

MATERIALS LICENSE

Amendment No. 05

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.

OFFICIAL RECORD COPY

Licensee	In accordance with letter dated February 14, 1997, 3. License Number 37-20505-01 is amended in its entirety to read as follows:	
1. Shenango, Incorporated		
2. 200 Neville Road Pittsburgh, PA 15225-1690	4. Expiration Date July 31, 2002	
	5. Docket or Reference No. 030-19345	
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. Cesium 137	A. Sealed sources (3M Company Model 4F6S)	A. Not to exceed 2 curies per source and 4 curies total

9. Authorized use

- A. For use in Koppers Company, Incorporated, Model 2409-6A26 coke oven machinery gamma-ray interlock system transmitter.

CONDITIONS

10. Licensed material may be used only at the licensee's facilities at located 200 Neville Road, Pittsburgh, Pennsylvania.
11. A. Licensed material shall be used by, or under the supervision of, individuals designated in writing by the Radiation Safety Officer.
- B. The Radiation Safety Officer for this license is Todd Mobley.
12. Sealed sources or detector cells containing licensed material shall not be opened or sources removed from source holders or detector cells by the licensee.
13. A. Sealed sources and detector cells shall be tested for leakage and/or contamination at intervals not to exceed 6 months or at such other intervals as are specified by the certificate of registration referred to in 10 CFR 32.210, not to exceed 3 years.
- 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.

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SUPPLEMENTARY SHEET**

License Number

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- C. In the absence of a certificate from a transferor indicating that a test has been made within six months prior to the transfer, a sealed source or detector cell received from another person shall not be put into use until tested.
- D. Each sealed source fabricated by the licensee shall be inspected and tested for construction defects, leakage, and contamination prior to any use or transfer as a sealed source.
- E. Sealed sources and detector cells need not be leak tested if:
- (i) they contain only hydrogen 3; or
 - (ii) they contain only a 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 transfer 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.
- F. The test shall be capable of detecting the presence of 0.005 microcurie of radioactive material on the test sample. Records of leak test results shall be kept in units of microcuries and shall be maintained for inspection by the Commission. 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 and the source shall be removed 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 I, ATTN: Chief, Nuclear Materials Safety Branch, 475 Allendale Road, King of Prussia, Pennsylvania 19406. The report shall specify the source involved, the test results, and corrective action taken.
- G. The licensee is authorized to collect leak test samples for analysis by Applied Health Physics, Incorporated. 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. 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, not to exceed 3 years.

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15. 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. The licensee may initially mount the device in accordance with written instructions provided by the manufacturer; however, the device may not be used until surveyed by a person specifically licensed by the Commission or an Agreement State to install gauges. The licensee may repair the electronic equipment not associated with the source or its shielding.
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 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. A record of the results of this survey shall be maintained.
17. The licensee shall conduct a physical inventory every six months to account for all sealed sources and devices containing licensed material received and possessed under the license.
18. The licensee shall not acquire licensed material in a sealed source or in a device that contains a sealed source unless the source or device has been registered with the Nuclear Regulatory Commission under 10 CFR 32.210 or with an Agreement State.
19. 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 September 11, 1981
 - B. Letter dated January 8, 1985
 - C. Letter dated July 3, 1986
 - D. Letter dated January 8, 1992
 - E. Letter dated April 8, 1992
 - F. Letter dated February 14, 1997

Date

MAR - 7 1997

For the U.S. Nuclear Regulatory Commission
Original Signed By:
John R. McGrath

By

Nuclear Materials Safety Branch
Region I
King of Prussia, Pennsylvania 19406

MAR - 7 1997

Daniel Demoise
Vice President
Shenango, Inc.
200 Neville Road
Pittsburgh, PA 15225-1690

Dear Mr. Demoise:

This refers to your license amendment request. Enclosed with this letter is the amended license. Please note that your February 14, 1997 letter has been added to Condition 19 of your license. We expect you to comply with your commitment of having a full time Radiation Safety Officer by April 15, 1997.

Please review the enclosed document carefully and be sure that you understand and fully implement all the conditions incorporated into the amended license. If there are any errors or questions, please notify the U.S. Nuclear Regulatory Commission, Region I Office, Licensing Assistance Team, (610) 337-5093 or 5239, so that we can provide appropriate corrections and answers.

Thank you for your cooperation.

Sincerely,

Original Signed By:
John R. McGrath

John R. McGrath
Senior Health Physicist
Division of Nuclear Materials Safety

License No. 37-20505-01
Docket No. 030-19345
Control No. 124280

Enclosure:

~~DOCUMENT NAME~~ R:\WPS\MLTR\L3720505.01

To receive a copy of this document, indicate in the box: "C" = Copy w/o attach/encl "E" = Copy w/ attach/encl "N" = No copy

OFFICE	DNMS/RI	<input checked="" type="checkbox"/> N	DNMS/RI	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
NAME	McGrath	<i>JRM</i>					
DATE	02/20/97	02/ /97	02/ /97	02/ /97	02/ /97	02/ /97	02/ /97

OFFICIAL RECORD COPY



Shenango
INCORPORATED

NEVILLE ISLAND
PITTSBURGH, PA. 15225-1690
(412) 771-4400

DOKE OVENS
NEVILLE ISLAND, PA

Mr. John McGrath
Nuclear Materials Safety Branch
United States Nuclear Regulatory Commission
475 Allendale Road
King of Prussia, PA. 19406-1415

February 14, 1997

Re: License No. 37-20505-01
Docket No. 030-19345

030-19345

Dear Mr. McGrath,

Due to the recent resignation of Mr. Daniel Cumer as an employee and Radiation Safety Officer with Shenango, Inc., an amendment to USNRC License No. 37-20505-01 is required. Shenango, Inc. wishes to name Mr. Todd Mobley of Applied Health Physics, Inc. as the Radiation Safety Officer until one of our employees is trained and approved by the USNRC. Upon completion of the required training, an additional amendment request will be submitted. Our goal at Shenango, Inc. is to have one of our employees approved for that position by April 15, 1997.

Enclosed please find NRC Form 313 with attachments. If you have any questions please contact me at (412)-777-6679.

Sincerely,

Daniel Demoise
Shenango, Inc.
Vice President

cc: Applied Health Physics, Inc.
enclosures

124280

OFFICIAL RECORD COPY

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COKE • COAL CHEMICALS

(7-96)
10 CFR 30, 32, 33
34, 35, 36, 39 and 40

APPLICATION FOR MATERIAL LICENSE

Estimated burden per response to comply with this information collection request: 7 hours. Submittal of the application is necessary to determine that the applicant is qualified and that adequate procedures exist to protect the public health and safety. Forward comments regarding burden estimate to the Information and Records Management Branch (T-6 F33), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, and to the Paperwork Reduction Project (3150-0120), Office of Management and Budget, Washington, DC 20503. NRC may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number.

INSTRUCTIONS: SEE THE APPROPRIATE LICENSE APPLICATION GUIDE FOR DETAILED INSTRUCTIONS FOR COMPLETING APPLICATION. SEND TWO COPIES OF THE ENTIRE COMPLETED APPLICATION TO THE NRC OFFICE SPECIFIED BELOW.

APPLICATION FOR DISTRIBUTION OF EXEMPT PRODUCTS FILE APPLICATIONS WITH:

DIVISION OF INDUSTRIAL AND MEDICAL NUCLEAR SAFETY
OFFICE OF NUCLEAR MATERIALS SAFETY AND SAFEGUARDS
U.S. NUCLEAR REGULATORY COMMISSION
WASHINGTON, DC 20555-0001

ALL OTHER PERSONS FILE APPLICATIONS AS FOLLOWS:

IF YOU ARE LOCATED IN:

CONNECTICUT, DELAWARE, DISTRICT OF COLUMBIA, MAINE, MARYLAND,
MASSACHUSETTS, NEW HAMPSHIRE, NEW JERSEY, NEW YORK, PENNSYLVANIA,
RHODE ISLAND, OR VERMONT, SEND APPLICATIONS TO:

LICENSING ASSISTANT SECTION
NUCLEAR MATERIALS SAFETY BRANCH
U.S. NUCLEAR REGULATORY COMMISSION, REGION I
475 ALLENDALE ROAD
KING OF PRUSSIA, PA 19406-1415

ALABAMA, FLORIDA, GEORGIA, KENTUCKY, MISSISSIPPI, NORTH CAROLINA, PUERTO
RICO, SOUTH CAROLINA, TENNESSEE, VIRGINIA, VIRGIN ISLANDS, OR WEST VIRGINIA,
SEND APPLICATIONS TO:

NUCLEAR MATERIALS LICENSING SECTION
U.S. NUCLEAR REGULATORY COMMISSION, REGION II
101 MARIETTA STREET, NW, SUITE 2900
ATLANTA, GA 30323-0199

IF YOU ARE LOCATED IN:

ILLINOIS, INDIANA, IOWA, MICHIGAN, MINNESOTA, MISSOURI, OHIO, OR WISCONSIN,
SEND APPLICATIONS TO:

MATERIALS LICENSING SECTION
U.S. NUCLEAR REGULATORY COMMISSION, REGION III
801 WARRENVILLE RD.
Lisle, IL 60532-4351

ALASKA, ARIZONA, ARKANSAS, CALIFORNIA, COLORADO, HAWAII, IDAHO, KANSAS,
LOUISIANA, MONTANA, NEBRASKA, NEVADA, NEW MEXICO, NORTH DAKOTA,
OKLAHOMA, OREGON, PACIFIC TRUST TERRITORIES, SOUTH DAKOTA, TEXAS, UTAH,
WASHINGTON, OR WYOMING, SEND APPLICATIONS TO:

NUCLEAR MATERIALS LICENSING SECTION
U.S. NUCLEAR REGULATORY COMMISSION, REGION IV
811 RYAN PLAZA DRIVE, SUITE 400
ARLINGTON, TX 76011-8064

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 JURISDICTIONS.

1. THIS IS AN APPLICATION FOR (Check appropriate item):

<input type="checkbox"/>
<input checked="" type="checkbox"/>
<input type="checkbox"/>

A. NEW LICENSE

B. AMENDMENT TO LICENSE NUMBER 37-20505-01

C. RENEWAL OF LICENSE NUMBER _____

2. NAME AND MAILING ADDRESS OF APPLICANT (Include Zip code)

Shenango, Incorporated
200 Neville Road
Pittsburgh, PA 15225-1690

3. ADDRESS(ES) WHERE LICENSED MATERIAL WILL BE USED OR POSSESSED

Same

4. NAME OF PERSON TO BE CONTACTED ABOUT THIS APPLICATION

Jim Martin-Shenango, Inc.
Todd Mobley- Applied Health Phy.

TELEPHONE NUMBER

(412)-777-6679 / (412)-835-9555

SUBMIT ITEMS 5 THROUGH 11 ON 8-1/2 X 11" PAPER. THE TYPE AND SCOPE OF INFORMATION TO BE PROVIDED IS DESCRIBED IN THE LICENSE APPLICATION GUIDE.

5. RADIOACTIVE 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

7. INDIVIDUAL(S) RESPONSIBLE FOR RADIATION SAFETY PROGRAM AND THEIR TRAINING EXPERIENCE

8. TRAINING FOR INDIVIDUALS WORKING IN OR FREQUENTING RESTRICTED AREAS

9. FACILITIES AND EQUIPMENT

10. RADIATION SAFETY PROGRAM

11. WASTE MANAGEMENT

12. LICENSEE FEES (See 10 CFR 170 and Section 170.31)

FEE CATEGORY

AMOUNT
ENCLOSED \$

13. CERTIFICATION (Must be completed by applicant) THE APPLICANT UNDERSTANDS THAT ALL STATEMENTS AND REPRESENTATIONS MADE IN THIS APPLICATION ARE BINDING UPON THE APPLICANT.

THE APPLICANT AND ANY OFFICIAL EXECUTING THIS CERTIFICATION ON BEHALF OF THE APPLICANT, NAMED IN ITEM 2, CERTIFY THAT THIS APPLICATION IS PREPARED IN CONFORMITY WITH TITLE 10, CODE OF FEDERAL REGULATIONS, PARTS 30, 32, 33, 34, 35, 36, 39 AND 40, AND THAT ALL INFORMATION CONTAINED 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 STAT. 749 MAKES IT A CRIMINAL OFFENSE TO MAKE A WILLFULLY FALSE STATEMENT OR REPRESENTATION TO ANY DEPARTMENT OR AGENCY OF THE UNITED STATES AS TO ANY MATTER WITHIN ITS JURISDICTION.

CERTIFYING OFFICER - TYPED/PRINTED NAME AND TITLE

DANIEL DEMOISE VICE PRESIDENT

SIGNATURE

Daniel Demoise

DATE

2/14/97

FOR NRC USE ONLY

TYPE OF FEE	FEE LOG	FEE CATEGORY	AMOUNT RECEIVED	CHECK NUMBER	COMMENTS
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\$

APPROVED BY

DATE

OFFICIAL RECORD COPY

ML 10

124280

FEB 19 1997

United States Nuclear Regulatory Commission
475 Allendale Road
King of Prussia, PA 19406-1415

February 14, 1997

Re: License No. 37-20505-01
Docket No. 030-19345

ATTACHMENT No. 1

5. Cesium-137 Sealed Source Not to exceed 2 Curies per source and 4 Curies Total
6. Coke oven machinery gamma-ray interlock system transmitter.
7. Todd Mobley

See Attachment 2
8. All individuals who in the course of employment at Shenango, Inc. are likely to receive in a year an occupational dose in excess of 100 mrem will be trained in accordance with Title 10 of the Code of Federal Regulations, Part 19.12. See Attachment 3 for course description.
9. Radioactive material is contained within Koppers Co. Model 2409-6A26 coke guide machinery, located at the Shenango, Inc. facility 200 Neville Road, Pittsburgh, PA. 15225.
10. The *Radiation Safety Program* at Shenango, Inc. will be implemented in accordance with applicable regulations. The training of workers, leak testing of sealed sources, shutter operability checks and source inventories will be performed as required. Shenango, Inc. will ensure through training and supervision that license conditions are met and that individual exposures will be maintained ALARA.

Licensed materials will only be used by, or under the supervision of the Radiation Safety Officer, or individuals who have received the training described in Attachment 3 and designated in writing by the Radiation Safety Officer.
11. Upon termination of activities, the radioactive devices will either be:
 - a. Returned to the manufacturer
 - b. Transferred to another authorized licensee
 - c. Disposed of at a licensed facility.
12. Amendment fee for category 3.P. \$300.00

United States Nuclear Regulatory Commission
475 Allendale Road
King of Prussia, PA. 19406-1415

Re: License No. 37-20505-01
Docket No. 030-19345

ATTACHMENT 2

Certificate of Radiological Training

This is to certify that

Todd Mobley

has completed the 40-hour sequence of training entitled
Radiation Safety Officer Training Course

*presented at Applied Health Physics, Inc.,
Bethel Park, PA on September 2, 1994.*



HEALTH PHYSICS, Inc.
2986 INDUSTRIAL BLVD. • BETHEL PARK, PA 15102
PHONE: (412) 833-9555 • FAX: (412) 833-9559

Peter Collopy

PETER COLLOPY, CHH, CH
DIRECTOR, TECHNICAL SERVICES



Todd Y. Mobley
429 Frankfort Road
Monaca, PA. 15061
412-835-9555 (W) 412-774-0102 (H)

S U M M A R Y O F Q U A L I F I C A T I O N S

Over seventeen years of experience in the nuclear industry. Including regulatory, commercial, academic, research, manufacturing and industrial applications.

E D U C A T I O N

Mansfield State University

Mansfield, PA.

1973 - 1977

GRADUATED WITH B.A. IN CRIMINAL JUSTICE 1977

BEAVER COUNTY COMMUNITY COLLEGE

MONACA, PA.

COURSES COMPLETED:	NUCLEAR POWER SYSTEMS	1983-84
	RADIATION PHYSICS	1984
	RADIATION SAFETY OFFICER	1994
	HAZARDOUS WASTE OPER. HEALTH AND SAFETY	1994
	HAZWOPER REFRESHER	1995/96

P R O F E S S I O N A L E X P E R I E N C E

Applied Health Physics Inc.

Radiation Safety Officer/ Technical Supervisor 1996-Present

Duties included USNRC and PADEPLicense amendments and renewals, regulatory correspondence, Radiation Safety Program streamlining and compliance verification.

Technical Services Supervisor

1994-1996

Project Manager during site characterizations, remediations and decommissionings. Supervision of routine health physics services i.e. instrument calibrations, sealed source leak testing and radioactive waste packaging and shipping. Developed Health and Safety Plans, Decommissioning Plans, applicable procedures and radiation safety manuals. Contract liaison between regulatory agencies i.e. USNRC and State licensees. Performed audits for internal program and clients. Radiation emergency responder.

Training Instructor for Radiation Safety Officer Courses, developed lesson plans for internal and client training.

Prepared quotations for all aspects of health physics related projects.

Supervised the reorganization of an internal radioactive waste brokering plan.

Nuclear Power Plant Experience: Five years at various sites as Project Supervisor and Training Instructor.

Nine years as technician/foreman

P R O F E S S I O N A L M E M B E R S H I P S

WESTERN PENNSYLVANIA CHAPTER OF THE HEALTH PHYSICS SOCIETY

APPALACHIAN COMPACT USERS OF RADIOACTIVE ISOTOPES

United States Nuclear Regulatory Commission
475 Allendale Road
King of Prussia, PA 19406-1415

Re: License No. 37-20505-01
Docket No. 030-19345

ATTACHMENT 3

Training for Shenango, Inc. Radiation Workers

All Shenango, Inc. employees that likely would receive an occupational dose in excess of 100 millirem in one year will receive initial training that covers the following:

Radiation Fundamentals	Applicable Regulations
Biological Effects	License Conditions
External Protection (ALARA)	Notifications
Emergency Situations and Responses	Rights and responsibilities

Refresher Training will be provided to Shenango, Inc. employees that meet the 10CFR 19.12 requirements every three years.

(FOR LFMS USE)
INFORMATION FROM LTS

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: PROGRAM CODE: 03120  
: STATUS CODE: 0  
: FEE CATEGORY: 3P  
: EXP. DATE: 20020731  
: FEE COMMENTS:  
: DECOM FIN ASSUR REQD: N
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A. REGION

APPLICANT/LICENSEE: SHENANGO, INC.
RECEIVED DATE: 970219
DOCKET NO: 3019345
CONTROL NO.: 124280
LICENSE NO.: 37-20505-01
ACTION TYPE: AMENDMENT

AMOUNT: \$ 300.00
CHECK NO.: 12141

SIGNED
DATE

1. FEE CATEGORY AND AMOUNT:

AMENDMENT
RENEWAL
LICENSE

3. OTHER

SIGNED
DATE

Log Feb 16
Ref # 401
Check No. 12141
Amount \$300
Fee Category 3P
Type of Fee AND
Date Check Rec'd 2/18/97
Date Completed
By BAK

REC'D - 25 MAR 1967