands will be governed by the Memorandum of Understanding between AEC and USDA. PLO 4232 further states that the withdrawn lands are subject to valid existing rights. BLM retains oil and gas administration responsibilities for any preexisting oil and gas leases.

Institutional Controls

DOE, through AEC, via contract AT (04-3) -711, has been granted control of oil and gas leases, easements, conveyances, contract, or any other source whatsoever, in and to all rights and interest from the surface of the earth to a depth of 500 feet below the base of the Pictured Cliffs Formation as to the SW ¼ of Section 36, T. 29N., R 4W, NMPM.

In addition to the institutional control provided by the land withdrawal specified in PLO 4232, DOE requires notification from BLM of any Notices of Staking (NOSs) and Applications for Permit to Drill (APDs) for oil and gas. DOE will contact the appropriate

surface management agency for the status of any proposed water wells annually. The lands subject to these conditions are defined as the “area of review” and are described as follows: Sections 25, 26, 35, and 36, T. 29N., R. 4W.; Sections 30 and 31, T.29N., R.3W.; Sections 11, 12, 13, and 14, T. 28N., R.4W.; and Section 6, T., 28N., R. 3W., all in Rio Arriba County, New Mexico, NMPM.

A subset of lands within the area of review is defined as the “area of interest.” Under the National Environmental Policy Act (NEPA), the area of interest may require further environmental analysis prior to gas well drilling. The area of interest is shown on the attached map and is described as follows: Section 36 and the east ½ of Section 35, T. 29N, R. 4W; and Section 12 and the east ½ of Section 11, T. 28N, R. 4W, all in Rio Arriba County, New Mexico, NMPM.

Access for Monitoring

DOE requires access rights to Carson National Forest lands for sampling purposes. In cooperation with the appropriate oil and gas operator, DOE may conduct sampling of produced natural gas and any associated water in existing or future wells within the above described lands defined as the area of review. In cooperation with the appropriate surface management agency, DOE may also sample water from springs and water wells, should any be developed, in the area of interest at the Gasbuggy Site. DOE may also need to develop its own wells for environmental sampling, analysis, or remediation; however, this is unlikely.

This IA is hereby made and entered into by and among DOE, the BLM Farmington Field Office, and the Forest Service, under the provisions of the Economy Act of June 30, 1932 (31 U.S.C. 1535, Pub.L. 97-258 and 98-216).

I. PURPOSE

The purpose of this IA is to document the cooperation among the parties to outline roles and responsibilities addressing the withdrawn land, communication, and institutional controls, to ensure continued protectiveness at the Gasbuggy Site. Guiding documents include the Federal Land Policy and Management Act of 1976, PLO 4232, NEPA, Executive Order 10355, and Contract No. AT (04-3) - 711 between AEC, the U.S. Department of the Interior, and the El Paso Natural Gas Company, dated January 31, 1967.

In consideration of the above premises, the parties hereto agree to the following:

II. THE BLM FARMINGTON FIELD OFFICE SHALL:

- A. Notify DOE of any NOS or APD within the area of review specified under the institutional controls under this IA.

- B. Notify DOE of directional or horizontal drilling applications that originate outside of the specified area of review but have end-hole completions within the specified area of review.
- C. Include in the APD approval the right for DOE to acquire gas and produced water samples as a permit condition for wells in the area of review.
- D. Include in the APD approval the right for DOE to acquire drilling fluid and hydraulic fracturing fluid samples during the well drilling and development phase for wells drilled in the area of review.
- E. In accordance with NEPA, provide DOE with the opportunity for cooperating agency status for NEPA evaluations of proposed gas drilling locations within the area of interest, should the BLM Farmington Field Office decide to conduct a NEPA review.

III. DOE SHALL:

- A. Provide notice to the BLM Farmington Field Office and the Forest Service of the sampling schedule at least 1 month prior to the sampling event.
- B. Provide sample analysis results to the BLM Farmington Field Office and the Forest Service.
- C. Be entirely responsible for the prevention and mitigation of radioactive contamination resulting from Project Gasbuggy wherever such contamination may occur on National Forest land.
- D. In cooperation with the BLM Farmington Field Office, the Forest Service, and the affected oil and gas operator, develop mitigation measures should sampling results identify possible health, safety, and welfare impacts directly resulting from Gasbuggy activity. Mitigation measures will be determined on a site-specific, case-by-case basis.
- E. Have 30 days to respond to any NOS and APD notifications provided by the BLM Farmington Field Office.

IV. THE FOREST SERVICE SHALL:

- A. Provide DOE surface access to gas wells, springs, and water wells (if any are developed) for sampling purposes.
- B. Allow no subsurface intrusion within a radius of 100 feet from surface ground zero to a true vertical depth of 1,500 feet, and no subsurface intrusion within a radius of 600 feet from surface ground zero to a true vertical depth between 1,500 feet and 4,500 feet, as stated on the Gasbuggy Site monument.
- C. Give DOE the authority to conduct subsurface and surface investigations that DOE determined to be necessary as part of managing the Gasbuggy Site, within the areas described in item B above, subject to complying with normal Forest Service processes.
- D. In accordance with NEPA, provide DOE with the opportunity for cooperating agency status for NEPA evaluations of proposed gas drilling locations within the area of interest.

V. IT IS MUTUALLY UNDERSTOOD AND AGREED BY AND AMONG THE PARTIES THAT:

- A. This IA sets forth the general process by which the parties anticipate coordinating the Gasbuggy Project. This IA does not identify specific projects for funding or obligating any monies for projects.
- B. PRINCIPAL CONTACTS. Individuals listed below are authorized to act in their respective areas for matters related to this instrument.

Principal Cooperator Contacts

DOE Cooperator Project Contact
Jalena Dayvault
DOE Office of Legacy Management
2597 B ¾ Road
Grand Junction, CO 81503
Phone: 970-248-6016
Fax: 970-248-6023
E-mail: Jalena.Dayvault@lm.doe.gov

DOE Cooperator Administrative Contact
Thomas Pauling
DOE Office of Legacy Management
1000 Independence Avenue, SW
Washington DC 20585
Phone: 202-586-1782
Fax: 202-586-8403
E-mail: Thomas.Pauling@hq.doe.gov

BLM Cooperator Program Contact
Jim Lovato
BLM Farmington Field Office
1235 La Plata Highway
Farmington, NM 87401
Phone: 505-599-6367
Fax: 505-599-8997
E-mail: jim_lovato@blm.gov

BLM Cooperator Administrative Contact
Vicki Switzer
BLM Farmington Field Office
1235 La Plata Highway
Farmington, NM 87401
Phone: 505-599-8920
Fax: 505-599-8997
E-mail: vicki_switzer@blm.gov

Forest Service Program Contact
Mark Catron
Forest Service, Jicarilla Ranger
District
664 East Broadway
Bloomfield, NM 87413
Phone: 505-632-2956
Fax: 505-632-3173
E-mail: mcatron@fs.fed.us

Forest Service Administrative Contact
Kendall Clark
Forest Service, Carson National Forest
208 Cruz Alta Road
Taos, NM 87571
Phone: 575-758-6301
Fax: 575-758-6213
E-mail: kclark@fs.fed.us

- C. NOTICES. Any communications affecting the operations covered by this agreement given by the Forest Service or cooperators are sufficient only if they are in writing and delivered in person, by mail, by e-mail, or by fax, as follows:

FS Agreement No.
Cooperator Agreement No.
Cooperator Agreement No.

10-IA11030200-0XX

2/3/11


To the Forest Service program contact, at the address specified in this IA.

To the BLM Farmington Field Office and DOE at the cooperator's address shown in the IA or such other address designated within the IA.


Notices will be effective when they are delivered in accordance with this provision, or on the effective date of the notice, whichever is later.

- D. TERMINATION—INTERAGENCY AGREEMENTS. This IA may be terminated upon 30 calendar days' written notice by any party. In the event of termination of this IA, project/program contacts for DOE, the Forest Service, and the BLM Farmington Field Office will meet to discuss future management of the location covered by this IA.
- E. MODIFICATIONS. Modifications within the scope of this instrument must be made by mutual consent of the parties and by the issuance of a written modification signed and dated by all properly authorized signatory officials before any changes are performed. Requests for modification should be made, in writing, at least 30 days before implementing the requested change.
- F. COMMENCEMENT/EXPIRATION DATE. This instrument is executed as of the last signature and, if effective, through **01/31/2016**, at which time it will expire unless extended by an executed modification signed and dated by all properly authorized signatory officials.
- G. AUTHORIZED REPRESENTATIVES. By signature below, each party certifies that the individuals listed in this document as representative of the individual parties are authorized to act in their respective areas for matters related to this instrument. In witness whereof, the parties hereto have executed this instrument as of the last date written below.

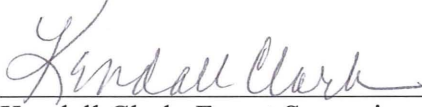
FS Agreement No. 11
Cooperator Agreement No. 10-1A11030200-0XX
Cooperator Agreement No. _____
2/3/11



Dave Evans, District Manager
U.S. Department of the Interior, Bureau of Land Management
Farmington District Office
2/24/2011
Date

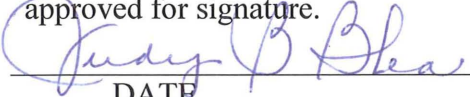


Thomas Pauling, Director
DOE, Office of Legacy Management
Office of Site Operations
2/7/2011
Date

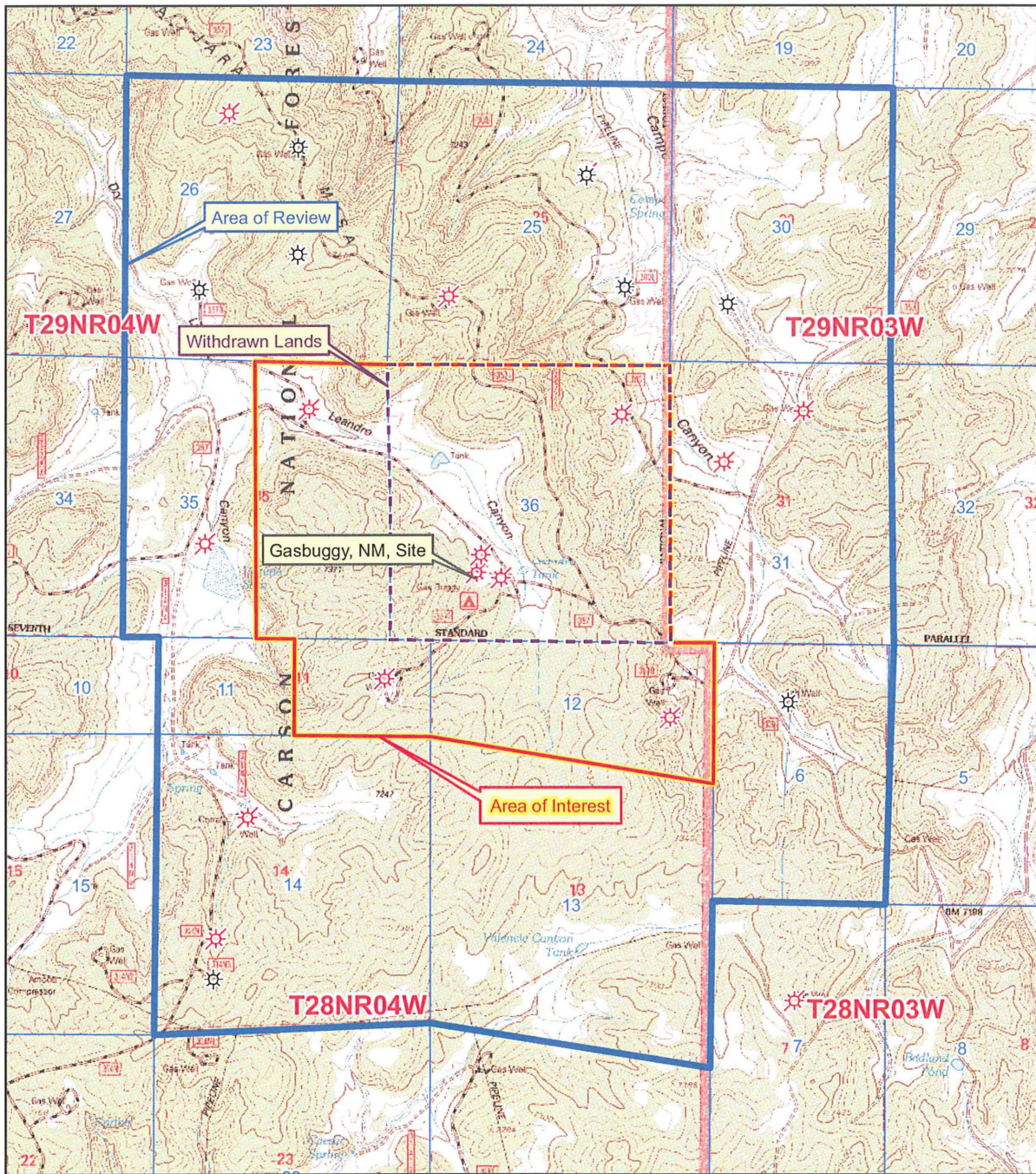


Kendall Clark, Forest Supervisor
USDA, Forest Service
Carson National Forest
3/14/11
Date

The authority and format of this instrument has been reviewed and approved for signature.

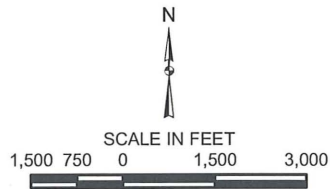


DATE 3/9/11
FS Agreements Coordinator



Legend

-  Producing Gas Well
-  Abandoned Gas Well
-  Withdrawn Lands
-  Area of Interest
-  Area of Review



U.S. DEPARTMENT OF ENERGY
GRAND JUNCTION, COLORADO

Work Performed by
S.M. Stoller Corporation
Under DOE Contract
No. DE-AM01-07LM00060

**Area of Interest and
Area of Review
Gasbuggy, NM Site**

DATE PREPARED:
December 28, 2010

FILENAME:
S0660500