



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
101 MARLETTA STREET, N.W., SUITE 2900
ATLANTA, GEORGIA 30323-0199

DL-080495-01

OFFICIAL RECORD COPY

Falcon Energy, Inc.
ATTN: Mr. Dennis G. Cook
President
P.O. Box 307
Mullens, WV 25882

AUG 04 1995

Gentlemen:

**SUBJECT: TRANSMITTAL AND EXPLANATION OF A MATERIALS LICENSE
(REFERENCE: 256521, 030-33907)**

Enclosed is License No. 47-25343-01 issued in response to your application dated July 3, 1995.

We are enclosing a copy of 10 CFR 20 and specifically call your attention to 10 CFR 20.1101 and 20.2102 (radiation safety programs and record keeping requirements). These sections deal with how you are to manage your radiation safety program to maintain exposures as low as reasonably achievable (ALARA) and require that you:

1. Implement a radiation protection program commensurate with your licensed activities.
2. Use to the extent practicable, procedures and engineering controls based on sound radiation protection principles to maintain occupational doses and doses to members of the public as low as reasonably achievable (ALARA).
3. At least annually conduct a review of your radiation safety program content and implementation.

Enclosures 2-4 are provided for your use in developing and implementing your radiation safety program and audit procedures.

Also, please note that: (1) As indicated in the application, Mr. Dennis G. Cook and any other user of the nuclear gauge(s) must receive the manufacturer's training course on the safe use of the device(s) prior to conducting any licensed activities, and (2) Condition 23.A.2 of the license requires that you notify us when licensed activities will be initiated.

If you have questions, please call me at 404/331-7880.

Sincerely,

Héctor Bermúdez
Nuclear Materials Licensing Section

Enclosures: See page 2

Falcon Energy, Inc.

2

Enclosures:

- 1. License No. 47-25343-01
- 2. Duties and Responsibilities of RSO
- 3. 10 CFR 20
- 4. Annual Audit of Radiation Safety Program

bcc w/o Enclosures:
NMSS Reading File
Docket File

SEND	OFF	RI:DRSS	RI:DRSS	RI:DRSS		
TO	NAME	Hermudez <i>2/5</i>	Wright	PPotter <i>✓</i>		
PCP?	DATE	8/2/95	1/195	1/195	1/195	1/195
Yes	No	COPY?	Yes	No	Yes	No

OFFICIAL RECORD COPY

DOCUMENT NAME: G:\DRSS\NMLS\LICLTR\256521T.HB

ENCLOSURE 2

DUTIES AND RESPONSIBILITIES OF THE RADIATION SAFETY OFFICER

The Radiation Safety Officer (RSO) is responsible for implementing the radiation safety program and ensuring that radiation safety activities are performed in accordance with approved procedures and regulatory requirements in the daily use of gauges.

The RSO's duties and responsibilities include ensuring that:

1. licensed material possessed by the licensee is limited to the kinds (e.g., cesium-137 as a sealed source) and quantities of byproduct material listed on the license;
2. individuals using gauges are properly trained and receive refresher training at least annually to include, as a minimum, participation in a "dry run" of emergency procedures and review of operating and emergency procedures, all changes in regulatory requirements, and deficiencies identified during annual audits;
3. proper authorities are notified in case of accident, damage to gauges, fire, or theft;
4. audits are performed at least annually to ensure that (a) the licensee is abiding by NRC regulations and the terms and conditions of the license (e.g., periodic leak tests, inventories, use limited to trained, approved gauge users), (b) the licensee's radiation protection program content and implementation achieve occupational doses and doses to member of the public that are ALARA (see 10 CFR 20.1101), and (c) the licensee maintains required records with all required information (e.g., records of leak tests, inventories, training of gauge users) sufficient to comply with NRC requirements;
5. results of audits, identification of deficiencies, and recommendations for change are documented (and maintained for at least 3 years), provided to management for review, and prompt action is taken to correct deficiencies;
8. audit results and corrective actions are communicated to all personnel who use licensed material (regardless of their location or the license under which they normally work);
9. all incidents, accidents, and personnel exposure to radiation in excess of ALARA or Part 20 limits are investigated and reported to NRC and other authorities, as appropriate, within required time limits;
10. licensed material is disposed of properly;
11. the license is amended when changes in licensed activities or responsible individuals occur.

ENCLOSURE 4

Annual Audit of Radiation Safety Program

Section 20.1101 of 10 CFR Part 20 requires licensees: (1) to develop, document, and implement a radiation program commensurate with the scope and extent of licensed activities and sufficient to ensure compliance with the regulations, (2) to use procedures and engineering controls to achieve occupational doses and doses to members of the public that are ALARA and (3) to review, at least annually, the radiation program content and implementation. Section 20.2102 of 10 CFR Part 20 requires licensees to maintain records of their radiation protection program. Licensees must maintain records of the provisions of their radiation protection program until the Commission terminates the pertinent license. Licensees must maintain records of audits and other review of program content and implementation for 3 years after the record is made.

As indicated in Enclosure 3, the RSO needs to ensure that annual audits are conducted, but does not necessarily need to do it himself/herself. In fact, if the RSO is one of the authorized gauge users, it may be beneficial for a qualified individual (e.g., radiation safety consultant; the corporate radiation safety officer) who is not associated with day-to-day operations to conduct the audit.

The audit should be sufficiently detailed to ensure that (a) the licensee is abiding by NRC regulations and the terms and conditions of the license (e.g., periodic leak tests, inventories; only trained, approved individuals use gauges independently), (b) the licensee's radiation protection program content and implementation achieve occupational doses and doses to member of the public that are ALARA (see 10 CFR 20.1101), and (c) the licensee maintains required records with all required information (e.g., records of leak tests, inventories, training of gauge users) sufficient to comply with NRC requirements.

These audits may be conducted as "mini-NRC inspections" and may include observation of some or all of the licensee's authorized users during actual or simulated use of gauges. The results of the audit, identification of deficient areas, and recommendations for change need to be documented and provided to licensee management which, in turn, needs to take prompt action to correct any deficiencies noted by the auditor. If the licensee conducts licensed activities at locations other than the one audited or under other licenses, it needs to inform its personnel (at the other locations or working under the other licenses) of the deficiencies noted during audits and of the actions management expects all personnel to take to avoid similar deficiencies.

Document (1) the name and radiation safety qualifications of the individual who will conduct audits, (2) a description of the scope and extent of the audits, (3) a commitment to conduct audits at intervals not to exceed 12 months and to maintain records of the audits for at least 3 years after the record is made, (4) management's commitment to review the documented results of the audit promptly after the audit's completion, and (5) a commitment to take prompt action to correct deficiencies identified during audits, to inform all personnel (including those at other location, and those working under other licenses) of the deficiencies and the actions management expects all personnel to take to avoid similar deficiencies.

(FOR LFMS USE)
INFORMATION FROM LTS

License Fee Management Branch, AMM
and
Regional Licensing Sections

Program Code: _____
Status Code: 3
Fee Category: _____
Exp. Date: 0
Fee Comments: _____
Decom Fin Assur Req'd: _____

LICENSE FEE TRANSMITTAL

A. REGION

1. APPLICATION ATTACHED
Applicant/Licensee: FALCON ENERGY, INC.
Received Date: 950710
Docket No.: 3033907
Control No.: 256521
License No.: _____
Action Type: New Licensee

2. FEE ATTACHED

Amount: _____
Check No.: _____

3. COMMENTS

Signed: _____
Date: _____

B. LICENSE FEE MANAGEMENT BRANCH (Check when milestone 03 is entered)

1. Fee Category and Amount: _____
2. Correct fee Paid. Application may be processed for:
Amendment _____
Renewal _____
License _____
3. OTHER _____

Signed _____
Date _____

LCB	Check # 11
Remitter	5463/132
Check No.	3033907
Amount	3033907
Fee Category	
Type of fee	
Date Check Rec'd.	
Date Completed	
By:	

LICENSE FEE REQUIREMENTS

LICENSE FEE AND DEBT COLLECTION BRANCH
DIVISION OF ACCOUNTING AND FINANCE
OFFICE OF THE CONTROLLER
U.S. NUCLEAR REGULATORY COMMISSION
WASHINGTON, DC 20545-0001

Attn: Rita Messler

*Falcon Energy, Inc.
Attn: Dennis G. Cook
RSO / President
P. O. Box 307
Mullens, WV 25882*

TYPE OF ACTION

NEW LICENSE
 RENEWAL OF LICENSE
 AMENDMENT TO LICENSE

REQUESTED DATE
7/3/95

LICENSE NUMBER

CONTROL NUMBER
256521

I. APPLICATION FEE DUE

Your request for a licensing action is subject to the fee(s) in the category(ies) noted below in accordance with Section 170.31 of the enclosed Federal Register notice. Payment of the fee is required prior to the issuance of the license, renewal, or amendment.

FEE CATEGORY	APPLICATION	RENEWAL	AMENDMENT
<i>3P</i>	<i>\$ 540</i>	\$	\$
	\$	\$	\$
	\$	\$	\$
	\$	\$	\$
	\$	\$	\$
	\$	\$	\$
	\$	\$	\$
	\$	\$	\$
	\$	\$	\$
	\$	\$	\$

FEE(S) DUE	\$
PAYMENT RECEIVED	<i>\$ 540</i>
AMOUNT DUE	<i>\$ 30</i>

Your request was received without the prescribed application fee

We received your Check No. *543* in the amount of \$ *540*. Payment of the additional fee noted above is required.

Your request will increase the scope of your license program. Therefore, your request is subject to the application fee(s) noted above. Refer to Section 170.31 and Footnote 1(d)(2).

Your license expired prior to the receipt of your application for renewal. Therefore, your request is subject to the application fee(s) noted above. Refer to Section 170.31 and Footnote 1(a).

MAKE PAYMENT OF THE FEE(S) TO THE U.S. NUCLEAR REGULATORY COMMISSION AND MAIL THE PAYMENT TO THE ADDRESS LISTED AT THE TOP OF THIS FORM. IF WE DO NOT RECEIVE A REPLY FROM YOU WITHIN 30 CALENDAR DAYS FROM THE DATE LISTED BELOW, WE SHALL ASSUME THAT YOU DO NOT WISH TO PURSUE YOUR APPLICATION AND WILL VOID THIS ACTION.

SIGNATURE LICENSE FEE ANALYST
Rita Messler

CFDCB
[Signature]

LFCB
[Signature]

II. FEE NOT REQUIRED

Enclosed is Check No. _____ which accompanied your request. The fee is not required because:

We received your Check No. _____ in payment of the fee.

The Licensing staff has informed us that your request is to be considered as a continuation of your request dated _____ Control No. _____

Your request was combined, prior to review, with your _____ request. Control No. _____

III. CHECK RETURNED

Enclosed is Check No. _____ which was returned to us by the bank for:

INSUFFICIENT FUNDS

ACCOUNT CLOSED

OTHER

MAIL THE REPLACEMENT CHECK TO THE ADDRESS LISTED AT THE TOP OF THIS FORM AND REFERENCE THE ABOVE CONTROL NUMBER

IV. LICENSE ISSUED WITHOUT THE REQUIRED FEE

License No. _____ Amendment No. _____ issued on _____ was issued without the required fee being collected. The fee required is noted in Section I of this form.

The scope of your licensed program was increased. Therefore, your request is subject to the application fee(s) noted in Section I of this form. Refer to Section 170.31 and Footnote 1(d)(2).

Because of the urgency of your request, the license was issued without remittance of the prescribed fee noted in Section I of this form.

DATE
7/30/95

SENDING FEE FILE #
[Signature]

TRANSMISSION REPORT

08.04.1995 08:53

LFDCB

DATE TIME	DURATION	REMOTE ID	MODE	PAGES	RESULT
08.04 08:52	00'24"	404 331 7437	ECM	1	O.K.

MATERIALS LICENSE

Pursuant to the Atomic Energy Act of 1954, as amended, the Energy Reorganization Act of 1974 (Public Law 93-438), and Title 10, Code of Federal Regulations, Chapter I, Parts 30, 31, 32, 33, 34, 35, 36, 39, 40, and 70, and in reliance on statements and representations heretofore made by the licensee, a license is hereby issued authorizing the licensee to receive, acquire, possess, and transfer byproduct, source, and special nuclear material designated below; to use such material for the purpose(s) and at the place(s) designated below; to deliver or transfer such material to persons authorized to receive it in accordance with the regulations of the applicable Part(s). This license shall be deemed to contain the conditions specified in Section 183 of the Atomic Energy Act of 1954, as amended, and is subject to all applicable rules, regulations, and orders of the Nuclear Regulatory Commission now or hereafter in effect and to any conditions specified below.

<p>Licensee</p> <p>1. Falcon Energy, Inc.</p> <p>2. P.O. Box 307 Mullens, West Virginia 25882</p>	<p>3. License Number 47-25343-01</p> <p>4. Expiration Date August 31, 2000</p> <p>5. Docket or Reference No. 030-33907</p>
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6. Byproduct, Source, and/or Special Nuclear Material	7. Chemical and/or Physical Form	8. Maximum Amount that Licensee May Possess at Any One Time Under This License
A. Barium 133	A. Any sealed source registered pursuant to 10 CFR 32.210 or an equivalent Agreement State regulation	A. No single source to exceed 370 megabecquerels (10 millicuries). Five sources total. (See item 9.A)
B. Cesium 137	B. Any sealed source registered pursuant to 10 CFR 32.210 or an equivalent Agreement State regulation	B. No single source to exceed 370 megabecquerels (10 millicuries). Five sources total. (See item 9.B)
C. Americium 241	C. Any sealed source registered pursuant to 10 CFR 32.210 or an equivalent Agreement State regulation	C. No single source to exceed 9.25 gigabecquerels (250 millicuries). Five sources total. (See item 9.C)

9. Authorized Use:

A., B., and C. For possession and use of sealed source(s) contained in compatible non-portable gauging devices (registered pursuant 10 CFR 32.210 or an equivalent Agreement State regulation) for measuring properties of material, and/or controlling industrial processes.

CONDITIONS

- 10. Licensed material shall be used only at the licensee's facilities located on Route 103, Gary, West Virginia (The Old Gary # 2 Mine).
- 11. The Radiation Safety Officer for this license is Dennis G. Cook.

9508170147 950804
PDP ADOCK 03033907
C PDR

**MATERIALS LICENSE
SUPPLEMENTARY SHEET**

License Number
47-25343-01

Docket or Reference Number
030-33907

(cont.)

CONDITIONS

12. Licensed material shall be used by, or under the supervision of, Dennis G. Cook or other individuals who have successfully completed the device manufacturer's training course for safe use and handling of licensed material.
13. A. Sealed sources shall be tested for leakage and/or contamination at intervals not to exceed 6 months or at such other intervals as specified by the certificate of registration referred to in 10 CFR 32.210.
B. In the absence of a certificate from a transferor indicating that a leak test has been made within 6 months prior to the transfer, a sealed source received from another person shall not be put into use until tested.
C. Sealed sources need not be leak tested if they contain only a radioactive gas; or not more than 100 microcuries of beta and/or gamma emitting material or, are in storage, and are not being used. However, when they are removed from storage for use or transferred to another person, and have not been tested within the required leak test interval, they shall be tested before use or transfer. No sealed source or detector cell shall be stored for a period of more than 10 years without being tested for leakage and/or contamination.
D. The leak test shall be capable of detecting the presence of 0.005 microcurie of radioactive material on the test sample. If the test reveals the presence of 0.005 microcurie or more of removable contamination, a report shall be filed with the U.S. Nuclear Regulatory Commission in accordance with 10 CFR 30.50(b)(2), and the source shall be removed immediately from service and decontaminated, repaired, or disposed of in accordance with Commission regulations. The report shall be filed within 5 days of the date the leak test result is known with the U. S. Nuclear Regulatory Commission, Region II, Division of Radiation Safety and Safeguards, Nuclear Material Inspection Section, 101 Marietta Street, Suite 2000, Atlanta, Georgia 30323-0199. The report shall specify the source involved, the test results, and corrective action taken.
E. The licensee is authorized to collect leak test samples for analysis by Energy Technologies, Inc. (ETI). Alternatively, tests for leakage and/or contamination may be performed by persons specifically licensed by the Commission or an Agreement State to perform such services.
14. Installation, initial radiation surveys, relocation, removal from service, or any similar activity with devices containing licensed material shall be performed only by persons specifically licensed by the Commission or an Agreement State to perform such services.
15. Sealed sources containing licensed material shall not be opened or removed from their respective source holders by the licensee.
16. Each gauge shall be tested for the proper operation of the on-off mechanism and indicator, if any, at no longer than six-month intervals or at such longer intervals as specified by the manufacturer and approved by NRC.
17. The licensee shall operate each gauge within the manufacturer's specified temperature and/or environmental limits such that the shielding and shutter mechanism of the source holder are not compromised.
18. The licensee shall assure that the shutter mechanism is locked in the closed position during periods when a portion of an individual's body may be subject to the direct radiation beam. The licensee shall review and modify as appropriate its "lock-out" procedures whenever a new gauge is obtained to incorporate the device manufacturer's recommendations.
19. The licensee shall conduct a physical inventory every 6 months to account for all sources and/or devices received and possessed under the license.

**MATERIALS LICENSE
SUPPLEMENTARY SHEET**

License Number

47-25343-01

Docket or Reference Number

030-33907

(cont.)

CONDITIONS

20. The licensee shall maintain records of information important to safe and effective decommissioning at the location specified in Item 10 pursuant to the provisions of 10 CFR 30.35(g) until this license is terminated by the Commission.

21. In addition to the possession limits in item 8, the licensee shall further restrict the possession of licensed material to quantities below the minimum limit specified in 10 CFR 30.35(d) for establishing decommissioning financial assurance.

22. Prior to initial use and after installation, relocation, dismantling, alignment, or any other activity involving the source or removal of the shielding, the licensee shall assure that a radiological survey is performed to determine radiation levels in accessible areas around, above and below the gauge with the shutter open.

This survey shall be performed only by persons authorized to perform such services by the Commission or an Agreement State.

23. A. The licensee may not possess and use materials authorized in Items 6, 7, and 8, until:

- 1. The licensee has constructed the facilities and obtained the equipment described in the application and supporting documentation; and
- 2. The licensee has notified the U. S. Nuclear Regulatory Commission, Region II, ATTN: Chief, Nuclear Materials Safety and Safeguards Branch 101 Marietta Street NW, Suite 2900, Atlanta, Georgia 30323-0199, in writing, that the activities authorized by the license will be initiated.

B. In accordance with the requirements set forth in 10 CFR 30.36(d), the licensee shall notify the Chief, Nuclear Materials Safety and Safeguards at the address above, in writing, of a decision not to complete the facility, acquire equipment, or possess and use authorized material

24. Except as specifically provided otherwise in this license, the licensee shall conduct its program in accordance with the statements, representations, and procedures contained in the documents including any enclosures, listed below. The Nuclear Regulatory Commission's regulations shall govern unless the statements, representations and procedures in the licensee's application and correspondence are more restrictive than the regulations.

A. Application dated July 3, 1995.

B. Letter (fax) received on August 3, 1995 [physical location of use].

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

for EARL G. WRIGHT

Date

AUG 04 1995

By

John Lotter
Region II, Nuclear Materials Licensing Section
101 Marietta Street, Suite 2900
Atlanta, GA 30323