

APPLICATION FOR MATERIAL LICENSE

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.

FEDERAL AGENCIES FILE APPLICATIONS WITH:

U.S. NUCLEAR REGULATORY COMMISSION
DIVISION OF FUEL CYCLE AND MATERIAL SAFETY, NMSS
WASHINGTON, DC 20555

ALL OTHER PERSONS FILE APPLICATIONS AS FOLLOWS, IF YOU ARE LOCATED IN:

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

U.S. NUCLEAR REGULATORY COMMISSION, REGION I
NUCLEAR MATERIAL SECTION B
631 PARK AVENUE
KING OF PRUSSIA, PA 19406

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

U.S. NUCLEAR REGULATORY COMMISSION, REGION II
MATERIAL RADIATION PROTECTION SECTION
101 MARIETTA STREET, SUITE 2900
ATLANTA, GA 30323

IF YOU ARE LOCATED IN:

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 60137

ARKANSAS, COLORADO, IDAHO, KANSAS, LOUISIANA, MONTANA, NEBRASKA,
NEW MEXICO, NORTH DAKOTA, OKLAHOMA, SOUTH DAKOTA, TEXAS, UTAH,
OR WYOMING, SEND APPLICATIONS TO:

U.S. NUCLEAR REGULATORY COMMISSION, REGION IV
MATERIAL RADIATION PROTECTION SECTION
611 RYAN PLAZA DRIVE, SUITE 1000
ARLINGTON, TX 76011

ALASKA, ARIZONA, CALIFORNIA, HAWAII, NEVADA, OREGON, WASHINGTON,
AND U.S. TERRITORIES AND POSSESSIONS IN THE PACIFIC, SEND APPLICATIONS
TO:

U.S. NUCLEAR REGULATORY COMMISSION, REGION V
MATERIAL RADIATION PROTECTION SECTION
1450 MARIA LANE, SUITE 210
WALNUT CREEK, CA 94596

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 item)

- ☐ A. NEW LICENSE
☒ B. AMENDMENT TO LICENSE NUMBER 20-20815-01
☐ C. RENEWAL OF LICENSE NUMBER _____

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

Digital Equipment Corporation
100 Minuteman Road APO-1/B8
Andover, MA 01810

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

Digital Equipment Corporation
100 Minuteman Road APO-1/B8
Andover, MA 01810

4. NAME OF PERSON TO BE CONTACTED ABOUT THIS APPLICATION

Michael B. Amster CIH, CSP Industrial Hygiene & Safety Manager

TELEPHONE NUMBER

617-689-1181

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 AND 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 3P AMOUNT
ENCLOSED \$60.00

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, 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 MISREPRESENTATION
TO ANY DEPARTMENT OR AGENCY OF THE UNITED STATES AS TO ANY MATTER WITHIN ITS JURISDICTION.

SIGNATURE—CERTIFYING OFFICER

TYPED/PRINTED NAME

TITLE

DATE

Michael B. Amster Michael B. Amster

Industrial Hygiene and
Safety Manager

8/5/87

14. VOLUNTARY ECONOMIC DATA

a. ANNUAL RECEIPTS

<\$250K	\$1M-3.5M
\$250K-500K	\$3.5M-7M
\$500K-750K	\$7M-10M
\$750K-1M	>\$10M

b. NUMBER OF EMPLOYEES (Total for
entire facility excluding outside contractors)

c. NUMBER OF BEDS

d. WOULD YOU BE WILLING TO FURNISH COST INFORMATION (Dollar and/or staff hours)
ON THE ECONOMIC IMPACT OF CURRENT NRC REGULATIONS OR ANY FUTURE
PROPOSED NRC REGULATIONS THAT MAY AFFECT YOUR BUSINESS? (If "NO", permit
it to protect confidential commercial or financial—proprietary information—submit to
the agency in confidence)

YES

NO

FOR NRC USE ONLY

TYPE OF FEE

FEE LOG

FEE CATEGORY

COMMENTS

AMOUNT RECEIVED

CHECK NUMBER

BB04140194 B70914

REG1 LIC30

20-20815-01

DCD

APPROVED BY

DATE

PRIVACY ACT STATEMENT

Pursuant to 5 U.S.C. 552a(e)(3), enacted into law by section 3 of the Privacy Act of 1974 (Public Law 93-579), the following statement is furnished to individuals who supply information to the Nuclear Regulatory Commission on NRC Form 313. This information is maintained in a system of records designated as NRC-3 and described at 40 Federal Register 45334 (October 1, 1975).

1. **AUTHORITY:** Sections 81 and 161(b) of the Atomic Energy Act of 1954, as amended (42 U.S.C. 2111 and 2201(b)).
2. **PRINCIPAL PURPOSE(S):** The information is evaluated by the NRC staff pursuant to the criteria set forth in 10 CFR Parts 30, 32, 33, 34, 35 and 40 to determine whether the application meets the requirements of the Atomic Energy Act of 1954, as amended, and the Commission's regulations, for the issuance of a radioactive material license or amendment thereof.
3. **ROUTINE USES:** The information may be (a) provided to State health departments for their information and use; and (b) provided to Federal, State, and local health officials and other persons in the event of incident or exposure, for their information, investigation, and protection of the public health and safety. The information may also be disclosed to appropriate Federal, State, and local agencies in the event that the information indicates a violation or potential violation of law and in the course of an administrative or judicial proceeding. In addition, this information may be transferred to an appropriate Federal, State, or local agency to the extent relevant and necessary for an NRC decision or to an appropriate Federal agency to the extent relevant and necessary for that agency's decision about you.
4. **WHETHER DISCLOSURE IS MANDATORY OR VOLUNTARY AND EFFECT ON INDIVIDUAL OF NOT PROVIDING INFORMATION:** Disclosure of the requested information is voluntary. If the requested information is not furnished, however, the application for radioactive material license, or amendment thereof, will not be processed. A request that information be held from public inspection must be in accordance with the provisions of 10 CFR 2.790. Withholding from public inspection shall not affect the right, if any, of persons properly and directly concerned need to inspect the document.
5. **SYSTEM MANAGER(S) AND ADDRESS:** U.S. Nuclear Regulatory Commission
Director, Division of Fuel Cycle and Material Safety
Office of Nuclear Material Safety and Safeguards
Washington, D.C. 20555

7. Individual(s) responsible for Radiation Safety Program, all of whom have completed the 40 hour Intertest RSO Training Course, and their additional training and experience (Please refer to page 3 of the license application).

a. Radiation Safety Officer (RSO):

Michael B. Amster CIH, CSP Industrial Hygiene and Safety Manager
(See attached resume for applicable training and experience.)

b. Radiation Safety Officer Alternates:

Richard G. Aichelmann CSP Plant Safety Engineer
Linda M. Howard Plant Industrial Hygienist
(See attached resumes for applicable training and experience.)

c. Individual(s) who will use or directly supervise the use of licensed material:

Fernando Del Campillo Process and Plating Engineer

And the following Management, Repair and Maintenance Technicians, and Operators who have all successfully completed the 40 hour Intertest RSO Training Course.

Paul Landi	Gary Johnson
Hon Nguyen	Larry Schiavone
Kendall Brown	Lynne Mattedi
Bill Gonzalez	Dave Carmen
Tom Shenton	Kevin Hathaway
Kevin Dushane	

9. Facilities and Equipment (Please refer to page 19 of the license application):

I. Control Area:

The control or restricted area for the Intertest 1014-B Fine Leak Pressurization System is an enclosed, dedicated room of the following description:

- 120 sq. ft. room with 9 ft. ceiling.
- 1 window and double doors with glass windows and a lock.
- Foil-faced gypsum board for walls, non-conductive flooring, and mylar faced-edge wrapped ceiling tiles.
- 165 degree recessed sprinkler.
- Two lay-in light fixtures.

II. Exhaust Fan/Stack Assembly Data:

The ventilation system provides a pressure differential from positive (outside) to negative (inside) the room. The air supply to the control area is part of the air conditioning system that is dedicated to the adjacent cleanroom. It is provided through a dampered wall opening designed to close should the machine exhaust fail. The dedicated machine exhaust is 1500 cubic feet per minute (cfm).

The exhaust fan/stack assembly is sealed and dedicated to the Fine Leak System. The exhaust fan is located outside the building on the roof to assure that the ductwork inside the building is under negative pressure. The ductwork is constructed of galvanized steel with a 12" square stack. The stack is 10 feet above the roof line with a rain deflector inside the stack and a drain plug. The stack is approximately 55-60 feet from the nearest intake vent on the roof.

10. Radiation Safety Program: (refer to page 2 of License Additional Information, March 19, 1987)

VIII. Calibration Procedures:

(Please refer to page 2 of the Additional Information Letter March 19, 1985.) Portable G-M survey meters will be checked for battery strength before each use and will be calibrated every year according to Manufacturer's recommendations and specifications. The meter manufacturer will be used to provide meter calibration and service.

X. Alarm State Procedure:

(Please refer to page 28 of the license application) State and NRC authorities shall be notified if any of the following occur:

- * DELETE: "A loss of 5 Curies of Krypton-85 in any 24-hour period."

MICHAEL B. AMSTER, CIH, CSP

Certified Industrial Hygienist
Certified Safety Professional

Methuen, Massachusetts 01844

OBJECTIVE: A position involving design and implementation of corporate policies for industrial hygiene, safety, right-to-know, and environmental affairs.

EDUCATION: Specialized Management and Technical Courses - Sponsored by government and industry.

Middlebury College, M.S., Chemistry, 1975.

Colby College, B.A., Chemistry, 1972.

PROFESSIONAL CERTIFICATIONS:

CSP - Certified Safety Professional in Comprehensive Practice by the Board of Certified Safety Professionals, 1985.

CIH - Certified Industrial Hygienist in Comprehensive Practice by the American Board of Industrial Hygiene, 1982.

EXPERIENCE:

DIGITAL EQUIPMENT CORPORATION. (5/86 - present)

Industrial Hygiene and Safety Manager - Management of the development and implementation of the Andover Facility industrial hygiene, safety, and air emission control program. Site Laser Safety and Radiation Safety Officer.

TEXAS INSTRUMENTS INC. (7/84 - 5/86)

Materials and Controls Group Industrial Hygienist - Responsibilities in industrial hygiene, safety, right-to-know, occupational health, and environmental affairs for more than 6000 employees in four plants.

CONSULTANT (5/83 - 7/84)

Professional consultation in industrial hygiene, safety, environmental affairs including field surveys, program development, and training.

TRC ENVIRONMENTAL CONSULTANTS, INC. (11/81 - 5/83)

Manager of Industrial Hygiene, Manager of the Industrial Hygiene Laboratory, and Principal Scientist in the Odor and Indoor Quality Group.

AETNA LIFE AND CASUALTY CO. (6/75 - 11/81)

Senior Industrial Hygienist (1/77 - 11/81) - Field surveys, chemical analyses of samples, and training.

Engineering Representative (6/75 - 1/77) - Loss control service. Evaluation of property and casualty accounts for insurability.

AREAS OF EXPERTISE:

Senior professional consulting, program management and implementation of plant specific and corporate wide preventative and remedial programs involving industrial hygiene, safety, right-to-know, indoor air quality improvement, odor evaluation and control, environmental compliance, and hazardous waste site safety management. Experience includes independent consultation to senior management, regulatory analysis, expert testimony, and in-house staff development through design and delivery of seminars and specialized training programs.

Program Management: Direct supervision, coordination, and scheduling of industrial hygiene, safety, and expert technical support staff. Client and/or production management interaction during all project phases. Maintenance of budgetary controls.

Industrial Hygiene, Safety, and Environmental Affairs: Recognition, evaluation, and control of occupational health and safety exposures in the industrial environment. Support of right-to-know compliance. Environmental compliance and hazardous waste site safety analyses. Identification and resolution of indoor air quality problems in the non-industrial environment. Characterization of ventilation systems with the use of various gas tracer techniques. Engineering evaluations. Laser and radiation safety.

Odor Technology: Definition, evaluation, and control of community odor problems resulting from process upsets and/or sampling. State-of-the-art odor measurement. Analytical capability for source finger printing and odorant identification. Control alternative evaluations.

Seminars and Training: Preparation and presentation of articles and topics to industry groups, professional societies, and government organizations on indoor air quality and ventilation. Training of industrial hygiene professionals, safety directors, and plant engineers in areas including industrial hygiene fundamentals, chemical exposures, personal protection, and ventilation.

ACCOMPLISHMENTS HAVE INCLUDED:

Over three hundred industrial hygiene surveys nationwide in a multitude of industrial and non-industrial settings.

Development and management of a nationally known consulting firm's industrial hygiene program.

Design and management of indoor air quality and hazardous waste site studies using the TAGA mobile mass spectrometer.

Participation in projects for the evaluation of the community impact and control of odors released from waste treatment facilities and industrial processes.

Author and conference speaker with presentations to the American Industrial Hygiene Association (AIHA), Air Pollution Control Association (APCA), and American Society of Heating, Refrigeration, and Air Conditioning Engineers (ASHRAE).

ORGANIZATIONS, OFFICES, AND COMMITTEES:

American Industrial Hygiene Association, Local and National, Since 1977.

* Local Section President, 1984-1985.

* National Committee - Indoor Environmental Air Quality, Since 1983.

American Academy of Industrial Hygiene, Since 1982.

American Lung Association of Massachusetts, Environmental Quality Guidance Committee, Since 1984.

Semiconductor Safety Association, Since 1987.

SPECIAL INTERESTS:

Travel
Photography
Sports including skiing, tennis, golf

REFERENCES:

Available upon request.

LINDA M. HOWARD
61 MALDEN STREET
HOLDEN, MASSACHUSETTS 01520

EXPERIENCE:

DIGITAL EQUIPMENT CORPORATION, ANDOVER, MA

INDUSTRIAL HYGIENIST, 9/86 - present

Responsible for creating and implementing industrial hygiene and safety

- * Completed Radiation Safety Officer training course sponsored by Intertest Corporation
- * Conduct monthly room surveys and film badge changes
- * Develop and maintain a data base for industrial hygiene sampling data
- * Perform industrial hygiene review for new processes

WANG LABORATORIES, INC., LOWELL, MA

INDUSTRIAL HYGIENIST, 11/84 - 9/86

Responsible for implementing corporate wide industrial hygiene program

- * Developed corporate wide respirator compliance and training program
- * Develop and maintain a data base for air and noise sampling data
- * Conduct annual training for Hearing Conservation and Hazard Communication
- * Perform toxicological review of new products and processes
- * Conduct air sampling, noise surveys and ventilation measurements in manufacturing facilities and recommend controls for employee exposures

AMERICAN MUTUAL INSURANCE COMPANIES, WAKEFIELD, MA

INDUSTRIAL HYGIENE REPRESENTATIVE, 5/84 - 11/84

Responsible for industrial hygiene field surveys in CT, RI and upstate NY

- * Conducted air sampling, noise surveys and ventilation measurements for a wide variety of policy holders
- * Completed written reports for each survey outlining recommendations for employee exposures
- * Conducted follow-up visits to review improvements made by clients

LOSS CONTROL REPRESENTATIVE, 7/83 - 5/84

Responsible for Loss Control surveys in CT and RI

- * Conducted safety surveys and identified potential safety exposures
- * Completed written reports which included recommendations addressing safety concerns and solutions

EDUCATION:

KEENE STATE COLLEGE, KEENE, NH

B.S. OCCUPATIONAL SAFETY

- * 3.29 Overall GPA
- * 3.9 GPA in major
- * Dean's list
- * Vice President of the Student Chapter of the American Society of Safety Engineers, Boston Chapter
- * Vice President of Administration, Eta Gamma Chi Sorority

FERNANDO DEL CAMPILLO

DERRY, NH 03038

TELEPHONES: OFFICE (617) 689-1396

HOME 689-1396

PROFESSIONAL OBJECTIVES:

AN ENGINEERING POSITION IN A MANUFACTURING ENVIRONMENT THAT PROVIDES
CONTINUES DEVELOPMENT, CHALLENGE, LEARNING AND OFFERING EVENTUALLY AN
OPPORTUNITY FOR A MANAGERIAL POSITION.

EDUCATION:

1984 B.S.C.H.E., UNIVERSITY OF PUERTO RICO, MAYAGUEZ CAMPUS

GRADUATED WITH A CUM-LAUDE AVERAGE

MEMBER OF TAU BETA PI

WORK EXPERIENCE:

JULY 1986 - PRESENT

DIGITAL EQUIPMENT CORPORATION (SEMICONDUCTOR ASSEMBLY ORGANIZATION)
ANDOVER, MA.

POSITION: PROCESS AND PLATING ENGINEER

RESPONSIBILITIES:

1) PLATING OPERATION:

PROCESS
PROCESS CONTROL
LABORATORY ANALYSIS
PROCESS SPECIFICATIONS
MILITARY METHODS AND REQUIREMENTS
TESTS FOR PROCESS RELIABILITY

2) CENTRIFUGE PROCESS

3) TEMPERATURE CYCLE PROCESS

4) FINE LEAK PROCESS (HELIUM AND Kr-85)

5) GROSS LEAK PROCESS

JULY 1985

PRECISION MONOLITHICS PUERTO RICO INC. (SEMICONDUCTOR INDUSTRY)
FAJARDO, PUERTO RICO

POSITION: ASSEMBLY AND PLATING ENGINEER

RESPONSIBILITIES:

1) PLATING AND WAVE SOLDERING OPERATION FOR Cerdip PACKAGES:

FACILITIES
EQUIPMENT SELECTION
EQUIPMENT SET-UP
PROCESS SELECTION
PROCESS SET-UP
PERSONNEL SUPERVISION
PROCESS CONTROL
EQUIPMENT MAINTENANCE
LABORATORY
PROCESS SPECIFICATIONS
MILITARY METHODS AND REQUIREMENTS
TESTS FOR PROCESS RELIABILITY

2) TEMPERATURE CYCLE PROCESS

3) FINE LEAK PROCESS (HELIUM AND Kr-85)

DECEMBER 1984 - JULY 1985

SILICON GENERAL CARIBBEAN, INC. (SEMICONDUCTOR INDUSTRY)
AGUADA, PUERTO RICO

POSITION: ASSEMBLY ENGINEER

RESPONSIBILITIES:

1) PLATING PROCESS

2) BACKEND PROCESSES

3) RADIATION SAFETY OFFICER

4) BACKEND SUPERVISOR

TRAINING OBTAINED:

1) PLATING PROCESS BY BANCE HOM FROM TECHNOLINCS AND AMERICHEM
CORP., PHOENIX, ARIZONA.

2) RADIATION SAFETY BY JOHN TRIPPA FROM TRIO-TECH CORP.

3) RADIATION SAFETY AND FINE LEAK EQUIPMENT MAINTENANCE BY MARK
WITKOWSKI FROM INTERTEST CORP.

4) WAVE SOLDERING AND SURFACE MOUNT TECHNOLOGY BY LARCOT AND
ASSOCIATES.

SHORT TERM INTERESTS:

TO CONTINUE LEARNING ABOUT PRODUCT FINISHING PROCESSES FOR THE
SEMICONDUCTOR INDUSTRY AND OTHER MATTERS RELATED TO THE SEMICON-
DUCTOR ASSEMBLY OPERATIONS. ALSO, TO WIDEN MY KNOWLEDGE IN EVERY-
THING CONCERNING TO THIS INDUSTRY TO GROW PROFESSIONALLY AS WELL
AS PERSONALLY.

BETWEEN: William O. Miller, Chief
License Fee Management Branch
Office of Administration

John E. Glenn, Chief
Nuclear Materials Section B
Division of Engineering and
Technical Programs

Address Ch

030-22117
03124

4/90

LICENSE FEE TRANSMITTAL

A. REGION *1*

1. APPLICATION ATTACHED

Applicant/Licensee:

Application Dated:

Control No.:

License No.:

Digital Equipment Corp

8/5/87

107694

20-20815-01

2. FEE ATTACHED

Amount:

Check No.:

\$ 60.00

199

3. COMMENTS

Signed

Date

Jorter

8/22/87

B. LICENSE FEE MANAGEMENT BRANCH

1. Fee Category and Amount:

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

Amendment

Renewal

License

3P

\$ 60

Signed

Date

J. Kimberley

8/28/87