

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 1, Parts 30, 31, 32, 33, 34, 35, 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.

Licensee

1. AMAX Coal West, Inc.
Coal Dryer
2. Belle Ayr Mine
P.O. Box 3039
Gillette, Wyoming 82717

In accordance with letter dated
September 10, 1996

3. License number 49-26963-02 is amended in
its entirety to read as follows:

4. Expiration date October 31, 2001

5. Docket or
Reference No 030-32444

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. Californium-252

A. Sealed sources
registered either
with NRC under
10 CFR 32.210 or with
an Agreement State
and incorporated in a
compatible bulk
sample elemental
analyzer as specified
in Item 9 of this
license

A. See Condition
9.A.

9. Authorized use

A. To be used, for evaluated and approved licensing purposes, in compatible Gamma-Metrics, Inc. bulk sample elemental analyzers that have been registered either with NRC under 10 CFR 32.210 or with an Agreement State and have been distributed in accordance with an NRC or Agreement State specific license authorizing distribution to persons specifically authorized by an NRC or Agreement State license to receive, possess, and use the devices.

CONDITIONS

10. Licensed material shall be used only at the licensee's facilities located at AMAX Coal West, Inc., Belle Ayr Mine, 2273 Bishop Road, Gillette, Wyoming.

230093

OFFICIAL RECORD COPY

9612230226 961212
PDR ADOCK 03032444
C PDR

ML40

**MATERIALS LICENSE
SUPPLEMENTARY SHEET**

License Number

49-26963-02

Docket or Reference Number

030-32444

Amendment No. 04

11. A. Licensed material shall be used by, or under the supervision of, Steven R. Laird and/or Neil Hutten.
- B. The Radiation Safety Officer for this license is Steven R. Laird.
12. Sealed sources or detector cells containing licensed material shall not be opened or sources removed from source holders by the licensee.
13. A. Sealed sources or detector cells 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. Notwithstanding Paragraph A of this Condition, sealed sources designed to emit alpha particles shall be tested for leakage and/or contamination at intervals not to exceed 3 months.
- C. 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.
- D. Sealed sources need not be leak tested if:
 - (i) they contain only hydrogen-3; or
 - (ii) they contain only a radioactive gas; or
 - (iii) the half-life of the isotope is 30 days or less; or
 - (iv) they contain not more than 100 microcuries of beta and/or gamma emitting material or not more than 10 microcuries of alpha emitting material; or
 - (v) they are not designed to emit alpha particles, 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.
- E. 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

MATERIALS LICENSE
SUPPLEMENTARY SHEET

License Number

49-26963-02

Docket or Reference Number

030-32444

Amendment No. 04

result is known with the U.S. Nuclear Regulatory Commission, Region IV, 611 Ryan Plaza Drive, Suite 400, Arlington, Texas 76011, ATTN: Director, Division of Nuclear Materials Safety. The report shall specify the source involved, the test results, and corrective action taken.

- F. Tests for leakage and/or contamination shall be performed by Gamma-Metrics, Inc. or by other persons specifically licensed by the Commission or an Agreement State to perform such services.
14. Each device shall be tested for the proper operation of the on-off mechanism and indicator, if any, at no longer than 6-month intervals or at such longer intervals as specified by the manufacturer and approved by U.S. Nuclear Regulatory Commission.
15. Installation, initial radiation survey, relocation, removal from service, maintenance, and repair of devices containing sealed sources shall be performed by Gamma-Metrics, Inc., or by persons specifically licensed by the Commission or an Agreement State to perform such services. Installation, replacement, and disposal of sealed sources shall be performed only by persons specifically licensed by the Commission or an Agreement State to perform such services.
16. 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 device with the shutter open. This survey shall be performed only by persons authorized to perform such services by the Commission or an Agreement State.
17. The licensee shall operate each device 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 conduct a physical inventory every 6 months to account for all sources and/or devices received and possessed under the license.
19. 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.

**MATERIALS LICENSE
SUPPLEMENTARY SHEET**

License Number

49-26963-02

Docket or Reference Number

030-32444

Amendment No. 04

20. 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 8, 1991
- B. Letter dated October 22, 1991
- C. Letter dated October 25, 1991
- D. Letter dated March 25, 1993
- E. Letter dated March 2, 1994
- F. Letter received October 17, 1995
- G. Letter dated September 4, 1996
- H. Letter dated September 10, 1996
- I. Letter dated November 5, 1996

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

Date DEC 12 1996

By M.C. Hernandez
Christi Hernandez
Nuclear Materials Licensing Branch
Region IV
Arlington, Texas 76011



UNITED STATES
NUCLEAR REGULATORY COMMISSION

REGION IV

611 RYAN PLAZA DRIVE, SUITE 400
ARLINGTON, TEXAS 76011-8064

December 12, 1996

AMAX Coal West, Inc.
Coal Dryer
Belle Ayr Mine
ATTN: Steven R. Laird
Radiation Safety Officer
P.O. Box 3039
Gillette, Wyoming 82717

SUBJECT: LICENSE AMENDMENT

Please find enclosed License No. 49-26963-02. You should review this license carefully and be sure that you understand all conditions. If you have any questions, you may contact me at 817-860-8217.

NRC expects licensees to conduct their programs with meticulous attention to detail and a high standard of compliance. Because of the serious consequences to employees and the public which can result from failure to comply with NRC requirements, you must conduct your program involving radioactive materials in accordance with the conditions of your NRC license, representations made in your license application, and NRC regulations. In particular, note that you must:

1. Operate in accordance with NRC regulations 10 CFR Part 19, "Notices, Instructions and Reports to Workers: Inspection and Investigations," 10 CFR Part 20, "Standards for Protection Against Radiation," and other applicable regulations.
2. Possess radioactive material only in the quantity and form indicated in your license.
3. Use radioactive material only for the purpose(s) indicated in your license.
4. Notify NRC in writing of any change in mailing address (no fee required if the location of radioactive material remains the same).
5. Request and obtain written NRC consent before transferring your license or any right thereunder, either voluntarily or involuntarily, directly or indirectly, through transfer of control of your license to any person or entity. A transfer of control of your license includes not only a total change of ownership, but also a change in the controlling interest in your company whether it is a corporation, partnership, or other entity. In addition, appropriate license amendments must be requested and obtained for any other planned changes in your facility or program that are

contrary to your license or contrary to representations made in your license application, as well as supplemental correspondence thereto, which are incorporated into your license. A license fee may be charged for the amendments if you are not in a fee-exempt category.

6. Maintain in a single document decommissioning records that have been certified for completeness and accuracy listing all the following items applicable to the license:
 - Onsite areas designated or formerly designated as restricted areas as defined in 10 CFR 20.3(a)(14) or 20.1003.
 - Onsite areas, other than restricted areas, where radioactive materials in quantities greater than amounts listed in Appendix C to 10 CFR 20.1001-20.2401 have been used, possessed, or stored.
 - Onsite areas, other than restricted areas, where spills or other unusual occurrences involving the spread of contamination in and around the facility, equipment, or site have occurred that required reporting pursuant to 10 CFR 30.50(b)(1) or (b)(4), including areas where subsequent cleanup procedures have removed the contamination.
 - Specific locations and radionuclide contents of previous and current burial areas within the site, excluding radioactive material with half-lives of 10 days or less, depleted uranium used only for shielding or as penetrators in unused munitions, or sealed sources authorized for use at temporary job sites.
 - Location and description of all contaminated equipment involved in licensed operations that is to remain onsite after license termination.
7. Submit a complete renewal application with proper fee, or termination request at least 30 days before the expiration date on your license. You will receive a reminder notice approximately 90 days before the expiration date. Possession of radioactive material after your license expires is a violation of NRC regulations.
8. Request termination of your license if you plan to permanently discontinue activities involving radioactive material.

You will be periodically inspected by NRC. Failure to conduct your program in accordance with NRC regulations, license conditions, and representations made in your license application and supplemental correspondence with NRC will result in enforcement action against you. This could include issuance of a notice of violation; imposition of a civil penalty; or an order suspending, modifying, or revoking your license as specified in the "General Statement of Policy and Procedure for NRC Enforcement Actions" (Enforcement Policy), 60 FR 34381, June 30, 1995.

DEC 12 1996

AMAX Coal West, Inc.

-3-

Thank you for your cooperation.

Sincerely,

A handwritten signature in cursive script that reads "M. C. Hernandez".

Christi Hernandez, Radiation Specialist
Nuclear Materials Licensing Branch

Docket: 030-32444
License: 49-26963-02
Control: 466199

Enclosures: As stated

DEC 12 1996

DOCUMENT NAME: G:\NMLS.O\49-26963.MLC

To receive copy of document, indicate in box: "C" = Copy without enclosures "E" = Copy with enclosures "N" = No copy

RIV:NMLB	N					
MCHernandez	MCH					
12/12/96						

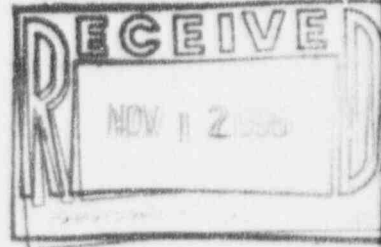
OFFICIAL RECORD COPY



M/S #16
Wyoming Operations
Belle Ayr & Eagle Butte Mines
Post Office Box 3039
Gillette, Wyoming 82717-3039
(307) 687-3460
FAX (307) 687-3480

T2

Thomas J. Lien
Vice President



November 5, 1996

Ms. Christi Hernandez, Radiation Specialist
United States Nuclear Regulatory Commission
Region IV
611 Ryan Plaza Drive, Suite 400
Arlington, TX 76011-8064

SUBJECT: LICENSE AMENDMENT
Docket: 030-32444
License: 49-26963-02
Control: 466199

Dear Ms. Hernandez:

I received your letter dated October 15, 1996, in which you listed eleven (11) exceptions to our request for an amendment to our byproduct material license. I discussed those exceptions with GAMMAMETRICS, the manufacturer of the FastLab device, as well as our own operations personnel. As appropriate, we responded to each exception on a paragraph by paragraph basis by providing additional information and clarification as set out below.

We acknowledge that the amendment request is for the addition of a sealed source and device combination that is different than that which is authorized by our current license. This is because, after a discussion with NRC personnel, it was our understanding that it would be simpler to add the sealed source material and device to our existing license rather than make an application for a new license.

In any event, the additional information required by your office is set out as follows:

NRC Exception 1(A). Material to be Possessed

Your letter indicates that you wish to add to your license a Gamma-Metrics FastLab which contains a californium-252 sealed source.

Provide the following: (a) identification of each source by isotope, manufacturer, and model number; (b) identification of each device by manufacturer and model number; and (c) the maximum amount of radioactive material that will be in each named source. NOTE: the device and sealed source combinations should be clearly and specifically keyed to one another.

Amax Responses:

a) There are a maximum of three (3) sources. The isotope in each source is

466199

Californium 252. The sources are manufactured by Frontier Technologies as a Model 100.

b) There is one (1) device only. It is manufactured by GAMMAMETRICS as a Model "FastLab" and will be the device using the three Californium Model 100 sources.

c) There will be a maximum of 100 micrograms of radioactive material per source.

NRC Exception 1(B).

In addition, it is not clear whether or not you wish to maintain the current sealed source and device (Co-60 in a Berthold Systems, Inc. fixed gauging device) on your license.

Please indicate if you wish to keep the sealed source and device currently listed on your license or if you wish to delete them.

Amax Responses:

The sealed source and device currently listed on our license, a Berthold Systems, Inc. fixed gauging device using a Cobalt 60 sealed source, should be deleted from the license as the source has been returned to the manufacturer.

NRC Exception 2(A). Individuals Responsible for Radiation Safety Program - Their Training and Experience

Your letter indicates that Steven R. Laird will continue as Radiation Safety Officer and that licensed material shall be used under his supervision. Records previously submitted document Mr. Laird's radiation safety training. However, our records do not document Mr. Laird's training in the use of the Gamma-Metrics FastLab device. In addition, your letter does not indicate the individual responsible for services such as installation, initial radiation survey, maintenance, and leak testing.

Please provide documentation of Mr. Laird's training in the use of the device(s).

Amax Responses:

Licensed material will be used by, or under the supervision of, **Steven R. Laird**, the site Radiation Safety Office (hereinafter referred to as "the RSO"), who will be trained in the safe use and operation of the FastLab by the manufacturer at the time the device is installed. Additionally, **Neil Hutten** will act as the alternate RSO. Documentation concerning Mr. Hutten's RSO training is attached as Exhibit "A". Mr. Hutten will also be trained in the safe use and operation of the FastLab at the time the device is installed.

NRC Exception 2(B).

If all services will be performed by the manufacturer, distributor, or other person specifically licensed to perform these services, the training and instruction provided in the use and operation of the device at the time of installation is satisfactory. If training will be given at the time the device is installed, you should include a commitment that the device will not be operated until the training has been received.

Please provide specific information for each individual named as a "responsible individual."

Amax Responses:

All services including, but not limited to, installation, initial radiation surveys, leak testing, physical inventorying, and maintenance, will be performed by the manufacturer, or his designated representative, specifically licensed to perform these services. Training in the use and operation of the FastLab will be given to **Steven R. Laird** (the RSO) and **Neil Hutten** (the alternate RSO) at the time of installation and will be conducted by a qualified GAMMAMETRICS service engineer. The device will not be operated until the aforementioned training has been received.

NRC Exception 3. Training Provided to Other Users

Your letter does not specify the training to be provided to other users. To state that users will "have received proper training in the use of the sealed source unit" is not sufficient for the NRC to evaluate your training program.

If persons other than those named as a "responsible individual" will operate the device you should make a commitment that any employee who will operate the device will attend the training and instruction given at the time of installation or will receive equivalent training and instruction. If equivalent training is given, provide an outline of the training and show its equivalency to the training offered by the device installer. You should also name the instructor of the equivalent training.

Amax Response:

At the time of installation, a qualified GAMMAMETRICS (the manufacturer) service engineer will provide training and instruction in the use and operation of the FastLab to all employees and other persons, if any, who will operate the device. The device will not be operated until the aforementioned training has been received. Training of employees and other persons subsequent to the training given at the time of installation will also be conducted by GAMMAMETRICS personnel.

NRC Exception 4. Facilities and Equipment

Your letter does not provide information on your facilities and equipment with regard to the Gamma-Metrics FastLab device.

Please submit the following:

- (a) a sketch of the proposed location of the device within your facility,
- (b) the environmental conditions to which the device will be exposed,
- (c) a description of a cooling system, its maintenance, the method and procedures for detecting a cooling system failure, procedures for coping with a cooling system failure, and the consequences of its failure (if applicable),
- (d) information on the maintenance of the device; and
- (e) emergency procedures to be followed in the event of an accident involving damage to the device.

Amax Response:

- a) A sketch of the proposed location of the device within the facility is shown on Exhibit "B" which is attached hereto and by reference made a part hereof.
- b) The device will be housed in a heated, air conditioned room located within a larger building. Temperatures within the room should vary between 60 and 80 degrees Fahrenheit. The device will not be exposed to any exterior weather conditions such as extreme temperatures, rain, snow, sleet, hail or other precipitation events, wind, dust or other environmental conditions.
- c) The device utilizes a sealed source. The source is contained in a double encapsulated Zircalloy Savannah River type CF-100 capsule designed to survive even a complete destruction of the device by fire. It has no internal cooling system; thus, no maintenance is required. A separate air conditioning (AC) unit will be used to cool the room in which the device resides; however, the AC unit will in no way be connected with the FastLab device. The AC unit will be maintained by a contract air conditioning service representative. If the AC unit fails, it will readily observable by site personnel at which time the AC contract representative will be telephoned and instructed to come out to the mine to repair the unit. The only effect of an AC unit failure on the FastLab device is that under extreme conditions, the accuracy of the instrument might be affected.
- d) By contract, maintenance of the device, and all other servicing to include, but not limited to, initial radiation surveys, periodic leak tests, replenishing of sources, physical surveys, etc., will be performed by the manufacturer, or his

representative, who are specifically licensed to perform the foregoing maintenance and servicing

- e) The device utilizes a sealed source. The source is contained in a double encapsulated Zircalloy Savannah River type CF-100 capsule designed to survive even a complete destruction of the device by fire. In the event, however, that an accident damages the device, then the licensee shall immediately contact the manufacturer and suspend operation of the device until it has been repaired by the manufacturer or other person holding a specific license. Within 30 days of receiving notice that the device was damaged, the licensee shall file a report with the Nuclear Regulatory Commission, Regional Office, that contains a brief description of the event and the remedial action taken. The licensee shall ensure that an emergency telephone number list showing the phone numbers of the NRC, GAMMAMETRICS, and the responsible individuals to call in the event of an emergency are posted at telephones near the device.

NRC Exception 5. Performance of Service Operations

Your letter does not address device service operations.

Please specify the name, address, and the license number of the person or firm who will provide service operations.

Amax Response:

The name, address and license number of the firm who will provide service operations is:

GAMMAMETRICS
5788 Pacific Center Blvd.
San Diego, CA 92121
California License No. 3775-80

In case of Emergency call: (619-450-9811).

NRC Exception 6. Personnel Monitoring Equipment

Your letter does not address the use of personnel monitoring equipment with regard to the Gamma-Metrics FastLab device. 10 CFR 20.1502 requires, in part, that each licensee monitor occupational exposure to radiation and shall supply and require the use of individual monitoring devices by adults that are likely to receive, in 1 year from sources external to the body, a dose in excess of 10 percent of the limits in § 20.1201(a). The specified annual dose limits are 5 rems whole body and 50 rems skin and extremities. Thus, you will not need to monitor users if you can demonstrate, in accordance with 10 CFR 20.1502, that individuals using devices which contain licensed material are not likely to receive a radiation dose in excess of

10 percent of the allowable limits.

Please provide either (a) documentation of your evaluation that unmonitored users are unlikely to receive doses in excess of 10 percent of the regulatory limit or (b) a commitment for personnel monitoring, including: the name of the supplier of the monitoring equipment you will use or a commitment to use any supplier accredited by the National Voluntary Laboratory Accreditation Program, identification of the type of personnel monitoring equipment that will be used, and specification of the frequency with which personnel monitoring will be exchanged. (NOTE: if you propose to service the device, you should provide personnel monitoring equipment for personnel who perform the service operations.)

Amax Response:

According to the manufacturer, Personnel Monitoring Equipment is not required in connection with the GAMMAMETRICS FastLab device. With the exception of only one point, all points on the surface of the device as shown in the accompanying sketch (see Exhibit "C") are at or below .5 mr/hr. The one point higher than .5 mr/hr is point "D" and is the point used for the following calculation. Point "D" is the point of insertion of a bucket of raw material for elemental analysis by an operator. The radiation at this point is 1 mr/hr. Using a scenario of 2 hours per day, 250 days per year exposure to an operator's hands in area "D", the total dose to the operators extremity (hands) would be as shown:

$$.1\text{mr/hr}(\text{max. dose rate}) \times 2 \text{ hours/day} \times 250 \text{ days/year} = 0.50 \text{ rem}$$

Note that 0.50 rem is significantly less than the 5 rem specified annual dose limit for extremities (which is 10% of the 50 rems specified annual dose limit for extremities.) Using a similar scenario for a whole body calculation the numbers are as follows:

$$.5\text{mr/hr}(\text{max. dose rate}) \times 2 \text{ hours/day} \times 250 \text{ days/year} = 0.25 \text{ rem}$$

Note that .25 rem is half of the 0.5 rem specified annual dose limit for whole body (which is 10% of the 5 rems specified annual dose limit for whole body.) In this case it should be noted that the calculation uses a maximum dose rate of 0.5 mr/hr which is significantly greater than the average whole body dose rate an operator would receive, therefore making the calculation conservative.

In conclusion, from both an extremities and a whole body perspective, unmonitored users of FastLab will not receive doses in excess of 10 percent of the regulatory limit and therefore personnel monitoring is not necessary.

NRC Exception 7. Radiation Detection Instruments

Your letter does not address radiation detection instruments.

Please provide a statement regarding the possession and use of a radiation detection

instrument or a statement regarding the fact that a radiation detection instrument is not required. (NOTE: if you propose to service the device, you must have available an appropriate, operable, and calibrated instrument.)

Amax Response:

Radiation detection equipment is not necessary on a day-to-day basis for operation of the device (refer to the discussion of radiation levels in section 6, above). In addition, Licensee has entered into a maintenance contract with the manufacturer, GAMMAMETRICS, to conduct radiation surveys and leak testing; therefore, the manufacturer will be responsible for all instruments necessary to conduct radiation surveys and leak testing.

NRC Exception 8. Leak Testing

Your letter does not address leak testing with regard to the Gamma-Metrics FastLab device. The options for leak testing are: (a) engage the services of a consultant or commercial facility to take samples, evaluate the samples, and report the results to you; (b) use a commercial leak test kit, take the samples and send them to the kit supplier who evaluates the samples and reports the results to you; or (c) perform the entire leak test sequence yourself.

Please specify which option you will utilize, provide specific information appropriate to the selected option, and provide the frequency at which leak tests will be performed.

Amax Response:

Licensee has entered into a maintenance contract with the manufacturer, GAMMAMETRICS, to conduct radiation surveys and leak testing. The leak tests will be conducted on intervals not to exceed 6 months.

NRC Exception 9. Lock-Out Procedures

Your letter does not address lock-out procedures for the Gamma-Metrics FastLab device.

Please provide a commitment to prepare lock-out procedures, provide the procedures to your personnel, and post the procedures. In addition, please list the name of the individual responsible for ensuring that the lock-out procedures are followed.

Amax Response:

According to the manufacturer, the GAMMAMETRICS FastLab provides a redundant source lock-out system. The first level of security comes in the form of a padlocked metal box at the point of insertion of the source into the shield assembly. The second level of security is a locked door on the rear of the FastLab assembly. The

design of the device does not provide for a source shutter that requires locking out during service. Licensee will commit to preparing lock-out procedures applicable to this device, will provide the procedures to Licensee's personnel, and will post the procedures in a conspicuous location near the FastLab device. The RSO will be the person responsible for ensuring that applicable lock-out procedures are followed.

NRC Exception 10. Performance of Services

Your letter does not address the services, if any, you will perform on the Gamma-Metrics FastLab device.

If you request authorization to service the device, you must either state that you will follow the written procedures provided by the device manufacturer for each service operation requested or submit the procedures you propose to use of each service operation requested.

Amax Response:

Licensee has entered into a maintenance contract with the manufacturer, GAMMAMETRICS, to conduct radiation surveys, leak testing, and other maintenance services as required. Licensee does not request authorization to service the device.

NRC Exception 11. Waste Management

Your letter does not address disposition of the Gamma-Metrics FastLab device. Because of the licensed material contained in the device, your only option for disposal is to transfer the device to an authorized recipient.

Please provide a commitment, that for disposal, the device will be returned to the original supplier/manufacturer or to another specifically licensed recipient.

Amax Response:

In the event that Licensee elects to dispose of the device, Licensee is committed by certain maintenance service agreements and source refurbishment agreements to return the device to the original manufacturer - GAMMAMETRICS.

As requested, the above paragraphs set out Licensee's responses to your exceptions. For your convenience, we have provided duplicate copies of these responses. If, after you resume your review, you have questions or require clarification on any of the information stated above, please contact me at (307) 687-3424.

Sincerely,

Steven R. Laird, RSO

EXHIBIT "A"

LICENSE AMENDMENT

Docket: 030-32444

License:49-26963-02

Control:466199

Certificate of Completion

awarded to

Neil Hutten

for participation in a radiation safety training course

Given by Engelhardt & Associates, Inc.

January 8-10, 1996

Las Vegas, NV

Susan Engelhardt

Susan J. Engelhardt, M.S.

Ralph Grunewald

Ralph Grunewald, Ph.D.

Dee Kaiser

Dee Ann Kaiser, M.S.

Judith Grunewald

Judith Grunewald, R.N., M.S.

Radiation Safety Seminar

January 8-10, 1996

Las Vegas, Nevada

Day One	Description	Objectives	Trainer(s)
08:00 - 08:30 am	Continental Breakfast	Not Applicable (NA)	
08:30 - 08:40	Seminar Objectives/Overview	Understand seminar objectives. Meet trainers.	Bob Kaiser
08:40 - 09:00	How Radiation is Used <ul style="list-style-type: none"> • Medical uses • Industrial uses • Academic uses 	Know common uses of radiation in industry, research & medicine.	Sue Engelhardt
09:00 - 09:20	Regulatory Agencies <ul style="list-style-type: none"> • Who regulates what • Where regulatory standards come from • NRC vs. Agreement States • Other agencies (e.g., OSHA, FDA, EPA, DOT) 	Understand how the regulations are developed. Know the difference between Agreement vs. Non-Agreement states. Know the relationship between the NRC and other agencies.	Sue
09:20 - 09:30	Break	NA	
09:30 - 09:40	Introduction to Radiation Physics	Overview of next topic.	Sue
09:40 - 11:00 (10 min break)	Radiation Physics <ul style="list-style-type: none"> • Types of radiation • Interactions with matter • Half-life • Radioactivity units 	Know the various types and characteristics of radiation (e.g., alpha, beta, gamma) and their interactions in matter. Understand half-life, Ci, & Bq.	Ralph Grunewald
11:00 - 12:00	Group Sessions	See Attached	All
12:00 - 01:00 pm	Lunch	NA	
01:00 - 01:50	Radiation Dosimetry <ul style="list-style-type: none"> • Exposure and dose units • Types of dosimeters; how they work • NRC dose limits • Dose Calculations 	Understand radiation exposure and dose units (e.g., rad, rem, R, RBE, LET, QF). Know NRC dose limits. Know how to calculate dose from a point source.	Sue

Day One (cont.)	Description	Objectives	Trainer(s)
01:50 - 02:00 pm	Break	NA	
02:00 - 02:50	Radiation Protection <ul style="list-style-type: none"> • Time, distance, shielding • Rules for protection from radiation (including apparel) • Posting requirements • ALARA 	Know methods used for radiation protection (e.g., time, distance, shielding, contamination control). Know how to apply inverse square law. Know what ALARA is and how to implement.	Dee Kaiser
02:50 - 03:20	Types of Licenses/Regulatory Issues <ul style="list-style-type: none"> • General vs. Specific licenses • Device registrations • Gauge, medical, academic, biotechnology requirements 	Know common types of NRC licenses and scope of each.	Sue
03:20 - 03:30	Break	NA	
03:30 - 04:30	Group Sessions	See Attached	All
Day Two	Description	Objectives	Trainer(s)
08:00 - 08:30 am	Continental Breakfast	NA	
08:30 - 09:45 (10 min break)	Radiation Detection Equipment <ul style="list-style-type: none"> • Types of equipment • Appropriate uses • Demonstration of equipment • Self-reading dosimeters 	Understand how to select and operate equipment for the different types of radiation. Understand the basic design principles of various detectors.	Ralph
09:45 - 10:00	Sources of Radiation Exposure <ul style="list-style-type: none"> • Naturally occurring, medical, occupational, life style • Risk vs. benefit 	Understand typical levels of radiation exposure from common sources. Understand perceived vs. real risk	Sue
10:00 - 10:50	Radiation Biology <ul style="list-style-type: none"> • Cellular effects, tissue effects, systematic effects • Delayed effects, early somatic effects • Acute radiation syndrome • Radiation hormesis, threshold vs. non-threshold 	Understand the biological effects of radiation and the dose levels where these effects occur.	Sue

Day Time (cont.)	Description	Objectives	Trainer(s)
10:50 - 11:00 am	Break	NA	
11:00 - 12:00	Group Sessions	See Attached	All
12:00 - 01:00 pm	Lunch	NA	
01:00 - 01:50	Radiation Safety Programs <ul style="list-style-type: none"> • Written programs • Key elements (e.g., training, radiation monitoring, instrument calibrations, shipping & receiving) • Recordkeeping • Annual reviews • Quality Management Programs 	Know key elements of a radiation safety program. Know how to develop an effective program. Know requirements for a Quality Management Program (medical).	Dee
01:50 - 02:00	Break	NA	
02:00 - 02:20	Responsibilities for Radiation Safety <ul style="list-style-type: none"> • Who is responsible • Legal issues 	Understand the various responsibilities for radiation safety.	Sue
02:20 - 03:10	Emergencies <ul style="list-style-type: none"> • Types of emergencies (gauge, medical, academic) • Procedures • Source leakage, loss • Emergency personnel as responders • Performance based training • Interactions with the public, media, and employees 	Understand the RSO's role in planning for and preventing accidents. Know how to develop an emergency plan.	Judy Grunewald
03:10 - 03:20	Break	NA	
03:20 - 03:45	Radioactive Waste Management <ul style="list-style-type: none"> • Minimization vs. volume reduction • Disposal options • Storage • DOT transportation 	Understand waste management strategies (e.g., minimization). Know radioactive waste disposal options (e.g., sewer, DIS). Understand waste storage requirements (e.g., shielding, facility needs).	Sue
03:45 - 04:30	Group Sessions	See Attached	All

Day Three	Description	Objectives	Trainer(s)
08:00 - 08:30 am	Continental Breakfast	NA	
08:30 - 09:00	NRC Regulations <ul style="list-style-type: none"> • Parts 19 and 20 • Parts 30 - 35 (types of licenses) • Special requirements (gauges and licenses) 	Know critical provisions of applicable NRC regulations.	Sue
09:00 - 09:30	Writing a License <ul style="list-style-type: none"> • New, renewal, & amendment applications • NRC Form 313 or equivalent for Agreement states • Content • Fees 	Understand the do's and don'ts when writing a license. Know what references are available for assistance (e.g., NRC Regulatory Guides).	Sue
09:30 - 09:40	Break	NA	
09:40 - 10:30	Reportable Incidents <ul style="list-style-type: none"> • When to/not to report an incident • Interactions with the public and media 	Know NRC requirements for reporting incidents and misadministrations (medical). Understand the NRC's media notification criteria. Know key aspects of communicating with the public & media.	All
10:30 - 11:20	NRC/State Inspections <ul style="list-style-type: none"> • How to prepare • How to deal with inspectors • What to do if your inspection is going badly • What to do if called for an enforcement conference 	Understand the inspection process. Know how to prepare for and respond to enforcement activities.	All
11:20 - 11:30	Break	NA	
11:30 - 12:30	Examination	Complete exam and score 80% or better.	All
12:30 - 01:00	Wrap-up		

EXHIBIT "B"

LICENSE AMENDMENT

Docket: 030-32444

License:49-26963-02

Control:466199

BELLE AYR MINE - PLANT 1:FASTLAB LOCATION

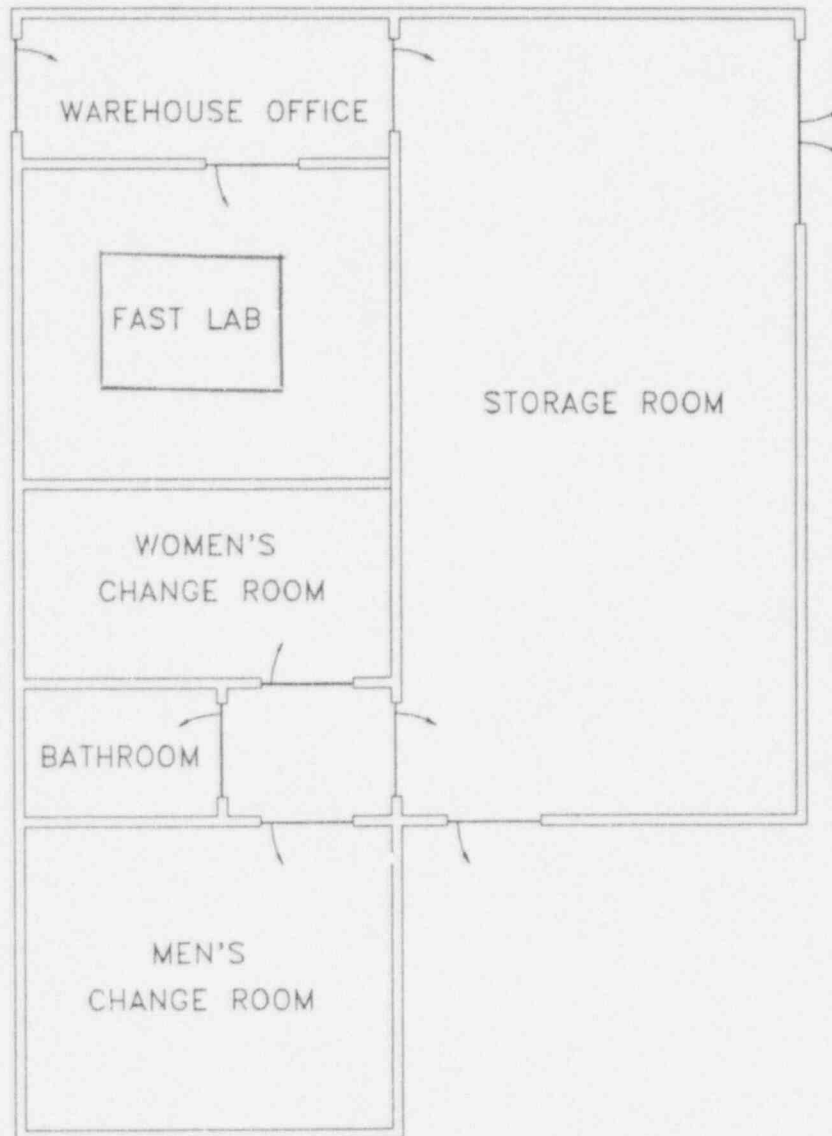


EXHIBIT “C”

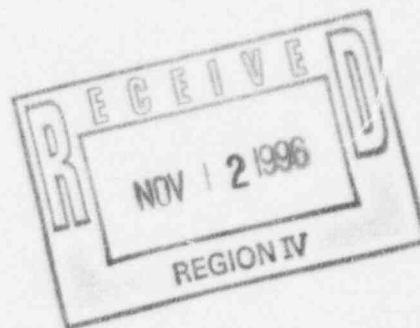
LICENSE AMENDMENT

Docket: 030-32444

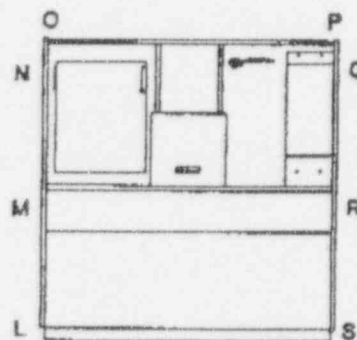
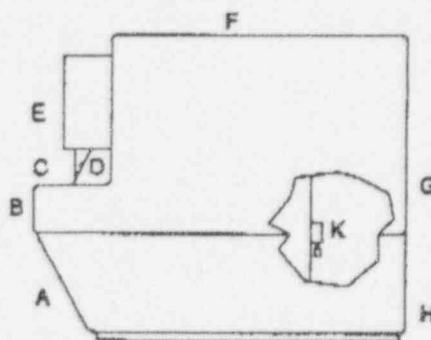
License:49-26963-02

Control:466199

EXHIBIT "C"



The figures at the right show the FastLab from a side and front view in that order. The position D shown from the side view is the area of 1mr/hr where an operator inserts a bucket for analysis. Typical Operation requires about 2 to 5 seconds every 15 minutes for an operator to insert a bucket. Otherwise all other regions shown are at .5 mr/hr or less.



466199



UNITED STATES
NUCLEAR REGULATORY COMMISSION

REGION IV

611 RYAN PLAZA DRIVE, SUITE 400
ARLINGTON, TEXAS 76011-8064

October 15, 1996

Amax Coal West, Inc.
Belle Ayr Mine
ATTN: Steven R. Laird
P.O. Box 3039
Gillette, Wyoming 82717

SUBJECT: LICENSE AMENDMENT

We have reviewed your letter dated September 10, 1996, requesting an amendment to your byproduct material license. Your amendment request is for the addition of a sealed source and device combination that is different than that which is authorized by your current license. Therefore, before further action can be taken, we shall need the following additional information.

1. Material to be Possessed

Your letter indicates that you wish to add to your license a Gamma-Metrics FastLab which contains a californium-252 sealed source.

- ✓ Provide the following: (a) identification of each source by isotope, manufacturer, and model number; (b) identification of each device by manufacturer and model number; and (c) the maximum amount of radioactive material that will be in each named source. NOTE: the device and sealed source combinations should be clearly and specifically keyed to one another.

In addition, it is not clear whether or not you wish to maintain the current sealed source and device (Co-60 in a Berthold Systems, Inc. fixed gauging device) on your license.

- ✓ Please indicate if you wish to keep the sealed source and device currently listed on your license or if you wish to delete them.

2. Individuals Responsible for Radiation Safety Program - Their Training and experience

Your letter indicates that Steven R. Laird will continue as Radiation Safety Officer and that licensed material shall be used under his supervision. Records previously submitted document Mr. Laird's radiation safety training. However, our records do not document Mr. Laird's training in the use of the Gamma-Metrics FastLab device. In addition, your letter does not indicate the individual responsible for services such as installation, initial radiation survey, maintenance, and leak testing.

- ✓ Please provide documentation of Mr. Laird's training in the use of the device(s).

If all services will be performed by the manufacturer, distributor, or other person specifically licensed to perform these services, the training and instruction provided in the use and operation of the device at the time of installation is satisfactory. If training will be given at the time the device is installed, you should include a commitment that the device will not be operated until the training has been received.

- ✓ Please provide specific information for each individual named as a "responsible individual."

3. Training Provided to Other Users

Your letter does not specify the training to be provided to other users. To state that users will "have received proper training in the use of the sealed source unit" is not sufficient for the NRC to evaluate your training program.

- ✓ If persons other than those named as a "responsible individual" will operate the device you should make a commitment that any employee who will operate the device will attend the training and instruction given at the time of installation or will receive equivalent training and instruction. If equivalent training is given, provide an outline of the training and show its equivalency to the training offered by the device installer. You should also name the instructor of the equivalent training.

4. Facilities and Equipment

Your letter does not provide information on your facilities and equipment with regard to the Gamma-Metrics FastLab device.

Please submit the following:

- ✓ (a) a sketch of the proposed location of the device within your facility,
- ✓ (b) the environmental conditions to which the device will be exposed,
- ✓ (c) a description of a cooling system, its maintenance, the method and procedures for detecting a cooling system failure, procedures for coping with a cooling system failure, and the consequences of its failure (if applicable),
- ✓ (d) information on the maintenance of the device; and
- ✓ (e) emergency procedures to be followed in the event of an accident involving damage to the device.

5. Performance of Service Operations

Your letter does not address device service operations.

✓ Please specify the name, address, and the license number of the person or firm who will provide service operations.

6. Personnel Monitoring Equipment

your letter does not address the use of personnel monitoring equipment with regard to the Gamma-Metrics FastLab device. 10 CFR 20.1502 requires, in part, that each licensee monitor occupational exposure to radiation and shall supply and require the use of individual monitoring devices by adults that are likely to receive, in 1 year from sources external to the body, a dose in excess of 10 percent of the limits in § 20.1201(a). The specified annual dose limits are 5 rems whole body and 50 rems skin and extremities. Thus, you will not need to monitor users if you can demonstrate, in accordance with 10 CFR 20.1502, that individuals using devices which contain licensed material are not likely to receive a radiation dose in excess of 10 percent of the allowable limits.

✓ Please provide either (a) documentation of your evaluation that unmonitored users are unlikely to receive doses in excess of 10 percent of the regulatory limit or (b) a commitment for personnel monitoring, including: the name of the supplier of the monitoring equipment you will use or a commitment to use any supplier accredited by the National Voluntary Laboratory Accreditation Program, identification of the type of personnel monitoring equipment that will be used, and specification of the frequency with which personnel monitoring will be exchanged. (NOTE: if you propose to service the device, you should provide personnel monitoring equipment for personnel who perform the service operations.)

7. Radiation Detection Instruments

Your letter does not address radiation detection instruments.

✓ Please provide a statement regarding the possession and use of a radiation detection instrument or a statement regarding the fact that a radiation detection instrument is not required. (NOTE: if you propose to service the device, you must have available an appropriate, operable, and calibrated instrument.)

8. Leak Testing

Your letter does not address leak testing with regard to the Gamma-Metrics FastLab device. The options for leak testing are: (a) engage the services of a consultant or commercial facility to take samples, evaluate the samples, and report the results to you; (b) use a commercial leak test kit, take the samples and send them to the kit supplier who evaluates the samples and reports the results to you; or (c) perform the entire leak test sequence yourself.

- ✓ Please specify which option you will utilize, provide specific information appropriate to the selected option, and provide the frequency at which leak tests will be performed.

9. Lock-Out Procedures

Your letter does not address lock-out procedures for the Gamma-Metrics FastLab device.

- ✓ Please provide a commitment to prepare lock-out procedures, provide the procedures to your personnel, and post the procedures. In addition, please list the name of the individual responsible for ensuring that the lock-out procedures are followed.

10. Performance of Services

Your letter does not address the services, if any, you will perform on the Gamma-Metrics FastLab device.

- ✓ If you request authorization to service the device, you must either state that you will follow the written procedures provided by the device manufacturer for each service operation requested or submit the procedures you propose to use of each service operation requested.

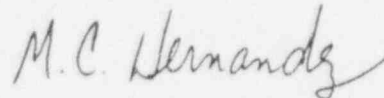
11. Waste Management

Your letter does not address disposition of the Gamma-Metrics FastLab device. Because of the licensed material contained in the device, your only option for disposal is to transfer the device to an authorized recipient.

- ✓ Please provide a commitment, that for disposal, the device will be returned to the original supplier/manufacture or to another specifically licensed recipient.

To continue review of your application, we request that you submit your response to this letter within 30 calendar days from the date of this letter. Please reply in duplicate and refer to the license, docket, and control number specified below. If you have questions or require clarification on any of the information stated above, we encourage you to contact us at (817) 860-8100.

Sincerely,

A handwritten signature in dark ink, appearing to read "M.C. Hernandez". The signature is fluid and cursive, with the first name "M.C." and the last name "Hernandez" clearly distinguishable.

Christi Hernandez, Radiation Specialist
Nuclear Materials Licensing Branch

Docket: 030-32444
License: 49-26963-02
Control: 466199

Enclosure(s): Draft Regulatory Guide entitled,
"Guide for the Preparation of
Applications for Licenses for the
Use of Sealed Sources in Nonportable
Gauging Devices," January 1985

OCT 15 1996

DOCUMENT NAME: G:\NMLS.O\MCH\49-26963.DEF

To receive copy of document, indicate in box: "C" = Copy without enclosures "E" = Copy with enclosures "N" = No copy

RIV:NMLB								
MCHernandez								
10/15/96								

OFFICIAL RECORD COPY

BETWEEN:

License Fee Management Branch, ARM
and
Regional Licensing Sections

(FOR LEMS USE)
INFORMATION FROM LTS

Program Code: 03800
Status Code: 0
Fee Category: 3P
Exp. Date: 20011031
Fee Comments: STORAGE ONLY EFF 3/25
Decom Fin Assur Regd: N

RECEIVED
RIV WCFD
96 SEP 18 PM 1:14

LICENSE FEE TRANSMITTAL

A. REGION IV

1. APPLICATION ATTACHED

Applicant/Licensee: AMAX COAL WEST, INC.
Received Date: 9/20/96
Docket No.: 3032444
Control No.: 466199
License No.: 49-26963-02
Action Type: Amendment

2. FEE ATTACHED

Amount: 11
Check No.: 11

3. COMMENTS

Signed Billie Mysynski
Date 9/16/96

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

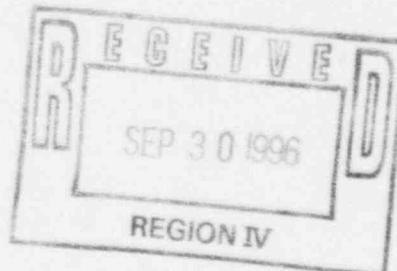
1. Fee Category and Amount: 3P \$300

2. Correct Fee Paid ✓ Application may be processed for:

Amendment ✓
Renewal
License

3. OTHER

Signed Rita Messier
Date 9/26/96



1996 SEP 26 PM 1:46

Log	<u>9 Sep 4 IV</u>
Remitter	<u>628750</u>
Check No.	<u>628750</u>
Amount	<u>\$300</u>
Fee Category	<u>3P</u>
Type of Fee	<u>Am</u>
Date Check Rec'd.	<u>9/26/96</u>
Date Completed	<u>9/26/96</u>
By:	<u>Lem</u>



UNITED STATES
NUCLEAR REGULATORY COMMISSION

REGION IV

611 RYAN PLAZA DRIVE, SUITE 400
ARLINGTON, TEXAS 76011-8064

1996 SEP 25 PM 2:46

BETWEEN: Doug Weiss, Chief
License Fee and Debt Collection Branch
Office of the Controller

D. Blair Spitzberg, Chief
Nuclear Materials Licensing Branch, DRSS, Region IV

LICENSEE FEE TRANSMITTAL

A. REGION IV

1. APPLICATION ATTACHED

Applicant/Licensee: Amay Coal West, Inc.

Application Dated: Sept. 10, 1996

Control No.: 466199

License No.: 49-26963-02

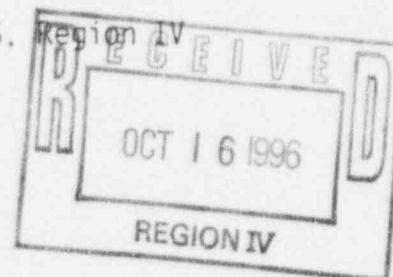
2. FEE ATTACHED

Amount: \$ 300.00

Check No: 28750

3. Comments

Signed: Billie Grusynski Date 9/24/96



Log	<u>Sep 4 IV</u>
Remitter	
Check No.	<u>628750</u>
Amount	<u>\$300</u>
Fee Category	<u>3P</u>
Type of Fee	<u>and</u>
Date Check Rec'd.	<u>9/26/96</u>
Date Completed	<u>9/26/96</u>
By:	<u>Kim</u>

B. LICENSEE FEE AND DEBT COLLECTION BRANCH

1. Fee Category and Amount: _____

2. Correct Fee Paid. Application may be processed for:

Amendment _____

Renewal _____

License _____

Signed: _____ Date _____



**AMAX COAL
WEST, INC.**

A Cyprus Amax Company

Amax Coal West, Inc.
Belle Ayr Mine
2273 Bishop Road
Post Office Box 3039
Gillette, Wyoming 82717-3039
(307) 687-3400
FAX (307) 687-3470

September 11, 1996

Ms. Billie Gruzynski
Nuclear Regulatory Commission, Region IV
611 Ryan Plaza Drive, Suite 400
Arlington, TX 76011-8064

RE: Amendment No. 04 to Material License No. 49-26963-02, Amendment No. 03

Dear Ms. Gruzynski:

Enclosed is a check in the amount of \$300 for fees to the Amendment referred to above.

If you have any questions, please don't hesitate to contact me.

Sincerely,

Steven R. Laird, RSO

/gw

Enclosure

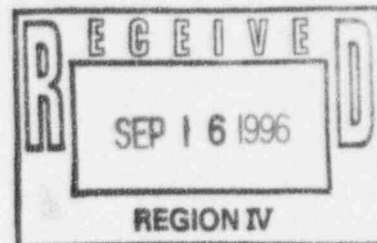


Wyoming Operations
Belle Ayr & Eagle Butte Mines
Post Office Box 3039
Gillette, Wyoming 82717-3039
(307) 687-3460
FAX (307) 687-3480

Thomas J. Lien
Vice President

September 10, 1996

Ms. Billie Gruzynski
Nuclear Regulatory Commission, Region IV
611 Ryan Plaza Drive, Suite 400
Arlington, TX 76011-8064



RE: Amendment No. 04 to Material License No. 49-26963-02, Amendment No. 03.

Dear Ms. Gruzynski:

As we have previously discussed, Amax Coal West, Inc., Belle Ayr Mine, is requesting that NRC Material License No. 49-26963-02, Amendment No. 03 (the "License"), be amended to reflect operational changes at our Belle Ayr Mine. It is my understanding that the above referenced License is a "specific license" which has been amended three times previously. Thus, these requested amendments should, collectively, be titled "Amendment No. 4" to the original License. The amendments requested are more fully explained in Exhibit "A" which is attached hereto.

The License was obtained by Belle Ayr Mine, originally, to cover the sealed source used by a Berthold belt scale at the Belle Ayr coal dryer. Recently, we decommissioned the Berthold device and sent the sealed source back to the manufacturer. At the same time, however, we plan to install a GAMMA-METRICS FastLab at the Belle Ayr preparation plant. The FastLab also utilizes a sealed source which requires a "specific license." The requested amendments should reflect the foregoing operational changes.

Please note that the above referenced License was due to expire on October 31, 1996. However, according to a May 23, 1996, letter from the NRC, signed by Donald A. Cool, an agency Director, the expiration date of the above referenced License has been extended to October 31, 2001. The extension was the result of certain rules amendments by the agency. I trust that the amended License will reflect this new expiration date.

Thank you for your time and consideration in this matter. Should you have any questions or comments about these requested amendments, please don't hesitate to contact me.

Sincerely,

Steven R. Laird, RSO

EXHIBIT "A"
AMENDMENT NO. 04 TO
MATERIALS LICENSE NO. 49-26963-02

Amax Coal West, Inc., Belle Ayr Mine (the Licensee), requests that the following amendments be made to the above referenced Materials License.

A. Paragraph 1 should be amended to read as follows:

1. Amax Coal West, Inc.
Preparation Plant

B. Paragraph 2 should be amended as follows:

2. Belle Ayr Mine
2273 Bishop Road
P.O. Box 3039
Gillette, Wyoming 82717

C. Paragraph 6 should be amended as follows:

6. Californium 252

D. Paragraph 7 should be amended as follows:

7. Sealed Sources

E. Paragraph 9 should be amended as follows:

9. Authorized Use.

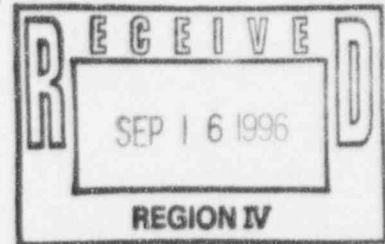
A. For possession and use in GAMMA-METRICS systems which have been evaluated and approved for licensing purposes and authorized for distribution under a license issued by the Nuclear Regulatory Commission or an Agreement State.

F. Paragraph 11 should be amended as follows:

- 11.A. Licensed material shall be used under the supervision of Steven R. Laird, or other responsible individuals who have received proper training in The use of the sealed source unit.

- 11.B. The Radiation Safety Officer for this license is Steven R. Laird.

G. Licensee requests no changes to paragraphs 3, 4, 5, 8, 12, 13, 14, 15, 16, 17, 18, and 19.



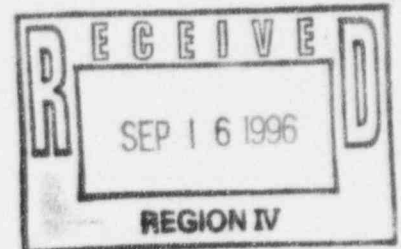


Wyoming Operations
Belle Ayr & Eagle Butte Mines
Post Office Box 3039
Gillette, Wyoming 82717-3039
(307) 687-3460
FAX (307) 687-3480

Thomas J. Lien
Vice President

September 10, 1996

Ms. Billie Gruzynski
Nuclear Regulatory Commission, Region IV
611 Ryan Plaza Drive, Suite 400
Arlington, TX 76011-8064



RE: Material License No. 49-26963-02 and ACWI Letter Dated 9/4/96

Dear Ms. Gruzynski:

As we discussed in our phone conversation yesterday, please disregard my letter to your office, dated 9/4/96, in which I requested that the NRC terminate Material License No. 49-26963-02 (the "License"). We are now requesting that this License be maintained in "Active" status.

Please note that Material License No. 49-26963-02 is a "specific license." Belle Ayr Mine obtained it, originally, to cover the sealed source used by a Berthold belt scale located in the Belle Ayr coal dryer. The Belle Ayr coal dryer (and the belt scale) went inactive in 1993. By letter dated March 2, 1994, Belle Ayr requested that the NRC put the License into "storage only" status. In June of 1996, Belle Ayr decommissioned the belt scale and returned the sealed source to Berthold. As we had no other sealed source devices on the property that required a "specific license," we, through the 9/4/96 letter, asked that the License be terminated.

Now, however, ACWI has elected to transfer a GAMMA-METRICS FastLab unit, which also contains a sealed source, from the Eagle Butte Mine to the Belle Ayr Mine. Both mines are owned by ACWI and are located in Wyoming. The FastLab unit is currently carried under a "specific license" held by Eagle Butte Mine. After our conversation, it seems that we could best make the transfer from Eagle Butte to Belle Ayr by amending License No. 49-26963-02. Consequently, Belle Ayr will follow this letter with a request for amendment of that License. Eagle Butte will also amend their license by deleting the FastLab from its terms.

In conclusion, ACWI, Belle Ayr Mine, is withdrawing its request to terminate License No. 49-26963-02. We wish to maintain that License in "Active" status, but we will amend the License so that it covers anticipated operational changes. Should you have any questions or comments about this matter, please don't hesitate to contact me.

Sincerely,

Steven R. Laird, RSO

466199

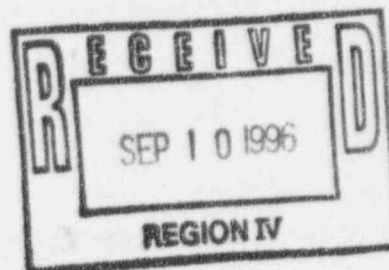


Wyoming Operations
Belle Ayr & Eagle Butte Mines
Post Office Box 3039
Gillette, Wyoming 82717-3039
(307) 687-3460
FAX (307) 687-3480

Thomas J. Lien
Vice President

September 4, 1996

Ms. Billie Gruzynski
Nuclear Regulatory Commission, Region IV
611 Ryan Plaza Drive, Suite 400
Arlington, TX 76011-8064



RE: Termination of Material License No. 49-26963-02

Dear Ms. Gruzynski:

As we discussed in our phone conversation today, Amax Coal West, Inc., Belle Ayr Mine, is requesting that the NRC terminate the above referenced license because the licensed material (sealed source) has been returned to the manufacturer (Berthold Systems, Inc.).

Enclosed please find the various documents which were provided to us by Berthold's service engineer, Aaron Tufts, as receipts for the sealed source. Should you have any questions or comments about this matter, please don't hesitate to contact me.

Sincerely,

Steven R. Laird
Manager, Loss Prevention

Date: May 30, 1996

Send to Fax #

Page 1 of 1

BERTHOLD SYSTEMS, INC.

339 East 3900 South

Suite 203C

Salt Lake City, UT 84070

Phone (801) 261-3500

Fax (801) 261-4282

SPEEDY FAX DELIVERY.....

TO: Steve Laird

COMPANY: AMAX Coal
Gillette, WY

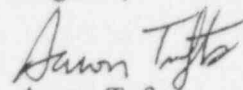
FROM: AARON TUFTS

SUBJECT: Return of Source

Steve,

Everything in this package is pretty self explanatory. Please put the address labels on the box and secure all labels with staples and tape. I will contact the carrier (LEPP Profit) and tell them the crate is in the shipping department and will be available for pickup on Monday morning. I will also give them your name as a contact. If you have any questions please give me a call. I will be in the office Monday morning.

Regards,



Aaron Tufts

Senior Service Eng.

APGEE CORPORATION

Engineering Services

Hopewell Business & Industrial Park
103 Corporation Drive
Aliquippa, Pennsylvania 15001-4863

Service Office:

Houston, Texas

PAGE 1 OF _____

Telephone: [412] 378-1900

Telefax: [412] 378-1926

SERVICE AND INSTALLATION REPORT

berthold systems.

AJ CO CB OS UN TE	Amax Coal Co.		B I L L	Amax Coal		<input type="checkbox"/> SALES SUPPORT <input type="checkbox"/> START-UP <input checked="" type="checkbox"/> SERVICE <input type="checkbox"/> TRAINING	BSI FILE REF. NO.
	Belle Ayr Mine			P.O. Box 3005			PURCHASE ORDER NO. 136239-0T
	Gillette WY			Gillette WY			WAS SERVICE START-UP INCLUDED IN SYSTEM ORDER <input type="checkbox"/> YES <input type="checkbox"/> NO IF YES, AMOUNT: N/A
	ZIP 82716			ZIP 82717			

P A R T S	PART NUMBER	DESCRIPTION	WARRANTY? Y or N	UNIT PRICE	QTY.	AMOUNT
	1	Return of (x1) Belt Weigher Rod Source	N			
	2			X		\$
	3			X		\$
	4			X		\$
	5	WIPE TESTS (x1) BSI	N	50.00	X 1	\$ 50.00
				SUB TOTAL PARTS		\$

T I M E	DATE ON-SITE	MO.	DAY	YEAR	MO.	DAY	MO.	DAY	MO.	DAY	MO.	DAY	MO.	DAY	TOTAL	RATE	
	5/23/96	5	23	96	5	29									6	\$ 75	PER HOUR
	REGULAR HOURS	.			6.0	.	.	.	.	.	.	.	.	.			570.00
	TIME & 1/2	.			.	.	.	.	.	.	.	.	.	.
	DOUBLE TIME	.			.	.	.	.	.	.	.	.	.	.
	TRAVEL REGULAR HRS.	3	5		.	.	.	.	.	.	.	.	.	.	3.5	\$ 55	PER HOUR
	TRAVEL TIME & 1/2	.			.	.	.	.	.	.	.	.	.	.			172.50
	TRAVEL DOUBLE TIME	.			.	.	.	.	.	.	.	.	.	.
	SUB TOTAL TIME																762.50

E X P E N S E	Mileage @ /mi.	COST	
	Transportation		
	Meals and Accommodations		
	Total Expense		
	Regulatory Reciprocity Fee for Radiometric Service	\$80	SUB TOTAL EXPENSES

SERVICE ENGINEER'S SIGNATURE X <i>Arion</i>	CUSTOMER CONTACT Steve Laird	CUSTOMER'S SIGNATURE X <i>Steve Laird</i>	TOTAL \$
NOTE: Customer may make comments on page 3.	AREA CODE (317) TELEPHONE NUMBER 687-3414	ION TITLE	

SERVICE

SERVICE AND INSTALLATION REPORT CONTINUED

DIARY OF EVENTS, INCLUDING DATES, TIMES & INDIVIDUALS:

Arrived on site 5:29 at 8:00 am and met with Steve Baird. Proceeded to belt weigher that is being retrofitted. Transported the transport shield to the installation site and found it was not big enough. Disassembled belt frame and removed source housing and shielding underneath. Performed wipe test. Source is a 5 in. 60 rod source #1741791. Began constructing a crate to ship it in. Performed ~~over~~ shipping survey and readied for shipment. All labels and paperwork are in place.

ENGINEERS RECOMMENDATION'S TO CUSTOMER:

CUSTOMER

DEN Shipper's Name and Address AMAX COAL COMPANY Belle Ayr Mine, Dept 89919 Gillette, Wyoming 82716		Shipper's Account Number Not negotiable Air Waybill		DEN - 0007 337 LEP PROFIT INTERNATIONAL INC Issued by 5401 Oswego, Unit B Denver, CO 80239																									
Consignee's Name and Address LABORATORIUM Calmbacher Strasse D-7457 Bad Wilbad		Consignee's Account Number It is agreed that the goods described herein are accepted in apparent good order and condition (except as noted) for carriage SUBJECT TO THE CONDITIONS OF CONTRACT ON THE REVERSE HEREOF. ALL GOODS MAY BE CARRIED BY ANY OTHER MEANS INCLUDING ROAD OR ANY OTHER CARRIER UNLESS SPECIFIC CONTRARY INSTRUCTIONS ARE GIVEN HEREON BY THE SHIPPER, AND SHIPPER AGREES THAT THE SHIPMENT MAY BE CARRIED VIA INTERMEDIATE STOPPING PLACES WHICH THE CARRIER DEEMS APPROPRIATE. THE SHIPPER'S ATTENTION IS DRAWN TO THE NOTICE CONCERNING CARRIER'S LIMITATION OF LIABILITY. Shipper may increase such limitation of liability by declaring a higher value for carriage and paying a supplemental charge if required.		Copies 1, 2 and 3 of this Air Waybill are originals and have the same validity.																									
Issuing Carrier's Agent Name and City Lep Profit International FMC#890 5401 Oswego, Unit B CHB#12588 Denver, Colorado 80239		Accounting information AGENTS REF DEN06923G1 BILL TO: AMAX COAL COMPANY BELLE AYR MINE GILLETTE, WYOMING 82716 ATTN: STEVE LAIRD INVOICE NUMBER 76206923		Agent's IATA Code 33-B-1409/052																									
Airport of Departure (Addr. of first Carrier) and requested Routing Denver CO DEN-STR		Airport of Destination STR Denver -DEN		Flight/Date 																									
Handling information Stuttgart		Notify:- Prof. Dr. Berthold		CT Coding: T1 Diversion contrary to U.S. law prohibited.																									
These commodities licensed by the U.S. for ultimate destination Germany																													
<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>No. of Pieces RCP</th> <th>Gross Weight</th> <th>kg</th> <th>Rate Class</th> <th>Chargeable Weight</th> <th>Rate</th> <th>Total</th> <th>Nature and Quantity of Goods (incl. Dimensions or Volume)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>105.7K</td> <td>Q</td> <td></td> <td>106.0</td> <td>3.02</td> <td>320.12</td> <td> RADIOACTIVE MATERIAL U.S., 7, UN2982 60-60 ROD SOURCE COBALTOUS CHLORIDE SOLID MATERIAL TYPE A PACKAGE 85 MBq (5mCi) Total Activity Yellow, TI=.5 1 48x17x17(in) </td> </tr> <tr> <td>1</td> <td>105.7</td> <td></td> <td></td> <td></td> <td></td> <td>320.12</td> <td></td> </tr> </tbody> </table>						No. of Pieces RCP	Gross Weight	kg	Rate Class	Chargeable Weight	Rate	Total	Nature and Quantity of Goods (incl. Dimensions or Volume)	1	105.7K	Q		106.0	3.02	320.12	RADIOACTIVE MATERIAL U.S., 7, UN2982 60-60 ROD SOURCE COBALTOUS CHLORIDE SOLID MATERIAL TYPE A PACKAGE 85 MBq (5mCi) Total Activity Yellow, TI=.5 1 48x17x17(in)	1	105.7					320.12	
No. of Pieces RCP	Gross Weight	kg	Rate Class	Chargeable Weight	Rate	Total	Nature and Quantity of Goods (incl. Dimensions or Volume)																						
1	105.7K	Q		106.0	3.02	320.12	RADIOACTIVE MATERIAL U.S., 7, UN2982 60-60 ROD SOURCE COBALTOUS CHLORIDE SOLID MATERIAL TYPE A PACKAGE 85 MBq (5mCi) Total Activity Yellow, TI=.5 1 48x17x17(in)																						
1	105.7					320.12																							
Prepaid 320.12		Weight Charge 320.12		Other Charges AWA 27.00 RLA 75.00 RAC 80.00 PUA 65.00																									
Valuation Charge 		Tax 		Shipper certifies that the particulars on the face hereof are correct and that insofar as any part of the consignment contains dangerous goods such part is properly described by name and is in proper condition for carriage by air according to the applicable Dangerous Goods Regulations.																									
Total other Charges Due Agent 167.00		Total other Charges Due Carrier 80.00		Cargo items tendered or directed to be tendered by your firm for air transportation are subject to Aviation Security controls by air carriers and when appropriate, other Government Regulations. Copies of all relevant shipping documents showing the cargo's consignee, consignor, description, and other relevant data will be retained on file until the cargo is imported.																									
Total prepaid 567.12		Total collect 		As Authorized Agent for Shipper Kimberly Cannon Signature of Shipper or his Agent																									
Currency Conversion Rates USD		Charges at Destination 		Total collect Charges 																									
For Carriers Use only at Destination 		Executed on (Date) Jul-10-1996		at (Place) Denver, CO, USA																									
Signature of Issuing Carrier or its Agent 		Signature of Issuing Carrier or its Agent 		Signature of Issuing Carrier or its Agent 																									