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# (FOR LFMS USE) INFORMATION FROM LTS

JUN 2 5 1990

BETWEEN:	
LICENSE FEE MANAGEMENT BRANCH, ARM	PROGRAM CODE: 03120
REGIONAL LICENSING SECTIONS	FEE CATEGORY: 3P EXP. DATE: 19900630 FEE COMMENTS:
A. REGION TO	
1. APPLICATION ATTACHED APPLICANT/LICENSEE: ANTELOPE COAL CO RECEIVED DATE: 900612 DGCKET NO: 3029770 CONTROL NO: 463108 LICENSE NO: 49-26875-01 ACTION TYPE: AMENDMENT	o. JUN 2 5 1990
2. FEE ATTACHED 9/0. 40 AMOUNT: CHECK NO.: 10601391	
3. COMMENTS SIGNED 1	Billie Drustynski
B. LICENSE FEE MANAGEMENT BRANCH (CHECK	WHEN MILESTONE 03 IS ENTERED / V/)
1. FEE CATEGORY AND AMOUNT: 31 66	0
2. CORRECT FEE PAID. APPLICATION MAY B AMENDMENT RENEWAL LICENSE	E PROCESSED FOR:
3. OTHER	
SIGNED	M. Missiel

ANTELOPE COAL COMPANY P.O. DRAWER 1450 DOUGLAS, WYOMING 82633 TELEPHONE 307-464-1133 FAX # 307-464-1204



June 1, 1990

Ms. Vivian Campbell U.S. Nuclear Regulatory Commission 611 Ryan Plaza Drive, Suite 1000 Arlington, TX 76053

RE:

License No. 49-26875-01

JUN 1 2 1990

Dear Ms. Campbell:

This letter will clarify our telephone conversation on this morning regarding the amendments to the above license.

The correct mailing address for all correspondence is:

Antelope Coal Company P.O. Drawer 1450 Douglas, WY 82633 Telephone: (307)464-1133

Please delete Donald E. Burkhart, Jr. from the license as he is no longer employed by Antelope Coal Company. The designated responsible party and Radiation Safety Officer is Larry E. Goodell.

Under the direction of Mr. Goodell, other personnel may be users of the sealed source device. Any personnel who are users of the device will receive training, which will be given by Mr. Goodell, and follow the same guideline as outlined in the license on file.

A copy of Mr. Goodell's training and outline of the class will accompany this letter.

Also, in the amendment we would like to have Item 11 read: Licensed material shall be used by, or under the supervision of, larry E. Goodell. Item 13-D to read: The licensee is authorized to collect leak test samples for analysis for Kay-Ray, or tests for leakage and/or contamination shall be performed by licensee and/or persons specifically licensed by the commission or an agreement state to perform such services.

Completion of application for material license amendment:

- #5 Kay-1/: 4800-X sealed source cesium-137 (50MC), 1 gauge.
- #6 Used as level gauge in coal crusher.
- #7 Larry E. Goodell (copy of certification).

463108

Ms. Vivian Campbell U.S. Nuclear Regulatory Commission June 1, 1990 Page Two

- #8 As per license (copy)
- #9 No problem with extreme heat. Externally mounted on crusher hopper.
- #10 In the past Health Physics Associates, Ltd. NRC #25-16166-01, but we would like to do our own leak testing from time to time.

Survey meter - Texas Nuclear Model 200X, thin end window, GM-TUBE.

Formula =  $\underline{A} = \underline{C}$  or C = A (MCL)  $\times \underline{M2 (mr/h)}$  M1 (mr/h)

#11 Health Physics Associates NRC #25-16166-01

The application for license is also enclosed along with the fee.

Sincerely,

Larry E. Goodell
Employee Relations
and Safety Assistant
Radiation Safety Officer

LEG:11w Enclosures Radiation.leg

## APPLICATION FOR MATERIAL LICENSE

U.S. NUCLEAR REGULATORY COMMISSION APPROVED BY CMS 3180-0120 Expires 6-20-80

INSTRUCTIONS. SEE THE APPRIOPRIATE LICENSE APPLICATION GUIDE FOR DETAILED INSTRUCTIONS FOR COMPLETING APPLICATION. SEND TWO COPIES OF THE ENTIRE COMPLETED APPLICATION TO THE NRC OFFICE SPECIFIED BELOW APPLICATIONS FOR DISTRIBUTION OF EXEMPT PRODUCTS FILE APPLICATIONS WITH IF YOU ARE LOCATED IN U.S. NUCLEAR REGULATO'S COMMISSION DIVISION OF INDUSTRIA', AND MEDICAL NUCLEAR SAFETY NMSS WASHINGTON, DC 20656 ILLINOIS INDIANA, IOWA MICHIGAN, MINNESOTA, MISSOURI, OHIO, OR WISCONSIN, SEND APPLICATIONS TO U.S. NUCLEAR REGULATORY COMMISSION, REGION III MATERIALS LICENSING SECTION 799 ROOSEVELT ROAD GLEN ELLYN, IL. 60:137 ALL OTHER PERSONS FILE APPLICATIONS AS FOLLOWS. IF YOU ARE CONNECTICUT, DELY WARE, DISTRICT OF COLUMBIA MAINE, MARYLAND, MASSACHUSETTE, JEW HAMPSHIRE, NEW JERSTY, NEW YORK, PENNEYLVANIA, RHODE ISLAND, O', VERMONT, BEND APPLICATIONS TO: ARKANSAS COLORADO, IDAHO, KANSAS LOUISIANA, MONTANA NEBRASKA, NEW MEXICO, NORTH DAKOTA, OKLAHOMA, SOUTH DAKOTA, TEXAS, UTAH, OR WYOMING, BEND APPLICATIONS TO: U.S. NUCLEAR F (QUILATORY COMMISSION FIGION ) NUCLEAR MATEL VILS SAFETY SECTION B 476 ALLENDALE R. 40 U.S. NUCLEAR REGULATORY COMMISSION REGION IV MATERIAL RADIATION PROTECTION SECTION 611 RYAN PLAZA DRIVE, SUITE 1000 ARLINGTON, TX 76011 ALABAMA, FLORIDA, GEORGIA, KENTUCKY, MISBISSIPP, NORTH CAROLINA, PUERTY, RIGO, SOUTH CAROLINA, TENNESBEE, VIRGINIA VIRGIN ISLANDS, OR WEET VI. TINIA, BEND APPLICATIONS TO ALASKA ARIZONA, CALIFORNIA, HAWAII, NEVADA, DREGON, WASHINGTON, AND U.S. TERRITORIES AND POSSESSIONS IN THE PACIFIC, SEND AFPLICATIONS U.S. NUCLAR REGULATORY COMMISSION, REGRAC 6 NUCLAR MA. TRIALS SAFETY SECTION 101 MARIETTA ""REET, SUITE 2000 ATLANTA, GA & VEZ. U.S. NUCLEAR REGULATORY COMMISSION, REGION V NUCLEAR MATERIALS SAFETY SECTION 1880 MARIA LANE, SUITE 210 WALNUT CREEK, CA 18888 JUN 1 2 1990 PERSONS LOCATED IN AGREEMENT STATES SEND APPLICATIONS TO THE U.S. NUCLEAR REGULATORY COMMISSION ONLY IF THEY WISH TO POSSESS AND USE LICENSED MATERIAL IN STATES SUBJECT TO U.S. NUCLEAR REGULATORY COMMISSION JURISDICTION. 1. THIS IS AN APPLICATION FOR (Check appropriate term) 2 NAME AND MAILING ADDRESS OF APPLICANT (Include 20 Code) A. NEW LICENSE Antelope Coal Company \* AMENDMENT TO LICENSE NUMBER 49-26875-01 P.O. Drawer 1450 C. RENEWAL OF LICENSE NUMBER . Douglas, WY 82633 3. ADDRESS (ES) WHERE LICENSED MATERIAL WILL BE USED OR POSSESSED Antelope Coal Company Antelope Creek and Convrse County Road No. #37. P.O. Drawer 1450 Douglas, WY 82633 A NAME OF PERSON TO BE CONTACTED ABOUT THIS APPLICATION TELEPHONE NUMBER (307)464-1133 Larry E. Goodell SUBMIT ITEMS & THROUGH 11 ON BI . 11 PAPER. THE TYPE AND SCOPE OF INFORMATION TO BE PROVIDED IS DESCRIBED IN THE LICENSE APPLICATION GUIDE RADIDACTIVE MATERIAL

a. Element and mass number, b. chemical and/or physical form, and c. maximum amount which will be possessed at any one time. 6. PURPOSE(S) FOR WHICH LICENSED MATERIAL WILL BE USED. INDIVIDUALISI RESPONSIBLE FOR RADIATION SAFETY PROGRAM AND THEIR TRAINING AND EXPERIENCE A TRAINING FOR INDIVIDUALS WORKING IN OR PREQUENTING RESTRICTED AREAS PACILITIES AND EQUIPMENT IO. RADIATION SAFETY PROGRAM 12 LICENSEE FEES (See 10 CFE 170 and Section 170.31) MOUNT \$ 60 11. WASTE MANAGEMENT FEE CATEGORY 3 CERTIFICATION (Must be completed by applicant) THE APPLICANT UNDERSTANDS THAT ALL STATEMENTS AND REPRESENTATIONS MADE IN THIS APPLICATION ARE THE APPLICANT AND ANY OFFICIAL EXECUTING THIS CERTIFICATION ON BEHALF OF THE APPLICANT, NAMED IN ITEM 2, CERTIFYTHAT THIS APPLICATION IS PREPARED IN CONFORMITY WITH TITLE 10, CODE OF FEDERAL REQULATIONS, PARTS 30, 32, 33, 34, 35, AND 40 AND THAT ALL INFORMATION COMPAINED HEREIN IS TRUE AND CORRECT TO THE BEST OF THEIR KNOWLEDGE AND BELIEF. WARNING 18 U.S.C. SECTION 1001 ACT OF JUNE 25, 1948, 62 CTAT, 745 MAKES IT A CRIMINAL OFFENSE TO MAY TO ANY DEPARTMENT OR AGENCY OF THE UNITED STATES AS TO ANY MATTER WITHIN ITS JURISDICTION ULLY PALSE STATEMENT OR REPRESENTATION SIGNATURE -CERTIFYING OFFICER TYPED/PRINTED NAME TITLE Relations Empl. ₹ 06-01-90 Larry E. Goodell damy Safety Assistant FOR NAC USE ONLY YPE OF FEE FEE CATEGORY FEE LOG COMMENTS Anid Jun 2.16 30 CHECK NUMBER AMOUNT RECEIVED 860 10601391 APPROVEDBY 6/19/60 M. Messer

# Certificate Of Training

This is to certify that

LARRY E. GOODELL

Has Successfully Completed a Radiation Safety Training Course presented by Texas Nuclear Corporation.

TEXAS NUCLEAR A Baker Hughes company

Insued	18TH	Buy Of MAY	19 90
	119	Hamburk Shipsicist	
7	W.	realth Physician	•
	John	Melson	
7	7	President	



#### AGENDA TEXAS NUCLEAR RADIATION SAFETY TRAINING COURSE

#### Radioactive Materials

- A. Isotopes
- B. Decay
- C. Half-Life

#### Types of Radiation

### Radiation Interaction with Matter

- A. Ionizing Radiation
  - 1. Electromagnetic
  - 2. Charged Particle
  - 3. Neutron
- B. Specific Ionization

#### Radiation Domimetry

- A. Pefinitions and Units of Dose
- B. Quality Factor C. Gamma Exposure Rate
- D. Neutron Exposure Rate

#### Distance, Time, Shielding

- A. Inverse Square Law
- B. Half-Value Layer

#### Biological Effects

- A. Doss Limits
- B. Radiation Protection Guides

#### Radiation Detection

- A. Detection Instruments
  - 1. Basic Operation
  - 2. Survey Meters

Radiation Safety Training Course Agenda Page 2

Personnel Monitoring

Working Definitions

Preparation for Laboratory

- A. Form Review
- B. Team Assignment
- C. Surveying and Leak Testing Demonstration

#### Laboratory Work at Texas Nuclear Corporation

- A. Check-out and re-briefing on use of portable radiation survey meters
- B. Survey Density, Level or Belt Weigh Scales
- C. Prepare Survey Forms
- D. Leak Test Devices Using QT/1S Procedure
- E. Count Swabs
- F. Prepare Leak Test Certificates

#### Regulatory Control

- A. Title 10 Code of Federal Regulations
- B. Agreement States
- C. Licensing Procedures D. Purpose of Licensing
- E. User Responsibility
- F. Radiation Areas and Posting

Shipping Radioactive Material

Occupational Safety & Health Act

Emergency Procedures

- A. Guidelines
- B. Fire or Explosion
- C. Incident Report

Summary of Topics

- A. Role of Radiation Safety Personnel
- B. Class Discussion

Written Test on Lectures and Homework Assignments

Note: Homework (approximately 2 hours) is assigned each night during the course.

JUN 1 2 1990

#### ANTELOPE COAL COMPANY TRAINING OUTLINE FOR STALED SOURCE DEVICE USERS

#### PURPOSE

Train users in the safe operation of the sealed source device.

#### APPLICABILITY

All personnel who are to be designated as users must be trained by the Radiation Safety Officer before being so designated.

#### TOPICS

The training will include at a minimum the following topics.

- Ionizing radiation 1.
  - A. Types
  - B. Characteristics
  - C. Sources
  - D. Quantities
- Sources of exposure to radistion 2.
- Health hazards of radiation 3.
  - A. Irradiation
  - B. Contamination
    - Internal
       External
- 4. Protective measures
  - A. Shielding
  - B. Distance
  - C. Time
- 5. Radiation Monitoring
- Emergencies involving radioactive materials 6.
- 7. NRC requirements and regulations
- Records 8 .

## 9. Operation of the Kay-Ray 4800% sealed source device

- A. Testing
- B. Records
- C. Operation
- D. Postings
- E. Emergencies
  - i. Operations
  - ii. Notification

#### Evaluation

Users will be evaluated on their knowledge by their active participation in the training and a written examination, a score of 75% is required to pass.

#### Instruction

Methods of instruction will include oral instruction, handout materials and audic/visual materials as appropriate. Instruction time will be sufficient for potential users to grasp the information however it will not be less than 2 hours.

Sincerely yours.

Daving & Social Larry E. Goodell

Employee Relations/Safety Radiation Safety Officer

東州 1 2 1990