

Medicine
Health Physics
Industrial Hygiene
Toxicology
Medical Department/3M

3M Center
St. Paul, Minnesota 55144
612/733 1110

September 13, 1984

U.S. Nuclear Regulatory Commission
Region III
799 Roosevelt Road
Glen Ellyn, IL 60137

Attention: Bruce S. Mallett, Chief
Licensing Section

Subject: Renewal of 22-00057-32G
NRC Program Code 03240

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U.S. N.R.C.
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Applicant	3M
Check No.	942507
Amount of Collection	\$700
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Code	9/27/84
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Gentlemen:

This letter constitutes a renewal application for Byproduct Material License 22-00057-32G. It is being submitted in accordance with the instructions provided to 3M by the NRC Notice of Expiration dated August 1, 1984. Since our current license and supporting documents accurately reflect our program, we wish to continue operation under the current license. The 3M contact person for this renewal application is Robert G. Wissink, Chairman, Isotope Committee who can be reached on 612/733-4095. Any correspondence should be directed to the attention of Robert G. Wissink, 3M Center 220-2E-02, St. Paul, MN 55144 to avoid delays in mail distribution. The renewal fee of \$700.00 is enclosed.

Introduction

USNRC License 22-00057-32G was amended on October 10, 1979 (Amendment 08) to extend the expiration date of the license to October 31, 1984 and to incorporate information submitted to USNRC in September 1977 in support of this renewal. At that time we submitted the information in the form of a "living document", covering our entire operation and designed to be updated and maintained current. Since that time we have updated this document at least annually, including any significant changes which were made in our operations, and have submitted monthly and annual reports of activities under this license.

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Since the information submitted in 1977, as amended, remains completely current, we would request that the license be renewed for an additional five years (or longer period if possible) on the basis of the information submitted previously and this letter.

For purposes of convenience, we have summarized the activities under the license during the period 1979 through 1983 below. However, this information has already been submitted to USNRC as part of our monthly and annual reports under the license.

Summary of Activities (1979-1983)

During this period, we have been submitting monthly reports to USNRC in two areas. The first is a report of smear tests carried out on undamaged returned devices and the other a computer printout showing devices which have not been returned from customers within the lease period. In addition we have submitted annual reports summarizing the number of units distributed in the U.S.A. and returned from customers, the tests run on undamaged returned units and incidents involving nuclear static eliminators which occurred during the previous year.

Sufficient data is available to analyze most of these activities over the last five years during which we have distributed approximately 146,500 units in the U.S.A. Sales growth of these units is approximately 5% per year with distribution of 26,200 units in 1979 and 32,500 units in 1983. During this period, essentially 100% of these units have been accounted for as returned. There has been some slight year to year variation in the total number of units returned, but the conclusion is that essentially all customers ultimately return the devices, although not all customers return them within the lease period. We have continued to increase our activities in the area of telephone contact with customers to encourage returns and have made this an important part of Static Analyst training.

The table below summarizes the tests made on returned undamaged units during the same period.

Returned Unit Tests (1979-83)

<u>Model</u>	<u>Number Tested</u>	<u>Over 0.005 uci</u>	<u>%</u>
Static Bars plus 906	45,000	45	0.10
All Others	54,300	5	0.01
<u>Totals</u>	<u>99,300</u>	<u>50</u>	<u>0.05</u>

It can be seen that we tested almost 100,000 units with only 50 units (0.05%) showing a smear test in excess of 0.005 microcuries. The average value obtained was 0.05 microcuries with a range of 0.005 to 0.25. It should be noted that essentially all failures occur on three model numbers, the 210 and 315 Static Bars and the 906 Air Ionizer. Forty-five of the 50 failures were accounted for by these three model numbers giving a "failure" rate of 0.1%. All other devices have a "failure" rate of only 0.01%. The major reason for higher smear tests on the bars and Model 906 seems to be the activity content of the units which range from two to ten times the other units. In addition the bar units are primarily used in heavier industrial application where physical damage might occur. In general, the failure mode appears to be loss of one or more microspheres rather than complete destruction of the device. These data indicate, to us, that there is no reasonable probability of contamination of customers locations or exposure to personnel as a result of the use of these devices.

While the devices are extremely unlikely to release material during normal use, there are certain conditions of abuse which could cause release of some Po-210. These have been treated as "incidents" and break down into three types. These include solvent attack (including steam or solvent vapor), exposure to fire or high temperatures, and physical damage. Users of the devices are cautioned against exposing devices to these environmental conditions, but occasionally such things will occur due to accident or abuse by a customer.

The table below summarizes the incidents reported to us or otherwise detected during the period from 1979-1983.

Incident Statistics (1979-83)

<u>Type</u>	<u>Solvent Attack</u>	<u>Fire or Heat</u>	<u>Physical Damage</u>
Number of Incidents	17	32	32
Number of Devices	80	69	59
Clean Up Required	13	1	10
Frequency Trend	Flat	Down	Down

There were a total of 81 incidents during the five year period, an average of about 16 per year. However, the frequency of incidents has declined sharply over the five year period, going from a high of 24 incidents in 1980 to a low of 8 incidents in 1983. We feel this is due to a better program of instruction of our customers by our Static Analysts and improved visibility of the special precaution section in our instruction sheets (copies attached).

In the case of solvent attack, there were 17 incidents involving 80 devices in the period in question. In 13 of the 17 cases (76%) it was necessary to visit the customer's location and do some sort of decontamination or clean up. In essentially all cases this was accomplished very easily by 3M personnel or, in a few cases, regulatory personnel from an agreement state. The trend in frequency of these incidents has been relatively flat over the last five years with three to four incidents occurring in each year.

In the case of fire or high temperature exposure the total number of incidents has been declining. While 32 have occurred in the last five years the number per year has ranged from a high of 11, again in 1980 to a low of 3 in 1983. In only one case was it necessary to visit the customer's location and do any sort of decontamination. It should be noted that 9 of the 32 incidents involved catastrophic fires where the entire plant or part of a plant burned down. In most of these cases the devices were not recoverable and were disposed of in landfills, along with the other debris, after consultation with regulatory authorities.

Physical damage, including sawing, drilling etc. occurred in 32 instances over the period in question. Again, frequency has been declining with a total of 10 incidents reported in 1979 going down to only 2 in 1983. In 10 of the cases (31%) a visit to the customer's plant was made and some decontamination was required. Several of these cases involved catastrophic damage, such as grinding up the unit in the grinder or something of that sort.

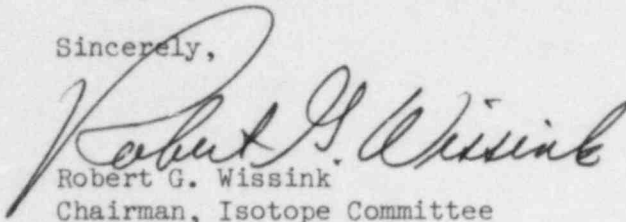
While incidents with these devices do occur and it is occasionally necessary to visit a customer's location to decontaminate, we have had no instances where there was any affect on personnel or where it was not possible to decontaminate the area so that is could be used again by the customer. In the great majority of these cases, such decontamination is completed in a few hours with relatively little effort by the customer's personnel and 3M Technical Service employees.

Conclusion

On the basis of the constant updating of our original application, submission of monthly and annual reports on our activities and the

lack of any evidence of adverse effect of these devices on health and safety, we request that License 22-00057-32G be amended to extend its expiration date by five years or whatever longer period is appropriate.

Sincerely,


Robert G. Wissink
Chairman, Isotope Committee

RGW/lma

Attachments

Please retain this document as your permanent record of receipt of the Nuclear Static Eliminators.

3M Brand Nuclear Static Eliminators

General Instruction Sheet

3M Brand Static Eliminators are one of the most efficient devices available for the elimination of static electricity. Since their ability to eliminate static charge comes from a nuclear material, Polonium 210, they do not require electrical power.

The nuclear element in this device emits alpha radiation. Alpha particles have such a low penetrating ability, they will not penetrate a thin sheet of paper. No special handling is required since the isotope is permanently caged in 3M Brand Radiating Microspheres. These are then housed sufficiently to make contact impossible under normal use.

The above information is not meant to imply these devices are a cure-all; although, they are designed to reduce the static charge to negligible levels. The actual level to which the static charge is reduced depends upon the individual application.

Special Precautions

1. In case a static eliminator has been subjected to fire or other catastrophe or has been lost or stolen, please notify the 3M Static Control Systems Department immediately by telephone (collect). The telephone number is 612/733-9420. Ask for the Regulatory Affairs Manager (or someone designated by him). We will advise you relative to reporting the incident to the proper authorities when required.

2. Although these devices are designed to retain their integrity under normal industrial operating conditions, they could be damaged if subjected to extreme environmental conditions. These devices should not be used in the following environments. If there are any questions regarding your application please contact your local Static Analyst or 3M Static Control Systems.

- a) Ambient temperature in excess of 200°F
- b) Solvents of any kind, including water
- c) Mineral acids or caustics
- d) Constant vibration or physical impact
- e) Flying abrasive matter
- f) Direct contact with steam

3. See also NRC Regulations included herewith.

Installation - Static Bars (203, 204, 205, 206, 210, 315)

The most effective ionization distance is approximately 1" from the screened surface of the nuclear component of the device, and the device should be mounted above or below the material to be neutralized at this distance.

Because of the wide range of application, mounting brackets are not provided except for the 206, 210, and 315. Mounting holes that take a 1/4" bolt are placed at the ends of the housing of these devices.

The proper positioning of Model 203 and 205, which are used exclusively in film cleaners, is automatically taken care of by following the instruction sheet for the appropriate film cleaner.

Positioning of the device must be determined for each application. In most cases the device should be placed over the sheet or web at a point where removal of the static charge will eliminate the problem caused by the charge. This is generally determined by trial and error. In most instances a unit on one side of a sheet or web will remove the static charge from both surfaces. There are however, some cases where this does not take place and a device must be used on each side.

These units are not fully effective when placed over a point where the charged sheet or web is in contact

Installation (continued)

with another surface. Most effective neutralization of static electricity takes place when the material is suspended in free space.

These units must be grounded.

Should the determination of the magnitude of the static charge be desired, it is best accomplished by using a commercially available static meter (such as 3M Model 703).

Special Note For Model 315. For proper operation of the "315" it is necessary that the induction component of the device be "upstream" from the nuclear component; that is, the charged material must pass the induction component prior to passing the nuclear component. There is an arrow on the label of this device indicating the proper direction of web movement. The bar should be positioned as above with the needle tips located $\frac{1}{8}$ " from the web.

Installation - Compressed Air Devices (902, 902F, 906, 908)

These devices require no installation except connection to a source of compressed air. Because ionized air rapidly recombines, particularly under compressed conditions, the static eliminator must be placed at the end of the compressed air line so that the distance from the static eliminator to the object to be neutralized is minimal.

A coating of water or oil over the nuclear source will decrease the efficiency of the static eliminator. It is often wise to install an air filter prior to the static eliminator to prevent this problem by removing dust, water, or oil droplets from the air.

Installation - Blown Air Devices (905, 907, 909)

These devices require no installation other than the connection to a source of air (907), such as a pressure blower, or a 110 volt electrical outlet (905, 909).

Cleaning Of Nuclear Static Eliminators

Since the penetrating ability of the alpha particle is so slight, a coating of dust or dirt over the device will adversely affect the operation. To prevent this, it is suggested that whenever possible the unit should be mounted face down.

Should the device become dirty it may be cleaned by blowing off with compressed air. Under no circumstances is a solvent of any type (including water) to be used to clean a static eliminator. If compressed air will not clean the device, it must be returned to 3M for replacement.

Attempts to clean a device by use of solvents, steam, water, detergents or cleaning solutions may cause damage to the nuclear source and release a radioactive material. Such cleaning procedures are a violation of Federal and State regulations.

NRC Regulations

You automatically become a GENERAL LICENSEE when you receive a 3M Brand Static Eliminator. NRC REGULATIONS are inserted in these instructions. The use of the device in an Agreement State is regulated under requirements substantially the same as these.

It is your responsibility to read, understand and abide by these regulations. Any questions regarding them can be referred to the Regulatory Affairs Manager (612/733-9420) or his designee.

RECORD THE SERIAL NUMBER, MODEL NUMBER, PO-210 CONTENT, AND THE DATE YOU RECEIVED THE DEVICE (SEE NEXT PAGE). RECORD THE DATE RETURNED WHEN YOU RETURN YOUR DEVICES TO 3M.

Serial No.	Model Number	Po ²¹⁰ Content (millicuries)	Date Received	Date Returned To 3M

Note: All of the above devices have been leak tested as of manufacture date and all leak tests have shown less than 0.0001 microcuries of removable activity.

Additional leak tests are required after 13 months. Returning the device(s) to 3M within the lease period will take care of this obligation for you. Failure to return the devices in a timely manner may result in your company being in violation of Federal and/or State regulations.

34-7016-0075-0

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Static Control Systems/3M
225-4S-04 3M Center
St. Paul, MN 55144



U.S. NUCLEAR REGULATORY COMMISSION

REGULATIONS

APPLICABLE TO

GENERAL LICENSEES

You automatically become a GENERAL LICENSEE when you receive the 3M Brand Nuclear Static Eliminator. Applicable N.R.C. Regulations may be found on the back of this sheet. The use of this device in an Agreement State is regulated under requirements substantially the same as these. In general the regulations state:

- (1) All labels must be maintained on the devices and you must comply with the instructions provided with the device.
- (2) You cannot transfer the device(s) to another general licensee.
- (3) In case a static eliminator has been subjected to fire or other catastrophe or has been lost or stolen, NOTIFY THE STATIC CONTROL SYSTEMS DEPARTMENT, 3M COMPANY, IMMEDIATELY BY TELEPHONE. THE NUMBER TO CALL (collect) IS 612/733-9420. Ask for the Regulatory Affairs Manager. You will be advised relative to reporting the incident to the proper authorities when required.
- (4) You must retain records of the receipt of the device and its return to 3M at the end of the lease period. (A table to record pertinent data is printed in the static eliminator instruction sheet).
- (5) Po-210 devices must be leak tested every thirteen (13) months. Return of the device(s) to 3M at the end of the 12 month lease period will take care of this obligation for you.
- (6) MODIFICATION OF 3M NUCLEAR STATIC ELIMINATORS BY OPERATIONS SUCH AS CUTTING, DRILLING, BENDING, WELDING, BRAZING OR OTHER DESTRUCTIVE AND/OR ALTERING OPERATIONS IS IN VIOLATION OF FEDERAL LAW AND NOT ALLOWED UNDER ANY CIRCUMSTANCES.
- (7) Under USNRC and State regulations your operations using nuclear static eliminators may be inspected for compliance with these regulations. State regulations may require registration of your devices.

Your local Static Analyst is ready to assist you with any questions you may have concerning compliance with the above regulations. Do not hesitate to call at any time.

If you do not have your local Static Analyst's number, call 612/733-9420 and leave your message. We will see that you are contacted.

**NUCLEAR REGULATORY COMMISSION
GENERAL LICENSE PROVISIONS**

**EXCERPTS FROM 10CFR20, 10CFR30, & 10CFR31
APPLICABLE TO GENERAL LICENSING**

§ 31.5 Certain measuring gauging or controlling devices. 2.3

(a) A general license is hereby issued to commercial and industrial firms and research, educational and medical institutions, individuals in the conduct of their business, and Federal, State or local government agencies to acquire, receive, possess, use or transfer, in accordance with the provisions of paragraph (b), (c) and (d) of this section, byproduct material contained in devices designed and manufactured for the purpose of detecting, measuring, gauging or controlling thickness, density, level, interface location, radiation, leakage, or qualitative or quantitative chemical composition, or for producing light or an ionized atmosphere.

(b) The general license in paragraph (a) of this section applies only to byproduct material contained in devices which have been manufactured or initially transferred and labeled in accordance with the specifications contained in a specific license issued by the Commission pursuant to § 32.51 of this chapter or in accordance with the specifications contained in a specific license issued by an Agreement State which authorizes distribution of the devices to persons generally licensed by the Agreement State.

(c) Any person who acquires, receives, possesses, uses or transfers byproduct material in a device pursuant to the general license in paragraph (a) of this section:

(1) Shall assure that all labels affixed to the device at the time of receipt and bearing a statement that removal of the label is prohibited are maintained thereon and shall comply with all instructions and precautions provided by such labels.

(2) Shall assure that the device is tested for leakage of radioactive material and proper operation of the on-off mechanism and indicator, if any, at no longer than six-month intervals or at such other intervals as are specified in the label, however:

(i) devices containing only krypton need not be tested for leakage of radioactive material; and

(ii) devices containing only tritium or not more than 100 microcuries of other beta and/or gamma emitting material or 10 microcuries of alpha emitting material and devices held in storage in the original shipping container prior to initial installation need not be tested for any purpose.

(3) Shall assure that the tests required by paragraph (c)(2) of this section and other testing, installation, servicing and removal from installation involving the radioactive materials, its shielding or containment, are performed:

(i) in accordance with the instructions provided by the labels; or

(ii) by a person holding a specific license from the Commission or an Agreement State to perform such activities.

(4) Shall maintain records showing compliance with the requirements of paragraph (c)(2) and (c)(3) of this section. The records shall show the results of tests. The records also shall show the dates of performance of, and the names of persons performing, testing, installation, servicing, and removal from installation concerning the radioactive material, its shielding or containment.

(5) Upon the occurrence of a failure of or damage to, or any indication of a possible failure of or damage to the shielding of the radioactive material or the on-off mechanism or indicator, or upon the detection of 0.005 microcurie or more removable radioactive material, shall immediately suspend operation of the device until it has been repaired by the manufacturer or other person holding a specific license from the Commission or an Agreement State to repair such devices, or disposed of by transfer to a person authorized by a specific license to receive the byproduct material contained in the device and within 30 days, furnish to the Director of the appropriate Nuclear Regulatory Commission Regulatory Operations Regional Office listed in Appendix D of Part 20 of this chapter a report containing a brief description of the event and the remedial action taken;

(6) Shall not abandon the device containing byproduct material;

(7) Shall not export the device containing byproduct material except in accordance with part 110 of this chapter.

(8) Except as provided in paragraph (c)(9) of this section shall transfer or dispose of the device containing byproduct material only by transfer to a specific licensee of the Commission or of an Agreement State whose specific license authorizes him to receive the device and within 30 days after transfer of a device to a specific licensee shall furnish to the Director of Licensing, U.S. Nuclear Regulatory Commission, Washington D.C. 20545 a report containing identification of the device by manufacturer's name and model number and the name and address of the person receiving the device. No report is required if the device is transferred to the specific licensee in order to obtain a replacement device.

(9) Shall transfer the device to another general licensee only:

(i) Where the device remains in use at a particular location. In such case the transferor shall give the transferee a copy of this section and any safety documents identified in the label of the device and within 30 days of the transfer, report to the Director of Licensing U.S. Nuclear Regulatory Commission, Washington D.C. 20545, the manufacturer's name and model number of device transferred, the name and address of the transferee, and the name and/or position of an individual who may constitute a point of contact between the Commission and the transferee; or

(ii) Where the device is held in storage in the original shipping container at its intended location of use prior to initial use by a general licensee.

(10) Shall comply with the provisions of §§ 20.402 and 20.403 of this chapter for reporting radiation incidents, theft or loss of licensed material, but shall be exempt from the other requirements of Parts 19, 20 and 21 of this chapter.

(d) The general license in paragraph (a) of this section does not authorize the manufacture or import of devices containing byproduct material.

§ 30.34 Terms and conditions of licenses.

(a) Each license issued pursuant to the regulations in this part and the regulations in Parts 31-36 shall be subject to all the provisions of the Act, now or hereafter in effect, and to all valid rules, regulations and orders of the Commission.

(b) No license issued or granted pursuant to the regulations in this part and Parts 31-36, nor any right under a license shall be transferred, assigned or in any manner disposed of, either voluntarily or involuntarily, directly or indirectly, through transfer of control of any license to any person, unless the Commission shall, after securing full information, find that the transfer is in accordance with the provisions of the Act and shall give its consent in writing.

(c) Each person licensed by the Commission pursuant to the regulations in this part and Parts 31-36 shall confine his possession and use of the byproduct material to the locations and purposes authorized in the license. Except as otherwise provided in the license, a license issued pursuant to the regulations in this part and Parts 31-36 of this chapter shall carry with it the right to receive, acquire, own, possess, and import byproduct material. Preparation for shipment and transport of byproduct material shall be in accordance with the provisions of Part 21 of this chapter.

(d) Each license issued pursuant to the regulations in this part and Part 31-36 shall be deemed to contain provisions set forth in section 183b, -d, inclusive, of the Act, whether or not these provisions are expressly set forth in the license.

(e) The Commission may incorporate in any license issued pursuant to the regulations in this part and Parts 31-36, at the time of issuance, or thereafter by appropriate rule, regulation or order, such additional requirements and conditions with respect to licensee's receipt, possession, use and transfer of byproduct material as it deems appropriate or necessary in order to:

(1) Promote the common defense and security;

(2) Protect health or to minimize danger to life or property;

(3) Protect restricted data;

(4) Require such reports and the keeping of such records, and to provide for such inspections of activities under the license as may be necessary or appropriate to effectuate the purposes of the Act and regulations thereunder.

RECORDS, INSPECTIONS AND TESTS

§ 30.51 Records.

* Each person who receives byproduct material pursuant to a license issued pursuant to the regulations in this part and Parts 31-36 shall keep records showing the receipt, transfer, export and disposal of such byproduct material.

§ 30.52 Inspections.

(a) Each licensee shall afford to the Commission at all reasonable times opportunity to inspect byproduct material and the premises and facilities wherein byproduct material is used or stored.

(b) Each licensee shall make available to the Commission for inspection, upon reasonable notice, records kept by him pursuant to the regulations in this chapter.

§ 30.53 Tests.

Each licensee shall perform, or permit the Commission to perform, such tests as the Commission deems appropriate or necessary for the administration of the regulations in this part and Parts 31-36, including tests of:

(a) Byproduct material;

(b) Facilities wherein byproduct material is utilized or stored;

(c) Radiation detection and monitoring instruments; and

(d) Other equipment and devices used in connection with the utilization or storage of byproduct material.

ENFORCEMENT

§ 30.61 Modification and revocation of licenses.

(a) The terms and conditions of each license, issued pursuant to the regulations in this part and Parts 31-36 shall be subject to amendment, revision or modification by reason of amendments to the Act, or by reason of rules, regulations and orders issued in accordance with the terms of the Act.

(b) Any license may be revoked, suspended or modified, in whole or in part, for any material false statement in the application or any statement of fact required under section 182 of the Act, or because of conditions revealed by such application or statement of fact or any report, record or inspection or other means which would warrant the Commission to refuse to grant a license on an original application, or for violation of, or failure to observe any of the terms and provisions of the Act or of any rule, regulation or order of the Commission.

(c) Except in cases of willfulness or those in which the public health, interest or safety requires otherwise, no license shall be modified, suspended or revoked unless prior to the institution of proceedings therefore, facts or conduct which may warrant such action shall have been called to the attention of the licensee in writing and the licensee shall have been accorded an opportunity to demonstrate or achieve compliance with all lawful requirements.

§ 30.62 Right to cause the withholding or recall of byproduct material.

The Commission may cause the withholding or recall of byproduct material from any licensee who is not equipped to observe or fails to observe such safety standards to protect health as may be established by the Commission, or who uses such materials in violation of law or regulation of the Commission, or in a manner other than as disclosed in the application therefor or approved by the Commission.

§ 30.63 Violations.

An injunction or other court order may be obtained prohibiting any violation of any provision of the Act or any regulation or order issued thereunder. A court order may be obtained for the payment of a civil penalty imposed pursuant to section 234 of the Act for violation of section 53, 57, 62, 63, 81, 82, 101, 103, 104, 107 or 109 of the Act or any rule, regulation or order issued thereunder, or any term, condition, or limitation of any license issued thereunder, or for any violation on for which a license may be revoked under section 186 of the Act. Any person who willfully violates any provision of the Act or any regulation or order issued thereunder may be guilty of a crime and upon conviction, may be punished by fine or imprisonment or both, as provided by law.

§ 20.402 Reports of theft or loss of licensed material.

Each licensee shall report by telephone and telegraph to the Director of the appropriate Nuclear Regulatory Commission Regulatory Operations Regional Office listed in Appendix D, immediately after its occurrence becomes known to the licensee, any loss or theft of licensed material in such quantities and under such circumstances that it appears to the licensee that a substantial hazard may result to persons in unrestricted areas.

§ 20.403 Notifications of incidents.

(a) **Immediate notification.** Each licensee shall immediately notify the Director of the appropriate Nuclear Regulatory Commission Regulatory Operations Regional Office shown in Appendix D by telephone and telegraph of any incident involving byproduct, source or special nuclear material possessed by him and which may have caused or threatens to cause:

(1) Exposure of the whole body of any individual to 25 rems or more of radiation, exposure of the skin of the whole body of any individual of 150 rems or more of radiation, or exposure of the feet, ankles, hands or forearms of any individual to 375 rems or more of radiation; or

(2) The release of radioactive material in concentrations which, if averaged over a period of 24 hours, would exceed 5,000 times the limits specified for such materials in Appendix B, Table II, or

(3) A loss of one working week or more of the operation of any facilities affected; or

(4) Damage to property in excess of \$100,000.

(b) **Twenty-four hour notification.** Each licensee shall within 24 hours notify the Director of the appropriate Nuclear Regulatory Commission Regulatory Operations Regional Office listed in Appendix D by telephone and telegraph of any incident involving licensed material possessed by him and which may have caused or threatens to cause:

(1) Exposure of the whole body of any individual to 5 rems or more of radiation, exposure of the skin of the whole body of any individual to 30 rems or more of radiation, or exposure of the feet, ankles, hands, or forearms to 75 rems or more of radiation; or

(2) The release of radioactive material in concentrations which, if averaged over a period of 24 hours, would exceed 500 times the limits specified for such materials in Appendix B, Table II, or

(3) A loss of one day or more of the operation of any facilities affected; or

(4) Damage to property in excess of \$1,000.

(c) Any report filed with the Commission pursuant to this section shall be prepared so that names of individuals who have received exposure to radiation will be stated in a separate part of this report.

APPENDIX D

**UNITED STATES NUCLEAR REGULATORY COMMISSION
REGULATORY OPERATIONS OFFICES**

REGION	ADDRESS	TELEPHONE	
		DAYTIME	NIGHTS & HOLIDAYS
I	Region I, Office of Inspection and Enforcement, USNRC 631 Park Avenue King of Prussia, Pennsylvania 19406	215-337-5000	215-337-5000
II	Region II, Office of Inspection and Enforcement, USNRC 101 Marietta St., N.W. Suite 3100 Atlanta, Georgia 30303	404-221-4503	404-221-4503
III	Region III, Office of Inspection and Enforcement, USNRC 799 Roosevelt Road Glen Ellyn, Illinois 60137	312-932-2500	312-932-2500
IV	Region IV, Office of Inspection and Enforcement, USNRC 611 Ryan Plaza Drive, Suite 1000 Arlington, Texas 76012	817-334-2841	817-334-2841
V	Region V, Office of Inspection and Enforcement, USNRC 1990 N. California Blvd., Suite 202, Walnut Creek Plaza Walnut Creek, California 94596	415-943-3700	415-943-3700

LITHO IN U.S.A.