

VOID SHEET

TO: License Fee Management Branch  
FROM: Reg I  
SUBJECT: VOIDED APPLICATION

May 17<sup>I</sup> ✓  
3P  
112525

Control Number: 112525

Applicant: NUS Corporation, WAYNE PA., 19406

Date Voided: 9/07/18

Reason for Void: No licensing action necessary, covered by general license. See letter of 7/18/90 to applicant. Discussed with Glenda Jackson 7/17/90

9011190125 900703  
REG1 LIC30  
MATLSLICENSING PDR

Rudial Roche 7/3/90  
Signature Date  
for Shaubaky

Attachment:  
Official Record Copy of  
Voided Action

Julia Letting 7/17/90

FOR LFMB USE ONLY

Final Review of VOID Completed:

- Refund Authorized and processed
- No Refund Due
- Fee Exempt or Fee Not Required

Comments: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Log completed  
Processed by: SR

RECEIVED  
JUL 20 12:00

JUL 18 1990

Mr. Garth Glenn  
NUS Corporation  
999 West Valley Road  
Wayne, Pennsylvania 19406

Dear Mr. Glenn:

We are responding to your letter of May 10, 1990, requesting a byproduct materials license for a gas chromatographic instrument located in a mobile laboratory van. We have reviewed the advice given to you by Inspector Kirkwood. After consulting with Headquarters and the Office of the General Counsel, we have arrived at the conclusion described below. Although 10 CFR 31.5 does not state that it is permitted to move covered devices from place to place or to operate them in a mobile mode, neither does the language of the regulation specifically prohibit such usage.

In looking for the intent of the regulation as to mobility or portability of covered measuring, gauging, and controlling devices, it should be noted that the regulation as drafted contains ample limitations and prohibitions on the use of this class of devices. For example, the licensee "shall not abandon the device," the licensee "shall not export the device... except in accordance with Part 110 of this chapter," and the licensee "[e]xcept as provided in paragraph (c)(9) of this section, shall transfer or dispose of the device... only by transfer to persons holding a specific license pursuant to Parts 30 and 32 of this chapter or from an Agreement State..." 10 CFR 31.5(c)(6)-(8). However, no such prohibitions on portability or mobility appear in the regulation as drafted. Consequently, it may be inferred that none were intended. Any question as to mobility is resolved, however, in the 1974 Statement of Consideration amending Part 31.5 to extend the general license to individuals using the devices in the course of their work, occupation, or profession. An example is given of the type of person and use envisioned by the amendment. It states: "An example of such an individual is a consulting engineer who owns and uses a soil density gauge in his work on highway construction projects." Hence, it is clear that mobile and portable uses were intended and are permitted under this section of the regulations.

In view of the above, the activity that you described in your application is covered under the NRC general license under 10 CFR 31.5. As for Agreement States such as the State of Maryland, we suggest that you inquire whether a general or specific license is required.

Mr. Glenn

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We have notified NRC's Licensing Fee and Debt Collection Branch of this action. They will contact you about a refund of your license application fee. If you need any further assistance, please contact Mr. Steven Courtemanche, of our staff, at 215-337-5075.

Sincerely,

Original Signed By:  
Lee H. Bettenhausen

Lee H. Bettenhausen, Chief  
Nuclear Materials Safety Branch

*R 7/13/90*  
*Shaulsky*  
RI:DRSS  
Rocha/gcb  
~~06/17/90~~  
7/9/90  
RI:DRSS  
Bettenhausen  
06/27/90

RI:RC  
Smith  
06/5/90  
HQ:NMSS  
JGlenn  
06/17/90  
*submitted*  
*W. Farmer*

*by telephone*  
HQ:LEDCB  
G. Jackson  
7/17/90

# CONVERSATION RECORD

TIME 11:25 am DATE 5/31/90

TYPE  VISIT  CONFERENCE  TELEPHONE  
 INCOMING  OUTGOING

ROUTING	
NAME/SYMBOL	INT

Location of Visit/Conference:

NAME OF PERSON(S) CONTACTED OR IN CONTACT WITH YOU: Jerry Van Osenbruggen  
 ORGANIZATION (Office, dept., bureau, etc.): Varian Instruments  
 TELEPHONE NO: (415) 939-2400

SUBJECT: Confirmation that General Licensing of G.C.'s covers Mobile Labs

SUMMARY: 5:22 PM Van Osenbruggen stated that he believed that reciprocity covered this. It was true of the states of California and Nevada programs. NRC R III requested a TAR on this in April. No word on the TAR has been received.

6/6/90 Sterling Bell (492-0617) Checking into it.

6/10/90 11:15 AM Sterling Bell stated that OGC\* just signed off on a letter stated that the activity requested can be considered part of the general license.

11:20 AM Informed Mr Jerry Van Osenbruggen of Varian of decision.

11:40 AM Informed Earl Glenn of NUS of the wording of the application.

ACTION REQUIRED

Document

NAME OF PERSON DOCUMENTING CONVERSATION: Steven Courtemanche  
 SIGNATURE: Steven Courtemanche  
 DATE: 5/31/90

\* ACTION TAKEN: John Glenn (NUS) is sending letter to applicant. See attached copy. letter dated 6/19/90. R. Fanner (OGC) reviewed letter and concurred on 6/13/90. Sterling Bell will send a copy of Glenn's letter to all five NRC regions. Glenn is working for customer to get in touch w/IDRS and in case whether specific. TITLE: Reg II, send letter to applicant (NUS); E. Glenn. DATE: 6/19/90. SIGNATURE: [Signature] for Shaubert. TITLE: [Signature] on concurrence.

112525

JUN 10 1990

Mr. Jerry Van Osenbruggen  
Varian Associates, Inc.  
2700 Mitchell Drive  
P. O. 9016  
Walnut Creek, CA 94598-0916

This letter is in response to your correspondence of March 29, 1990 requesting whether our regulation 10 CFR Part 31.5, "Certain measuring, gauging or controlling devices," requires that included devices must be stationary in order to be granted a General License under this section. Although the regulation does not state that it is permitted to move covered devices from place to place or to operate them in a mobile mode, neither does the language of the regulation specifically prohibit such usage.

In looking for the intent of the regulation as to mobility or portability of covered measuring, gauging, and controlling devices, it should be noted that the regulation as drafted contains ample limitations and prohibitions on the use of this class of devices. For example, the licensee "shall not abandon the device," the licensee "shall not export the device... except in accordance with Part 110 of this chapter," the licensee "[E]xcept as provided in paragraph (c)(9) of this section, shall transfer or dispose of the device... only by transfer to persons holding a specific license pursuant to Parts 30 and 32 of this chapter or from an Agreement State..." However, no such prohibitions on portability or mobility appear in the regulation as drafted. Consequently, it may be inferred that none were intended. Any question as to mobility is resolved, however, in the 1974 Statements of Consideration amending Part 31.5 to extend the general license to individuals using the devices in the course of their work, occupation, or profession. An example is given of the type of person and use envisioned by the amendment. It states, "[A]n example of such an individual is a consulting engineer who owns and uses a soil density gauge in his work on highway construction projects(39 FR 4583)." Hence, it is clear that mobile and portable uses were intended and are permitted under this section of the regulations.

We have not discussed this matter with the Illinois Department of Nuclear Safety. Assuming that Illinois has a general license comparable to 10 CFR 31.5, and based upon this letter, we suggest that your customer again inquire whether a specific license needs to be issued by the State of Illinois. Should Illinois require a specific license, please, at that time,

Mr. Jerry Van Osenbruggen

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at that time, forward all documentation to my office for our further review. In the meantime, if you should need any further assistance in this matter, please contact Mr. Sterling Bell, of my staff, at (301) 492-0617.

Sincerely,

*[Handwritten signature]*

John E. Glenn, Chief  
Medical, Academic, and Commercial  
Use Safety Branch  
Division of Industrial and  
Medical Nuclear Safety, NMSS

cc: L. Bolling, GPA/SP  
B. Mallett, RII

Distribution  
IMNS Central Files  
NRC File Center  
SBell  
IMABr/f  
RECunningham  
SBaggett  
GSJoblom  
JEGlenn  
NMSS r/f

RI  
RII  
RIII  
RIV  
RV

OFC:	IMAB	:IMAB	:JEGlenn	:IMAB	:
NAME:	SP [handwritten]	:SP [handwritten]	:reby	:JEGlenn	:
DATE:	06/04/90	:06/04/90	:06/13/90	:06/14/90	:

**varian**   
walnut creek instrument division

March 29, 1990

Mr. John Glenn, Chief  
US Nuclear Regulatory Commission  
Office of Nuclear Material and Safeguards  
Medical and Commercial Safety Branch  
Washington, D.C.

Dear Mr. Glenn:

RE: Legal Opinion on the Use of Generally Licensed  
Devices in Mobile Laboratories without  
Additional Regulatory Requirements

Varian Instrument Division manufactures and distributes Gas Chromatographs (GC) some of which are equipped with Electron Capture Detectors (ECD) used for the detection of pesticides, PCB and other chlorinated, environmentally undesirable compounds.

The ECD contains an eight (8) milli Curie Ni63 (Beta) source and is designed to qualify as a "Generally Licensed Device". (California License #3902-07 GL - Registry of Radioactive Sealed Sources and Devices No GA662D101 B). To respond to the needs of the public, the industry has increasingly moved toward the concept of moving the laboratory to the hazardous waste site in an attempt to speed up the detection, measurement and cleanup. Inevitably this has resulted in the need for mobile laboratories and consequently changing this Generally Licensed Devices' original stationary status. Most states have not imposed limitations to movement within nor from outside the state (Oregon excluded) as long as the restrictions for Generally Licensed devices are adhered to.

One of our customers informed us that the Illinois Radiologic Safety Department required that he acquire a specific license while at the same time suggesting that they do not intend to be more restrictive than other states which do not impose this financial burden ( a five year license costs over \$2,000).

It appears that there is no regulation indicating that it is permitted to move a Generally Licensed Device. In Illinois this is interpreted to mean that the device must be stationary to qualify as a Generally Licensed Device.

Mr. John Glenn  
Page 2  
March 28, 1990

It is our contention that there is no reason nor advantage in changing the licensing status just because it is placed in a mobile laboratory. In the interest of thousands of mobile-laboratory ECD users we request that you will authorize continuation of the present unrestricted condition, thereby avoiding the inevitable costs and delays in the acquisition of a Specific Radioactive Material License. The individuals operating this equipment have an academic background and would not be working in this field if they had not above average ability in making good judgements regarding hazardous materials.

It is to the advantage of all of us to minimize regulatory procedures if they do not produce concrete advantages. It appears we have a good working system which should be left alone.

We request your legal opinion concerning this matter. Your quick response would be greatly appreciated.

Sincerely,

Jerry Van Osenbruggen  
RSC WCID



PART 38 • STATEMENTS OF CONSIDERATION

38. A 50-gram inspection lot containing 1.0 percent defective would have the same chance, etc. shown in test of being accepted as a 100,000-gram inspection lot containing 0.0 percent defective.

The sampling table for LTPD 0.1 percent is consistent with Sampling Table A, lot size 100, to 200, previously set out in § 20.110 (b) with regard to protection as a function of lot size, a mathematical analysis has demonstrated that Sampling Table A previously set out in § 20.110, even though based on an Acceptable Quality Level of 1 percent defective, had the same chance in test of accepting 1 percent defective in a lot size of 21,000 and had the same chance in test of accepting 14 percent defective in a lot size of 110.

In addition to additional products being subjected to acceptance sampling procedures in 10 CFR, Part 38, eight single sampling tables covering the range of 0.0 percent to 10.0 percent LTPD are set out in § 20.110 (b), any one of which may be referenced depending on the percent defective that can be tolerated in acceptance lots of the product under consideration.

In addition to the amendments set forth below are of a similar nature, and could easily be drafted based on proposed rule making, and public procedure should, as necessary.

Pursuant to the Atomic Energy Act of 1954, as amended, and sections 602 and 603 of Title 10 of the United States Code, the following amendments to Title 10, Chapter 1, Code of Federal Regulations, Part 38 are published as a document subject to codification.

38 FR 20143  
Published 7/17/74  
Effective 8/19/74 (Part 31 & 32)  
Effective 1/13/76 (Part 38)

Group Licensing for Certain Medical Uses

See Part 34 Statements of Consideration.

38 FR 28307  
Published 7/19/74  
Effective 7/19/74

Consistency of Quality Assurance Practices

In FD Nos. 70-1000, appearing at page 28109 in the issue for June 28, 1974, the following changes should be made:

38 FR 45881  
Published 10/10/73  
Effective 1/10/74

PART 31—GENERAL LICENSES FOR BYPRODUCT MATERIAL  
PART 38—SPECIAL LICENSES TO MANUFACTURE, DISTRIBUTE, OR IMPORT CERTAIN TYPES CONTAINING BY-PRODUCT MATERIAL

Division of General Licenses for Industrial Devices

The Atomic Energy Commission published in the Federal Register on February 8, 1974 (29 FR 450) proposed

amendments to its regulations pertaining to the use of byproduct material in certain gauges and similar devices. The proposed amendments, among other things, would have required the user to register with the Commission prior to receiving byproduct material for use under the general license in § 31.2 of the Commission's regulation, 10 CFR Part 31, "General Licenses for Byproduct Material." Related changes were proposed in the requirements imposed on persons specially licensed under 10 CFR 31.2 to distribute byproduct material in devices to be used under the general license.

Interested parties were invited to submit written comments on the proposed amendments by March 10, 1974. The date was later extended to April 17, 1974. On April 18, 1974, a public meeting on the proposed changes was held at the Atomic Energy Commission's office in Bethesda, Maryland. After consideration of the written comments received, the record of the public meeting, and other factors involved, the Commission has adopted the proposed amendments with certain modifications. The more significant ones are described below.

(1) Under the proposed amendments, each user of the general license would have been identified to the Commission by the registrant certificate which he filed prior to receipt of a device containing byproduct material. Under the amendments set out below, prior registration by the general licensee is not required. Persons receiving devices for use under 10 CFR 31.2 will be identified in separate reports submitted to the Commission by persons specially licensed to distribute the devices. Persons specially licensed under 10 CFR 31.2 also will be required to report to the appropriate Agreement State agency any transfers to general licensees regulated by the Agreement State implementation of similar reporting requirements by the Agreement State should result in a system whereby 50 transfers to persons using the general license in 10 CFR 31.2 or equivalent Agreement State regulations are reported to the responsible regulatory agency.

(2) The proposed amendments would have permitted transfer of devices between general licensees since both the transformers and the transformers would have registered with the Commission. Since prior registration by the general licensee has not been adopted, the proposed provision for transfer by the general licensee has been modified in order to achieve a portable system for identifying users under the general license. The amendments set out below permit the general licensee to transfer a device (a) to a special licensee, (b) to another general licensee if the device remains installed in the same location but the person possessing the device changes as may be the case when a plant or building is sold, and (c) to another general licensee when possession of a device which remains in its shipping container is changed or in the case where a distributor ships a device to a construction site where it may be temporarily possessed by the building contractor prior to possession by the ultimate user.

(3) The proposed amendments provided that under certain conditions the general licensee may be authorized to perform tests for leakage of radioactive material. Under the amendments set out below the general licensee could still be authorized to perform the test except for the leakage test; this change would then be achieved by a specific license.

(4) The proposed amendments would have deleted an existing specific requirement that the general licensee have the device tested periodically for proper operation of the on-off mechanism and indicator. The intent of the proposed deletion was not to eliminate all tests on on-off mechanisms and indicators but rather to consider the need and procedure for the tests on a case-by-case basis. That consideration would have been reflected in the safety instructions and precautions which the user would be required to follow and these instructions could require that the test be performed by a specific licensee. Conditions on the proposed deletion of the specific test requirement, however, indicate that such action could result in misunderstanding and non-performance of important safety testing. Accordingly, the amendments set out below retain a specific requirement for testing of the on-off mechanism and indicator.

(5) Under the proposed amendments, the general license in § 31.2 would have been restricted to commercial and industrial areas, research, education and medical institutions, and governmental agencies. The amendments set out below also extend the general license to individuals using the device in the course of their work, occupation, or profession. An example of such an individual is a contractor who is engaged in the construction of a building.

Pursuant to the Atomic Energy Act of 1954, as amended, and sections 602 and 603 of Title 10 of the United States Code, the following amendments to 10 CFR, Parts 31 and 38 are published as a document subject to codification.

41 FR 16008  
Published 4/10/76  
Effective 4/10/76

Miscellaneous Changes to Chapter

See Part 31 Statements of Consideration.

PROPOSED RULES

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written comments or suggestions for consideration in connection with the proposed amendments should send them to the Secretary of the Commission, Wash.ington, D.C. 20044, Attention: Open Public Proceedings Staff, by March 7, 1974. Copies of comments received may be obtained in the Commission's Public Document Room at 1717 H Street NW, Washington, D.C.

1. Paragraph 2.101(a) of 10 CFR Part 2 is amended by adding the following at the end thereof:

§ 2.101 Filing of application.

(a) \* \* \* An applicant for a construction permit for a nuclear power reactor subject to § 2.101(a) of this chapter must submit the information required by applications by Part 20 of this chapter in two parts. One part shall be accompanied by the information required by § 20.20(f) of this chapter, and the other part shall include or be accompanied by any information required by §§ 20.22a, 20.26(a), and 20.26a of this chapter. One part may precede or follow the other by no longer than six (6) months. The Regulatory staff may return the later information to the applicant, informing it in what respects the information is incomplete. If the information is not complete or is inconsistent with the requirements of this chapter, such a determination of completeness will generally be made within a period of sixty (60) days. Whenever parts are filed first shall include the fee required by §§ 20.22(a) and 170.21 of this chapter and the information required by § 20.27 of this chapter. The Commission will accept for docketing an application for a construction permit for a nuclear power reactor subject to § 2.101(a) of this chapter where one part of the application as described above is complete and conforms to the requirements of Part 20 of this chapter.

2. A new § 2.701a is added to 10 CFR Part 2 to read as follows:

§ 2.701a Separate hearings and decisions.

In a proceeding on an application for a construction permit for a nuclear power reactor subject to § 2.101(a) of this chapter, the presiding officer shall conduct a separate hearing on issues covered by Part 51 of this chapter as soon as practicable after issuance by the Regulatory staff of the final environmental impact statement, and issue an initial decision on such matters. Preliminary matters regarding issues covered by Part 51 of this chapter, including any discovery and special prehearing conferences and prehearing conferences as provided in §§ 2.700, 2.700a, 2.700b, 2.741, 2.742, 2.701a, and 2.701b of all be resolved accordingly. The provisions of §§ 2.704, 2.705, 2.702, and 2.704(a) shall apply to any proceedings conducted and any initial decision rendered in accordance with this section.

\*Reference is to the proposed amendments to 10 CFR Part 2, §§ 2.101, 2.102, and 2.103, and addition of new Part 21, published in the Federal Register on November 1, 1973 (38 FR 28280).

Paragraph 2.704(b) shall not apply to any partial initial decision rendered in accordance with this section.

3. Paragraph 1(c) of Appendix A to 10 CFR Part 2 is amended by adding the following at the end thereof: "In a proceeding relating to the issuance of a construction permit for a nuclear power reactor subject to the environmental impact statement requirements of section 109(b)(3)(C) of the National Environmental Policy Act of 1969, and Part 51 of this chapter, separate hearings and decisions on National Environmental Policy Act issues are held as provided by § 2.701a.

4. In § 20.10, the prefatory language in paragraph (c) is amended and a new paragraph (e) is added to read as follows:

§ 20.10 License required.

(e) Notwithstanding the provisions of paragraph (b) of this section, and subject to paragraphs (d) and (a) of this section, no person shall effect commencement of construction of a production or utilization facility subject to the provisions of § 21.5(a) of this chapter on a site on which the facility is to be operated until a construction permit has been issued. As used in this paragraph, the term "commencement of construction" means any clearing of land, excavation or other substantial earth line work adversely affecting the natural environment of a site and construction of non-nuclear facilities (such as turbo-generators and turbine buildings) for use in connection with the facility, but does not mean:

(1) The Director of Regulation may, except for good cause, authorize an applicant for a construction permit for a nuclear power reactor to conduct the following activities: site preparation, preparation of the site for construction of the facility, excavation, the driving of piles, measures to protect the construction which may include installation of foundations and walls, and construction of roadways, railroad spurs, and transmission lines, and such other on-site activities as are not directly related to radiological safety matters. No such authorization shall be granted unless the Regulatory staff has completed a final environmental impact statement on the issuance of the construction permit as required by Part 51 of this chapter.

(2) Such an authorization shall be granted only after the presiding officer in the proceeding on the construction permit application has made all the findings required for issuance of the construction permit for the nuclear power reactor pursuant to § 21.52 of this chapter.

(3) Any activities undertaken pursuant to an authorization granted under this paragraph shall be entirely at the risk of the applicant and the grant of the authorization shall have no bearing on the issuance of a construction permit with respect to the requirements of the Act and rules, regulations, or orders promulgated pursuant thereto.

5. In § 20.13 a new paragraph (e) is added to read as follows:

§ 20.13 Specific exemption.

(e) No person will, prior to issuance of any initial decision as provided by § 2.701a of this chapter, be granted an exemption from the requirements of § 20.10(e) pursuant to this section, or authorize the conduct of activities prior to the issuance of a construction permit that exceed in scope the activities described in § 20.10(e)(1).

(See 108 Stat. Law 91-100, 99 Stat. 900; Sec. 101, 102, Pub. Law 90-701, 90 Stat. 990; Stat. 990, as amended (48 U.S.C. 9101, 9901, 9904, 9905).)

Issued at Germantown, Maryland, this 20th day of January 1974.

For the U.S. Atomic Energy Commission.

Paul C. Hughes,  
Secretary of the Commission.

(FR Doc. 74-2007 Filed 2-4-74; 2:48 am)

§ 20.101 (FR Part 21, 22)

BYPRODUCT MATERIAL CONTAINED IN CERTAIN DEVICES

Proposed Revision of General License

The Atomic Energy Commission is considering changes in its regulations pertaining to the use of byproduct material in certain gauges and similar devices. The proposed changes, among other things, would require the user to recover byproduct material for use under the general license in § 21.5 of the Commission's regulations, 10 CFR Part 21, "General License for Byproduct Material." Related changes would be made in the requirements imposed on permittees specifically licensed under 10 CFR 22.1 to distribute byproduct material in devices for use under the general license.

The Commission's regulations in 10 CFR 21.5 provide a general license for the use of byproduct material contained in certain measuring, gauging or controlling devices. Under the conditions of that general license, any permit may receive and use byproduct material when contained in devices designed and manufactured for the purpose of detecting, measuring, gauging or controlling substance density level, moisture content, radiation, leakage, or qualitative or quantitative chemical composition, or for providing light or an ionized atmosphere. If the device has been manufactured in accordance with the specifications contained in a specific license issued by the Commission or by an Agreement State, such a specific license may be issued upon a determination by the Commission or the Agreement State of the adequacy of the safety features of the device and the instructions for safe operation.

The Commission is considering the proposed changes to the general license in § 21.5 of the Commission's regulations. The proposed changes would require the user to recover byproduct material for use under the general license in § 21.5 of the Commission's regulations, 10 CFR Part 21, "General License for Byproduct Material."

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a device is transferred to generally licensed persons. Reports of transfers required by this section need not be submitted for transfers made on or subsequent to ...

(This effective date of this amendment) (Sec. 31, 32, 101, 30 Stat. 955, 958, as amended (40 U.S.C. 911), 9113, 9901.)

Dated at Germantown, Md. this 28th day of January 1974.

For the Atomic Energy Commission,

OSCAR M. GRANT, Acting Secretary of the Commission.

[FR Doc. 74-2004 Filed 2-6-74; 9:48 am]

FEDERAL COMMUNICATIONS COMMISSION

[47 CFR Part 73]

[Docket No. 19688, RM-1971, 9161, 9205, 9244]

Table of Assignments, FM Broadcast Stations in Illinois and Indiana

1. Notice is hereby given of the institution of this proceeding to consider the conflicting proposals to amend the Table of Assignments as concerns the above-listed communities which are advanced in the following petitions for rule making:

a. RM-1971. Petition of David Steinhart, filed February 28, 1972, requesting the assignment of Class B Channel 941 to Hoopston, Illinois, for a first FM assignment by substituting Channel 252A for Channel 240A (unused) at Powler, Indiana.

b. RM-2161. Petition of Radio Lafayette, Incorporated, filed March 15, 1972, requesting the assignment of Class B Channel 243 to Lafayette, Indiana, for a second Class B (third FM) assignment by selecting Channel 244A from Lafayette, occupied by Station WAZY-FM, licensed to Radio Lafa. site, and by also replacing Channel 246A with Channel 252A at Powler, Indiana.

c. RM-2163. Petition of Vermilion Broadcasting Corporation, filed May 23, 1972, requesting the assignment of Class B Channel 941 to Danville, Illinois, for a third Class B assignment by substituting Channel 262A for Channel 240A at Powler.

d. RM-2164. Petition of Citizens Broadcasting Company, filed August 18, 1972, requesting the assignment of either Class B Channel 243 or Class B Channel 245 to Terre Haute, Indiana, for a fifth Class B assignment.

2. In light of our mileage separation requirements for Class B FM assignments (150 miles for co-channel assignments; 100 miles for first adjacent channel assignments; and 60 miles for second adjacent channel assignments) and the relative locations of the communities involved, the FM assignment proposals of the above petitioners are mutually exclusive with one or more of the other proposals, i.e., the Hoopston and Danville 941 proposal, the Terre Haute Channel 243 proposal and the Lafayette Chan-

nel 243 proposal are mutually exclusive, as is the Lafayette Channel 243 proposal with each of the alternative Terre Haute Channel 243 and Channel 245 proposals. They are therefore considered together.

3. The required 150-mile co-channel spacing could not be met for Channel 941 assignments at both Hoopston and Danville since Hoopston is only about 82 miles north of Danville, and the antenna sites for Hoopston and Danville Channel 941 stations would have to be located even closer to each other to meet spacing requirements to existing Channel 941 assignments at Owensboro, Kentucky (WSTO) and Clinton, Iowa (KROC-FM). A Hoopston Channel 941 station would have to be located at least 11 miles south of Hoopston, and a Danville Channel 941 station would have to be located at least six miles northwest of Danville and in the same general area as required for a Hoopston Channel 941 site.

The required 60-mile second adjacent channel spacing could not be met for a Channel 941 assignment at either Hoopston or Danville and a Channel 243 assignment at Lafayette, since, while Lafayette is approximately 63 miles from Hoopston and 60 miles from Danville, the transmitter site for a Lafayette Channel 243 station would have to be located at least 14 miles west southwest of Lafayette to meet spacing requirements to Channel 244A (WAOV-FM) at Vincennes, Indiana, and to Channel 246 (WLSM-FM) at Mattson, Illinois.

4. Except for the conflicts with other of the pending proposals discussed above, however, each of the proposals, discussed at greater length hereafter, appears technically feasible insofar as minimum spacing requirements are concerned and is supported by a showing, which, while not sufficient to enable us to reach a decision on its public interest value, is sufficient to warrant us to further consideration in rule making, individually and jointly with the other pending proposals.

This proceeding is, therefore, instituted to consider each and all of them together with all alternative assignment possibilities, including those suggested by some of the proponents of the pending proposals, which would permit the making of such assignments as might be warranted to as many of the communities involved as possible without regard to conflicts which otherwise would exist with other of these pending proposals. This action should not be construed, however, as the expression of a view, even tentatively, that any or all of the proposals or proposed alternatives to resolve conflicts with other of the pending proposals should be adopted as proposed or at all.

5. The pertinent population data concerning the communities involved and their respective counties, based on 1970 U.S. Census figures, are, as follows:

City	Population	Percent change since 1960	County	Population	Percent change since 1960
Hoopston, Ill.	6,000	+1.8	Vermilion	97,000	+1.1
Powler, Ind.	1,000	+1.1	Warrick	11,000	+1.1
Lafayette, Ind.	45,000	+1.1	Vanderburgh	100,000	+1.1
Terre Haute, Ind.	100,000	+1.1	Vermilion	97,000	+1.1
Danville, Ill.	75,000	+1.1	Vigo	114,000	+1.1
West Terre Haute, Ind.	1,000	+1.1	Vigo	114,000	+1.1

Lafayette is the central city of the Lafayette-West Lafayette Standard Metropolitan Statistical Area (SMSA), consisting only of Tippecanoe County, with a total population of 100,378, representing a 22.7% increase over the total 1960 SMSA population. Terre Haute is the central city of the Terre Haute Standard Metropolitan Statistical Area,

consisting of its county (Vigo), and Clay, Sullivan and Vermilion Counties, all in Indiana, with a total population of 178,143, which represents a 1.9% increase over the total 1960 SMSA population.

6. Hoopston (Powler, Ind.), Illinois (RM-1971). The petitioner, David Steinhart, proposes the assignment of Class B Channel 941 to Hoopston for a first as-

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PROPOSED RULES

person holding a general license from the Commission or an Agreement State to repair such device, or disposed of by transfer to a person authorized to receive the proposed material submitted in the device and, within 30 days, furnish to the Director of the appropriate Atomic Energy Commission Regulatory Office, the National Office listed in Appendix L of Part B of this chapter, a report containing the requested action taken.

(1) Such report shall include the following proposed material, and the date of transfer or disposal of the device:

(a) Serial transfer or disposal of the device;

(b) Serial transfer or disposal of the device;

(c) Report as submitted pursuant to the regulations in Part B of this chapter; or

(d) Transfer to a licensee of the Commission or of an Agreement State whose records or general license authorize him to receive such material; or

(e) Transfer to any person exempt from the regulations of this chapter to the extent permitted under such exemptions.

within 30 days after any person will receive in any period of one calendar quarter a quantity in excess of 10 pounds of the limited quantities in the table in § 121.6 of this chapter; and

(ii) Under certain conditions (such as fire and explosion) associated with handling, storage and use of the device it is unlikely that any person would receive an amount of radioactive material in excess of the limits of the table in § 121.6 of this chapter.

(3) Each device may be subject to the following conditions:

(a) Each device shall be clearly identified by the Commission, which shall maintain a clearly identified and separate inventory;

(b) Restrictions and precautions necessary to assure safe installation, operation, and servicing of the device (such as maintenance and repair) shall be made available to the licensee of the device and used to provide this information;

(c) The requirements, or lack of requirements, for such testing, including the identification of radioactive material by source, quantity of radioactivity, and date of determination of the quantity; and

(d) The information called for in the following statement in the case of substantially similar items:

The receipt, possession, use, and transfer of the device shall be in accordance with the regulations of the U.S. AEC or of a State with which the AEC has entered into an agreement for the purpose of regulatory authority. This information shall be maintained on the device in a legible and accessible form.

Source—General license.

(v) Pure or contained radioactive material;

(vi) Maximum temperature exhibited during prototype tests;

(vii) Maximum pressure exhibited during tests;

(viii) Maximum velocity of contained radioactive material;

(ix) Radioactivity of contained radioactive material; and

(x) Operating experience with identical devices or similarly designed and certified devices.

(4) In the event the applicant desires that the general license under § 121.6 of this chapter or under equivalent regulations of an Agreement State be authorized to handle the device, persons authorized to handle radioactive material or other devices from installation, he shall include in his application sufficient information to demonstrate that such activity can be performed by persons without need for radiological protection, without exceeding the dose limits set forth in § 121.6(a)(3)(b). The submitted information shall include written instructions to be followed by such persons, instructions associated with each activity and the tests for such activities, and the total quarterly dose which a person is likely to acquire from all such activities and other handling, storage and use of devices under the general license in § 121.6 of this chapter.

(5) Paragraph (b) and (d) of § 121.6 are deleted.

Section 121.6 of 10 CFR Part 23 is revised to read as follows:

§ 121.6. Devices for use under § 121.5, requirements for license to manufacture, transport or distribute.

(a) An application for a specific license to manufacture, transport, or distribute devices containing byproduct material to persons generally licensed under § 121.6 of this chapter or equivalent regulations of an Agreement State will be approved if:

(1) The applicant attains the general requirements of § 121.5 of this chapter;

(2) The applicant submits sufficient information relating to the design, manufacture, prototype testing, quality control, handling, proposed use, installation, servicing, leak testing, operating and safety instructions, and potential hazards of the device to provide reliable information that:

(i) The device can be safely operated by persons not having training in radioactive devices;

(ii) Under ordinary conditions of handling, storage and use of the device the byproduct material contained in the device will not be released or distributed to persons other than the licensee, and it will be returned from the device, and it will

(1) Primary containment covers equipment;

(2) Prediction of primary containment leak;

(3) Method of sealing containment; and

(4) Containment construction details.

The model serial number, and name of the manufacturer, of the device to be tested from this table provides the information to determine whether a license is required for the device.

(4) A fee of \$25.00 is added to read as follows:

§ 121.6. Subject: Material transfer records.

Each person licensed under § 121.6 shall maintain a record showing the name, address, and registration number of each person to whom he transfers byproduct material. In devices for use pursuant to the general license provided in § 121.6 of this chapter or equivalent regulations of an Agreement State, the records also shall show the date of each transfer and the source and quantity of byproduct material transferred.

Paragraph (b) of § 121.6 is revised to read as follows:

§ 121.6. Source: Material transfer records.

Each licensee authorized under § 121.6 to distribute devices to persons generally licensed shall report to the Director of Atomic Energy Commission, Washington, D.C. 20545, all transfers of such devices to persons generally licensed under § 121.6 of this chapter made prior to \_\_\_\_\_

(The applicant shall of this amendment.)

Each report shall identify each general licensee by name and address, the type of device transferred, and the quantity and type of byproduct material contained in the device. The report shall be submitted within 30 days after the end of each calendar quarter in which such

(1) The applicant attains the general requirements of § 121.5 of this chapter;

(2) The applicant submits sufficient information relating to the design, manufacture, prototype testing, quality control, handling, proposed use, installation, servicing, leak testing, operating and safety instructions, and potential hazards of the device to provide reliable information that:

(i) The device can be safely operated by persons not having training in radioactive devices;

(ii) Under ordinary conditions of handling, storage and use of the device the byproduct material contained in the device will not be released or distributed to persons other than the licensee, and it will be returned from the device, and it will

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(2) The applicant submits sufficient information relating to the design, manufacture, prototype testing, quality control, handling, proposed use, installation, servicing, leak testing, operating and safety instructions, and potential hazards of the device to provide reliable information that:

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(i) The device can be safely operated by persons not having training in radioactive devices;

(ii) Under ordinary conditions of handling, storage and use of the device the byproduct material contained in the device will not be released or distributed to persons other than the licensee, and it will be returned from the device, and it will

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(2) The applicant submits sufficient information relating to the design, manufacture, prototype testing, quality control, handling, proposed use, installation, servicing, leak testing, operating and safety instructions, and potential hazards of the device to provide reliable information that:

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(ii) Under ordinary conditions of handling, storage and use of the device the byproduct material contained in the device will not be released or distributed to persons other than the licensee, and it will be returned from the device, and it will

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(i) The device can be safely operated by persons not having training in radioactive devices;

(ii) Under ordinary conditions of handling, storage and use of the device the byproduct material contained in the device will not be released or distributed to persons other than the licensee, and it will be returned from the device, and it will

PROPOSED RULES

4564

...cific licensee authorized to manufacture, install or service such devices.

At present, a specific licensee authorized pursuant to 10 CFR 21.5 to distribute devices to persons for use under the general license in 10 CFR 21.5 is required by 10 CFR 21.53 to submit reports to the Commission which identify the persons to whom he transferred devices during the preceding calendar quarter. Under the proposed revision, in lieu of requiring the distributor of devices to report the names and addresses of persons to whom he distributes devices, the person intending to possess the device would be required to register with the Commission prior to receipt of the device. Registration is expected to provide a more direct means of communication between the user and the Commission and thus offers greater assurance that the general licensee will be informed of his regulatory responsibilities.

At present 10 CFR 21.5 provides a general license to certain persons in Agreement States to install and service devices used under 10 CFR 21.5. Among the conditions of the general license provided in 10 CFR 21.5 are requirements that the general licensee report to the Commission the names and addresses of persons to whom he has transferred devices and that he supply to each of his transferees a copy of the general license contained in § 21.5. Under the proposed registration program the applicant for registration would identify himself to the Commission, which in turn would supply directly to the registrant a copy of the general license. Accordingly, under the proposed amendments, the above described requirements would be deleted from the general license provided in 10 CFR 21.5.

Experience in administering the general license provided in 10 CFR 21.5 indicates that for certain devices, an absolute prohibition against testing and servicing by the general licensee may be unduly restrictive. The proposed revision of 10 CFR 21.5 would contain a performance standard so that the Commission staff may determine, on a case-by-case basis how and by whom a device should be tested and serviced. For example, general licensees could be authorized to use leak test kits or to clean gas chromatography sources in accordance with instructions provided by the label on the device.

Under the present general license in § 21.5, anyone, including an individual homeowner, may be a general licensee. Under the proposed revision, the general license would be restricted to commercial and industrial firms, research, educational and medical institutions, and governmental agencies.

The Commission has decided that an environmental impact statement need not be prepared in connection with the proposed amendments because they are principally administrative and will not significantly affect the quality of the human environment. An environmental impact appraisal of the proposed amendments, which sets forth the basis for this decision, is available for public inspection

at the Commission's Public Document Room at 1717 H Street NW, Washington, D.C.

Pursuant to the Atomic Energy Act of 1954, as amended, and Section 552 to Title 5 of the United States Code, notice is hereby given that adoption of the following amendments to 10 CFR Parts 21 and 22 is contemplated. All interested persons who desire to submit written comments or suggestions for consideration in connection with the proposed amendments should send them to the Secretary of the Commission, United States Atomic Energy Commission, Washington, D.C. 20545, Attention: Chief, Public Proceedings Staff by March 18, 1974. Copies of comments on the proposed amendments may be examined in the Commission's Public Document Room at 1717 H Street NW, Washington, D.C.

1. Section 21.5 of 10 CFR Part 21 is revised to read as follows:

§ 21.5. [Redacted] as controlling devices.

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

(b) No person shall acquire, receive, possess, or use byproduct material contained in devices under the general license until he has filed Form ABC-..., "Registration Certificate—Use of Byproduct Material Under 10 CFR 21.5 General License" with the Director of Licensing, U.S. Atomic Energy Commission, Washington, D.C. 20545, and received from the Commission a validated copy of the Form ABC-... with registration number assigned. The registrant shall furnish on Form ABC-... the following information and such other information as may be required by that form:

- (1) Name and address of the applicant for registration;
(2) Identification of the device by manufacturer's name and model number, estimated number of devices to be received, and the name of the licensed installer if installation of the device by a specifically licensed installer is required;
(3) Name and title, address, and telephone number of the individual who

\* Persons possessing byproduct material in devices under the general license in § 21.5 before the effective date of the amendments may continue to possess, use, or transfer that material in accordance with the requirements of § 21.5 in effect on the day preceding the effective date of the amendments.

will supervise the use of the device; and (4) Address at which the device usually will be possessed or used.

The registrant possessing or using byproduct material under the general license in paragraph (a) of this section shall report in triplicate to the Director of Licensing any changes in the information furnished by the registrant. The report shall include the registration number and shall be submitted within 30 days after the effective date of such change.

(c) The general license in paragraph (a) of this section applies only to byproduct material contained in devices which have been manufactured or imported and labeled in accordance with the specifications contained in a specific license issued by the Commission pursuant to § 22.51 of this chapter or in accordance with the specifications contained in a specific license issued by an Agreement State which authorizes distribution of the device to persons generally licensed by the Agreement State.

(d) 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 comply with the provisions of §§ 20.602 and 20.603 in Part 20 of this chapter, but shall be exempt from the other requirements of Parts 19 and 20 of this chapter;

(2) 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 contained in such labels;

(3) Shall assure that the device is tested for leakage of radioactive material at no longer than six-month intervals or at such other intervals as are specified in the label; Provided, that devices containing only krypton, tritium, or not more than 100 microcuries of other beta and/or gamma emitting material or 10 microcuries of alpha emitting material need not be tested for leakage of radioactive material;

(4) Shall assure that the tests required by paragraph (d)(3) of this section and other testing, installation, servicing, and removal from installation involving the radioactive material, including shielding or containment, are performed:

(i) In accordance with the instructions provided by the label; and (ii) By a person holding a specific license from the Commission or an Agreement State to perform such activities;

(5) Shall maintain records showing the dates and results of required tests, the performance of required servicing, and names of the persons conducting the tests or servicing;

(6) Upon the detection of 5,000 microcuries or more removable radioactive material or upon any other indication of possible failure of or damage to the containment or shielding of the radioactive material, shall immediately suspend operation of the device until it has been repaired by the manufacturer or other

112525



888 WEST VALLEY ROAD  
WAYNE, PENNSYLVANIA 19087  
215-687-9510

hth 28533  
030-31736  
PRC: 03123

May 10, 1990  
C-585-5-0-12  
68-01-7346

Region I, United States Nuclear Regulatory Commission  
Office of Inspection and Enforcement  
475 Allendale Road  
King of Prussia, Pennsylvania 19406

Dear Sir/Madam:

Attached is an application and the required fee for a material license pertaining to a gas chromatographic (GC) instrument located in a mobile laboratory van, EPA vehicle number 921. This laboratory will be operated by NUS Corporation under contract with the United States Environmental Protection Agency, which is the owner of the van and its contents. The instrument contains an electron capture detector (ECD) that utilizes a Nickel-63 radiation source.

Currently, this instrument is under a general license issued by the California Department of Health for the Walnut Creek Instrument Division of Varian Corporation. In a conversation with Inspector Kirkwood, of your office, we were informed that the Varian General license was intended for permanent installations of ECD/GC and would not cover mobile operations.

Inspector Kirkwood assured us that a specific license would allow us to transport and use the ECD/GC in any region of the United States Nuclear Regulatory Commission, with the exception of agreement states. It is our intention to use this instrument in the mobile laboratory to support our site investigations on location at various hazardous waste sites located in U.S. EPA Region III: Pennsylvania, Delaware, Maryland, Virginia, West Virginia, and the District of Columbia. Of these, only Maryland is an agreement state and we will be able to negotiate a reciprocity agreement with Maryland if this specific license is issued.

If there are any questions or problems with our application, please contact Garth Glenn or me at (215) 687-9510. We appreciate your prompt attention to this matter.

Respectfully,

Russell Sloboda  
Senior Chemist

Approved by,

Garth Glenn  
Regional Manager, FIT 3

RECEIVED  
MAY 21 3:25 PM '90

RS/GG/nmd

Attachment

90 MAY 15 6:14 AM

RECEIVED-REGION I

License Fee Information  
on application.

112525

OFFICIAL RECORD COPY ML 10

MAY 15 1990

L4h 28533

NRC FORM 213  
 10 CFR 30.32, 33, 34  
 25 AND 60

U.S. NUCLEAR REGULATORY COMMISSION  
 APPROVED BY OMS  
 FIGURE  
 DATE 5-21-90

**APPLICATION FOR MATERIAL LICENSE**

030-37736  
 MFC: 03123

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.

<p><b>FEDERAL AGENCIES FILE APPLICATIONS WITH:</b></p> <p>U.S. NUCLEAR REGULATORY COMMISSION          DIVISION OF FUEL CYCLE AND MATERIAL SAFETY NMSS          WASHINGTON, DC 20545</p> <p><b>ALL OTHER PERSONS FILE APPLICATIONS AS FOLLOWS, IF YOU ARE LOCATED IN:</b></p> <p><b>CONNECTICUT, DELAWARE, DISTRICT OF COLUMBIA, MARYLAND, MASSACHUSETTS, NEW JERSEY, NEW YORK, PENNSYLVANIA, RHODE ISLAND, OR VIRGINIA, SEND APPLICATIONS TO:</b></p> <p>U.S. NUCLEAR REGULATORY COMMISSION, REGION I          NUCLEAR MATERIAL SECTION 3          631 PARK AVENUE          KING OF PRUSSIA, PA 19380</p> <p><b>ALABAMA, FLORIDA, GEORGIA, MISSISSIPPI, MISSOURI, NORTH CAROLINA, NORTH DAKOTA, SOUTH CAROLINA, TENNESSEE, VIRGINIA, VIRGIN ISLANDS, OR WEST VIRGINIA, SEND APPLICATIONS TO:</b></p> <p>U.S. NUCLEAR REGULATORY COMMISSION, REGION II          MATERIAL RADIATION PROTECTION SECTION          101 MARIETTA STREET, SUITE 3000          ATLANTA, GA 30223</p>	<p><b>IF YOU ARE LOCATED IN:</b></p> <p>ILLINOIS, INDIANA, IOWA, MICHIGAN, MINNESOTA, MISSOURI, OHIO, OR WISCONSIN, SEND APPLICATIONS TO:</p> <p>U.S. NUCLEAR REGULATORY COMMISSION, REGION III          MATERIAL LICENSING SECTION          788 ROOSEVELT ROAD          GLEN ELLEN, IL 60137</p> <p><b>ARIZONA, COLORADO, IDAHO, KANSAS, LOUISIANA, MONTANA, NEBRASKA, NEW MEXICO, NORTH DAKOTA, OREGON, SOUTH DAKOTA, TEXAS, UTAH, OR WYOMING, SEND APPLICATIONS TO:</b></p> <p>U.S. NUCLEAR REGULATORY COMMISSION, REGION IV          MATERIAL RADIATION PROTECTION SECTION          611 RYAN PLAZA DRIVE, SUITE 1000          ARLINGTON, TX 76011</p> <p><b>ALASKA, ARIZONA, CALIFORNIA, HAWAII, NEVADA, OREGON, WASHINGTON, AND U.S. TERRITORIES AND POSSESSIONS IN THE PACIFIC, SEND APPLICATIONS TO:</b></p> <p>U.S. NUCLEAR REGULATORY COMMISSION, REGION V          MATERIAL RADIATION PROTECTION SECTION          1460 MARIA LANE, SUITE 210          WALNUT CREEK, CA 94598</p>
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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.

<p>1. THIS IS AN APPLICATION FOR (Check appropriate item):</p> <p><input checked="" type="checkbox"/> A. NEW LICENSE</p> <p><input type="checkbox"/> B. AMENDMENT TO LICENSE NUMBER _____</p> <p><input type="checkbox"/> C. RENEWAL OF LICENSE NUMBER _____</p>	<p>2. NAME AND MAILING ADDRESS OF APPLICANT (Include Zip Code):</p> <p>NUS Corporation          999 W. Valley Road          Wayne, PA 19087</p>
--	---

3. ADDRESSES WHERE LICENSED MATERIAL WILL BE USED OR POSSESSED:

In mobile laboratory headquartered at:  
 NUS Corporation  
 999 W. Valley Road, Wayne, PA 19087      EPA Vehicle 921

<p>4. NAME OF PERSON TO BE CONTACTED ABOUT THIS APPLICATION:</p> <p style="text-align: center;">Mr. Russell Slohoda</p>	<p>TELEPHONE NUMBER:</p> <p style="text-align: center;">215-687-9510</p>
---	--

SUBMIT ITEMS 5 THROUGH 11 ON BN-11 PAPER. THE TYPE AND SCOPE OF INFORMATION TO BE PROVIDED IS DESCRIBED IN THE LICENSE APPLICATION GUIDE.

<p>5. RADIOACTIVE MATERIAL</p> <p>6. PURPOSE(S) FOR WHICH LICENSED MATERIAL WILL BE USED</p>	<p>7. INDIVIDUAL(S) RESPONSIBLE FOR RADIATION SAFETY PROGRAM AND THEIR TRAINING AND EXPERIENCE</p> <p>8. TRAINING FOR INDIVIDUALS WORKING IN OR FREQUENTING RESTRICTED AREAS</p>		
<p>9. FACILITIES AND EQUIPMENT</p> <p>10. RADIATION SAFETY PROGRAM</p>	<p>11. WASTE MANAGEMENT</p> <p>12. LICENSE FEES (See 10 CFR 170 and Section 170.31):</p> <table style="width: 100%;"> <tr> <td style="width: 70%;">FEE CATEGORY: <u>General</u></td> <td style="width: 30%;">AMOUNT ENCLOSED \$ <u>230.00</u></td> </tr> </table>	FEE CATEGORY: <u>General</u>	AMOUNT ENCLOSED \$ <u>230.00</u>
FEE CATEGORY: <u>General</u>	AMOUNT ENCLOSED \$ <u>230.00</u>		

13. CERTIFICATION (Only to be completed by licensee). 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, 26, AND 60 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, AS AMENDED, 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.

SIGNATURE - CERTIFYING OFFICER	TYPED/PRINTED NAME	TITLE	DATE
	Russell Slohoda	Senior Chemist	5/3/90

<p>14. ANNUAL RECEIPTS</p> <table style="width: 100%;"> <tr> <td>&lt; \$20K</td> <td>\$1M - 2.5M</td> </tr> <tr> <td>\$20K - 50K</td> <td>\$2.5M - 5M</td> </tr> <tr> <td>50K - 75K</td> <td>\$5M - 10M</td> </tr> <tr> <td>\$75K - 1M</td> <td>&gt; \$10M</td> </tr> </table>	< \$20K	\$1M - 2.5M	\$20K - 50K	\$2.5M - 5M	50K - 75K	\$5M - 10M	\$75K - 1M	> \$10M	<p>15. NUMBER OF EMPLOYEES (Year to start year in conducting on-site operations)</p> <p>16. NUMBER OF BEDS</p>	<p>17. WOULD YOU BE WILLING TO FURNISH COST INFORMATION TO THE NRC ON THE ECONOMIC IMPACT OF CURRENT NRC REGULATIONS OR ANY FUTURE PROPOSED NRC REGULATIONS THAT MAY AFFECT YOU? (NRC regulations apply if to protect public health, safety or the environment - information furnished to the Agency in confidence)</p> <p style="text-align: center;"><input type="checkbox"/> YES      <input type="checkbox"/> NO</p>
< \$20K	\$1M - 2.5M									
\$20K - 50K	\$2.5M - 5M									
50K - 75K	\$5M - 10M									
\$75K - 1M	> \$10M									

TYPE OF FEE	FEE LOG	FEE CATEGORY	COMMENTS	APPROVED BY
APP	May 17	3P	Visited 7/18/90 prior to review	
AMOUNT RECEIVED	CHECK NUMBER			DATE
\$230	5088	Refunded \$230.		5/22/90

PRIVACY ACT STATEMENT ON THE REVERSE

Application for Material License  
NUS Corporation

ITEM 5:

1. ISOTOPE: Nickel-63
2. SOURCE MANUFACTURER: Amersham or other approved source.  
DISTRIBUTER: VARIAN, Walnut Creek Instrument Division  
MODEL NO.: 02-1972-00 Model: NBC
3. AMOUNT OF ACTIVITY: 8 Millicuries
4. INSTRUMENT MANUFACTURER: VARIAN, Walnut Creek Instrument Division  
CELL NUMBER: 8811

ITEM 6:

PURPOSE:

The Electron Capture Detector (ECD) contains a Nickel-63 ( $\text{Ni}^{63}$ ) radioactive isotope plated onto a 1/2 by 3/4 inch metallic foil which emits beta particles (high energy electrons) for ionization of the carrier gas. This produces a steady state electronic current which is decreased by the introduction of molecules with an affinity for thermal electrons. This current is then measured, providing quantitative analysis of chemical compounds in environmental samples.

ITEM 7:

The person responsible for radiation safety at this location is Ms. Marcia Case, who will be providing any needed safety training and will be conducting the wipe tests for radiation leaks. No maintenance or removal will be allowed. Should any maintenance, repair or any other activity requiring the opening or dismantlement of the ECD be required, the entire detector unit shall be removed, without opening or exposing the radioactive source and be returned to Varian for needed repairs. Under no circumstances will any NUS employee attempt to open, repair or dispose of the radiation source. All needed services will be provided by the manufacturer, the Walnut Creek Instrument Division of Varian. Other maintenance not involving the source will be performed following the recommendations of the manufacturer and adhering to the guidelines in the attached radiation safety manual.



Application for Material License  
NUS Corporation

ITEM 8:

No employee of NUS Corporation will handle the radioactive components.

ITEM 9:

Storage and transport of the ECD will take place in a secured and alarmed vehicle, EPA vehicle 921. This vehicle will be locked at all times and only authorized personnel will be allowed entry.

ITEM 10:

PERSONNEL MONITORING EQUIPMENT:

No personnel monitoring equipment is required for gas chromatography devices.

RADIATION DETECTION INSTRUMENTS:

No radiation survey meter is required for gas chromatography devices or for Nickel-63 sources. No maintenance or repair work involving opening the sealed source will be conducted by NUS employees. All such work will be performed by Varian Instruments.

LEAK TESTING:

The instrument will receive leak testing every six months beginning August, 1990. A test kit will be obtained from the manufacturer and the manufacturer will analyze and report the results.

Test kit part number: 03-949041-00  
Manufacturer: Varian, Walnut Creek  
Instrument Div.  
2700 Mitchell Dr.,  
Walnut Creek, CA 94598  
General Licence No: 3092-07GL issued by the  
California Department of  
Health.

Testing will be conducted by NUS employee, Ms. Marcia Case, Safety Officer.

Application for Material License  
NUS Corporation

MAINTENANCE AND REPAIR:

No maintenance or repair work involving opening the sealed source will be conducted by NUS employees. All such work will be performed by Varian Instruments.

ITEM 11:

All ECD material will be returned to the original supplier, Varian Instruments for repair, service and disposal. Our agreement with Varian specifies that Varian will be responsible for all waste disposal and, if such disposal occurs, will provide us with any necessary documentation.

SUPPORT DOCUMENTATION:

Attached are copies of the Varian Radiation Safety Manual, the certificate of leak-testing supplied by Varian with the instrument, and the request for leak test kits supplied by Varian.

Dear Customer:

The Nickel 63 Electron Capture Detector (ECD) kit you received for use on the Varian VISTA Series or 3000 Series Gas Chromatographs is distributed under license number 3092-07 GL issued by the California Department of Health. This license authorizes Varian to distribute this ECD to persons who are generally licensed. This means that you are not required to possess a specific license.\*

To become a General Licensee, you *must* within 30 days register this radioactive material-containing device and commit yourself to following the regulations as indicated in the Radiation Safety Manual (RSM), pages 8 through 14. The United States Nuclear Regulatory Commission and all states with which the NRC has an agreement for the exercise of regulatory authority, require that Varian also inform them of your possession. The regulations in the ECD Radiation Safety Manual copied from the California Administrative Code, Title 17, are substantially the same as those you are subject to if you use the ECD outside California.

The pages attached to this writing are a registration form and list of the addresses of the United States NRC and the Agreement States. If your state is not separately listed, you must register with the regional NRC office.

If your organization has a "Safety Person", be sure to make him or her aware of your possession of this Generally Licensed device. This person must sign the registration form and keep on file the Radiation Safety Manual and records on inventory, ECD location of use, operator(s) and performed leak test(s) for display on request by a radiation authority.

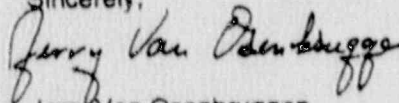
Only the State of California Radiologic Health Section requires renewal of this registration every July of even-numbered years. All Authorities require that you resubmit a completed registration form when the ECD is moved to a different address. The regulations further indicate that a leak test is required every three (3) years\*\* to determine if the exterior of the ECD has less than 0.005  $\mu\text{Ci}$  of removable Nickel 63. General Licensees are allowed to take their own wipes when using a Varian Wipe Kit, Part Number 03-949041-00. At your request, a wipe kit will be sent to you without charge.

Detectors returned for chemical cleaning or foil replacement will be leak tested at no additional charge. No return authorization is necessary for billable repair shipments. See the Radiation Safety manual, page 6, for shipping procedure.

Varian has a no charge disposal service for Varian ECDs. A disposal record will be supplied for inventory control purposes. Be sure to direct all shipments containing ECDs to "Attention: RSO".

Be aware that you are required to familiarize yourself with the Regulations listed in the Radiation Safety Manual, pages 8 through 14. We urge you to also read the Operator's Manual prior to operating the ECD. We appreciate receiving your Note of Acknowledgement as soon as possible.

Sincerely,



Jerry Van Osenbruggen  
Radiation Safety Officer  
Phone: 415-945-2133

Attachment

\*Oregon does not recognize this concept and requires its inhabitants to have a specific license which authorizes ECD possession.

\*\*Nebraska requires a leak test every six (6) months.

**varian** 

*walnut creek instrument division*

2700 mitchell drive/walnut creek/ca 94598/u.s.a./phone (415) 939-2400

# Nickel<sup>63</sup> ECD



## 1 GENERAL

This manual describes the procedures governing the handling, contamination testing, maintenance of records, repair, storage, and shipping of the Ni<sup>63</sup> Electron Capture Detector as a radioactive sealed source. Users of this detector are required by the Nuclear Regulatory Commission (NRC) regulations to be familiar with these procedures.

## 2 USAGE, HANDLING, AND REPAIR

This detector contains a Nickel 63 (Ni<sup>63</sup>) beta-emitting radioactive isotope plated onto a 1/2 x 3/4-inch metallic foil for ionization of the carrier gas. Some of the characteristics of Ni<sup>63</sup> are listed in Table 1.

TABLE 1  
NICKEL 63 SOURCE DATA

Half Life	92 years	Amount of Activity	8 millicuries
Type of Decay	(Beta) <sup>-</sup>	Physical State	Solid
Particle Energy	67 KeV	Model	NBC
Specific Activity	5 Ci/g	Manufacturer:	Amersham or other approved source
Maximum Temperature	400°C		

This detector does not emanate radioactive gas when heated to the maximum limit of its working temperature; however, to prevent exposure of the user to the radioactive source in the detector cell, dismantling of the detector cell is prohibited.

All repair, radioactive decontamination, chemical cleaning, and foil replacement must be done by Varian Instrument Group, Walnut Creek Division.

The Pulsed ECD is manufactured in two versions:

- o **Specific License Device:** This ECD has a removable cell which can be acquired as a separate part (provided the Specific License Nuclide possession limit is not surpassed). For radiation safety and warranty purposes, the owner/user is **not** allowed to open this cell.

- o **General License Device:** To possess this ECD, the owner is not required to be a specific licensee, but must register as indicated in the General License letter provided (para. 9). This ECD has a cell which is retained in the tower. **Do not attempt to remove it.**

If the owner/user prefers the removable cell, the ECD can be converted (for a minimal charge) after the Specific License is acquired. A copy of the license and the ECD must be returned to Varian in Walnut Creek for conversion.



**WARNING  
RADIATION PRESENT**

To prevent spreading radioactivity, always wash your hands thoroughly after handling the ECD. Although beta particles emitted by  $Ni^{63}$  have a relatively low energy level and cannot readily penetrate the skin, even a minute amount of radioactive material ingested into the body is undesirable.

### 3 RADIOACTIVE-CONTAMINATION LEAK TEST

Prior to shipment to the user, the  $Ni^{63}$  ECD is tested for radioactive leakage. A certificate indicating the results of that test is included with the detector. This initial leak test record must be retained, along with records of all subsequent tests. (See paragraphs 9 and 10 for required records.)

The Radiation Authorities in the U.S. and Canada require that the ECD be tested for removable radioactive contamination and that records be kept for display upon request. The General Licensee, owner, or user is allowed to take the leak test wipes only if (s)he uses the approved wipe kit P/N 03-949041-00 and returns it to Varian Instrument Group, Walnut Creek Division, for analysis. For other arrangements, contact your local radiation authority.

In the U.S., the leak test must be performed every three years. In Canada, this test must be performed annually or in accordance with the conditions of the user's license.

NOTE

It should be understood that authorization to possess a General License device or a Specific License device is a privilege which, when abused, can be revoked.

It is the obligation of the user of such a device to stay in compliance with the regulations which are printed in this manual (and Specific License document). In case of difficulties in interpreting these regulations, contact the local radiation authority or Varian Radiation Safety Officer, (415) 939-2400.

### 3.1 Varian Leak Test Program (United States and Canada)

It is the user's responsibility to have a leak test done in time. Varian will, at the user's written or phone request, mail a wipe kit without charge. (Phone 415-939-2400 and ask for the Radiation Safety Officer.) The postage paid NOTE OF ACKNOWLEDGEMENT enclosed with the ECD should be used to inform Varian of the user's intention.

For a small charge, Varian will measure the amount of radioactive contamination removed by the leak test swabs, (if any). A completed leak test report will then be returned to the user with the information needed for the user's records.

The Varian Wipe Kit (P/N 03-949041-00) for the leak test contains two prewetted cotton swabs. The purpose for the second swab is to establish the removability of the contamination (if any). After use, replace swabs in their vial and return to Varian for analysis.

If the leak test analysis shows that the amount of removed radioactive contamination reaches 0.001 microcuries, Varian will inform the user of the desirability to discontinue operation and return the detector for inspection and decontamination.

#### NOTE

If the leak test reveals the presence of 0.005 microcuries or more of removable  $Ni^{63}$  contamination, Varian will immediately contact the owner who must file a report in duplicate with the radiation authority (which has jurisdiction in the location of use) within 30 days of the test, describing the source involved, the test results, and the corrective action taken.

In addition, the user must remove the detector from service and return it to Varian Instrument Group, Walnut Creek Division, for radioactive decontamination (see para. 7, **Shipping**). Varian will decontaminate the detector whenever required, without charge, for as long as the customer owns the ECD and the contamination is not the result of any of the following non-approved handling procedures.

- DO NOT:**
1. Remove the cap from the cell.
  2. Submerge the cell in any liquid.
  3. "Steam clean" the cell.
  4. Run a liquid through the cell.
  5. Insert objects into the cell.
  6. Allow solids (column packing or fiber glass) to enter the cell.
  7. Run out of carrier gas with detector heated.

It is most important that radioactive contaminants which have settled on the exterior of the cell or tower do not get transferred. In case of excess "leakage," it is imperative that the cell and ECD tower parts are not touched without a glove on and that once the glove has been in contact, it is assumed contaminated and no other parts are handled.

After the cooled (ambient temperature) ECD is removed, the glove should be turned inside out over the detector which then must be placed in the original labeled shipping container and returned to Varian Instrument Group in the usual way (para. 7).

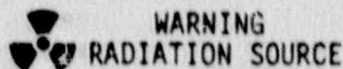
### 3.2 Leak Test Procedure

The radioactive source is contained in the detector cell. The carrier gas enters the bottom of the cell, passes through the radioactive foil holder, and exhausts at the top. Because of the extremely low vapor pressure of nickel at the temperatures to which the detector is exposed, any contamination that may escape must be assumed to be in solid form. Any  $Ni^{63}$  particles swept out by the carrier gas will most likely be deposited on the top of the detector tower cap, on the cell exit tube, and on the cell cap.

Leak test wipes are to be taken from the areas most likely to show radioactive material. Each wipe is to be taken by rotating the swab while forcefully holding it in contact with the area. To avoid spreading contamination, the direction of the wipe should be **from** the area **least** likely to be contaminated **toward** the area **most** likely to be contaminated.

Test for radioactive contamination as follows:

1. Allow the ECD to cool to room temperature. Turn off instrument power. Oven door may be opened to accelerate cooling.



To avoid spreading any possible contamination, do not handle the **top** of the tower cap or the detector cell exit tube with bare hands.

2. Remove swab from red-marked vial.
  - a. Wipe the top of the detector tower cap first, using a circular motion, starting at the outside edge and progressing toward the center.
  - b. Remove the detector tower cap by holding it by its sides.
  - c. Wipe the detector cell exit tube with the swab, then wipe the top of the foil cylinder.
  - d. Replace the detector tower cap.
3. Replace first swab in vial.
4. Repeat steps 2 and 3 with other swab.



5. Wash your hands thoroughly after completing the leak test procedure (see WARNING in para. 2).
6. Fill out (sign and date the appropriate line) the leak test record sheet on the backside of the instructions accompanying the leak test kit. Package swab vials in their original or similar container and return to Varian for measurement of the amount of Ni<sup>63</sup> removed.

#### 4 RADIOACTIVE SOURCE REPLACEMENT

When the ionization efficiency of the foil has been significantly reduced, the foil can often be regenerated by performing one of the ECD thermal-cleaning procedures (reference the appropriate ECD manual). If these procedures do not produce the desired result, the foil may have to be cleaned chemically or replaced. (Average life expectancy of a foil is between 3 and 5 years.)

Since the detector cell may not be dismantled by unauthorized personnel, the whole detector, or for Specific Licensees, the cell assembly, must be returned to Varian. See paragraph 7 for shipping instructions.

#### 5 DAMAGE

In case of damage which makes one suspect that radioactive material might be released, the user must immediately discontinue use of the device and consult the Radiation Safety Officer of Varian Instrument Group, Walnut Creek Division, California, by phone: (415) 939-2400.

A leak test must be scheduled as soon as possible (device must be cool) and action must be taken to prevent the spread of possible contamination. Use a plastic bag if a glove is not available to handle the device. Pull the glove or bag over the ECD inside out prior to placing it in the shipping container. Follow the shipping instructions of paragraph 7.

#### 6 STORAGE

Because of its potential personnel hazard, the detector must be stored under lock and key in an area posted with a "CAUTION - RADIOACTIVE MATERIAL" warning sign when not installed in an instrument. The ECD should be stored in its original inner shipping container (ECD case) which is marked with appropriate radioactivity labeling. If the ECD case is not available, the storage container must be marked with a "CAUTION - RADIOACTIVE MATERIAL" label which includes the isotope and quantity, or the label on the front of the GC may be removed and used to mark the new container. The installation tool received with the ECD should also be kept in the ECD case and the case stored in a clean, low humidity area.

The tool should not be used for any purpose other than installation and removal of the ECD it came with, to avoid cross-contamination. The flow tube assembly should likewise be used solely with that ECD.

## 7 SHIPPING

Regulations of the Department of Transportation and International Air Transport Association specify the packaging standards and labeling requirements for shipment of radioactive materials. According to Paragraph 173.422 of Title 49 of the Code of Federal Regulations, and Section 5.7.28 of the International Air Transport Association Regulations, the Ni<sup>63</sup> ECD's made by Varian are exempted from specific packaging, marking, labeling, and categorization requirements. Also, no shipper's declaration is required if the following conditions are met:

1. The material must be packaged in a strong, tight package such that there will be no leakage of radioactive material under conditions normally incident to transportation.
2. The consignment must be described on the air way bill as:  

Electron Capture Detector  
Excepted Radioactive Material--Instruments and Articles,  
UN 2911
3. The outside of the inner container must be labeled "RADIOACTIVE MATERIAL."
4. The radiation level at 4 inches from any point on the external surface of any unpacked instrument or article does not exceed 10 millirem per hour.
5. There must be no significant removable radioactive contamination on the exterior surface of the package (no more than  $10^{-11}$  Ci/cm<sup>2</sup> or 2,200 disintegrations/min per 100 cm<sup>2</sup>).

To comply with all of the above conditions, it is recommended that the detector and installation tool be returned in the same inner container (ECD case) in which they were received, with an outer container made of rigid packaging material (e.g., corrugated cardboard). No measurements need to be made to comply with steps 4 and 5, above.

Minimum outside dimensions of the outer container must not be less than 4 inches (10 cm). The ECD case, which is labeled as specified in condition 3 above, should be securely and tightly packaged in the outer container. Shock absorbing material should be used between the ECD case and the outer container. If the original ECD case is not available, be sure to label the new inner container according to condition 3 above.

**NOTE:** Provide complete information, including name and address of shipper and indicate the degree of urgency. DO NOT rely on previous phone conversations with Varian to convey this information. For fast turnaround, include a Purchase Order with the detector. Please include a copy of the Shipper's Certificate (last page) with as much information as possible about your returned ECD.

**8 WASTE DISPOSAL**

Varian provides a no-charge disposal service for ECD's manufactured by Varian. Disposal of radioactive waste generated by Varian and its customers is done through Southwest Nuclear Company.

Varian supplies its customers with a disposal certificate which can be used as evidence of disposal for the purpose of license cancellation or inventory record keeping.

**9 RESPONSIBILITIES OF THE USER OF A GENERALLY LICENSED DEVICE**

The radiation authorities require that one individual be in charge of an organization's ECD('s). This individual is responsible for the generation and/or storage of the following written ECD records:

- o Location of use or storage
- o Disposal
- o Leak test(s)
- o Receipt, transfer, loss, or theft
- o Notification of incidents
- o Communications with the manufacturer relative to radioactivity

Varian is required to supply to the appropriate radiation authority information on:

- o The name of the organization
- o Shipping address
- o The name of the user (from purchase order)

Varian assumes that the shipping address is the location of use. It is the user's obligation to inform both Varian and the radiation authority (who has jurisdiction of the actual location) where the detector(s) is used. For this purpose, Varian encloses with all ECD('s):

- a. Note of Acknowledgement
- b. Registration of Radiation Sources, attached to General License letter.

**We request that you mail both forms as soon as possible.**

If the name on the purchase order is not the responsible individual, then that individual must be notified so that he can fulfill the registration and, if necessary, the notification requirements. (See Dear Customer letter attachment and the Radiation Control Regulations, Article 6, Sections 30293, 30294, and 30295.)

If the individual who is responsible leaves the organization or is transferred and cannot cover the above indicated responsibilities any longer, another individual must be assigned to take over and perform the indicated tasks.

If the organization already has a Radiation Safety Officer, it is the task of this individual to make the purchasing department aware that purchases of radioactive-material-containing devices must be cleared through him.

## NOTE

Varian cannot be held responsible for the lack of inter-organizational communication if a Generally Licensed device is acquired without a Radiation Safety Officer having been informed.

**10 CALIFORNIA RADIATION CONTROL REGULATIONS**

The following excerpts relating to licensing of radioactive materials and standards for protection against radiation are taken from California Radiation Control Regulations, California Administration Code, Title 17, Health. The regulations in all other areas under jurisdiction of the NRC and other agreement states are substantially the same as these; however, the owner/user should consult with local authorities for the relevant regulations.

**Group 2. Licensing of Radioactive Material****Article 4. Licenses****30192. General Licenses--Other Radioactive Material.**

(c) (1) A general license is hereby issued to acquire and use radioactive material when 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, when such devices are manufactured pursuant to a specific license authorizing distribution to general licensees; provided that each such device:

(A) is labeled in accordance with the provisions of the specific license which authorizes distribution of the devices;

(B) bears a label containing the following or a substantially similar statement:

"The receipt, possession, use and transfer of this device, Model \_\_\_\_\_, Serial No. \_\_\_\_\_, are subject to a general license or equivalent and the regulations of the US NRC or of a State with which the NRC has entered into an agreement for the exercise of regulatory authority. Removal of this label is prohibited.

## CAUTION--RADIOACTIVE MATERIAL

-----"  
(Name of Supplier)

The model, serial number and name of supplier may be omitted from the label provided they are elsewhere specified in labeling affixed to the device; and

(C) when specified by the label on the device, is installed on the premises of the general licensee by a person having a specific license which authorizes installation of such devices.

(2) Persons who possess a device pursuant to the general license contained in Section 30192(c)(1) shall, with respect thereto, be exempt from the requirements of Group 3 of this subchapter except for sections 30253, 30254, 30293-(a)(2), 30294, and 30295, but shall comply with all of the following:

(A) Within 30 days of the receipt of any such device, register with the department, and within 30 days of transfer of any such device, notify the department, in accordance with the provisions of Group 1 of this subchapter (Registration of Radiation Sources).

(B) Shall not transfer, abandon, or dispose of the device, except by transfer to a person holding a specific license to receive such device.

(C) Assure that all labels affixed to the devices at the time of receipt and bearing the statement, "Removal of this label is prohibited," are maintained thereon, and comply with all instructions contained in such labels.

(D) Have the device tested for leakage of radioactive material and proper operation of the on-off mechanism and indicator, if any, at the time of installation of the device or of replacement of the radioactive material on the premises of the general licensee and thereafter at no longer than six-month intervals or at such longer intervals as may be specified in the specific license which authorizes distribution of the device to general licensees, except that any such intervals shall not exceed three years unless specifically approved by the department. Devices containing only krypton in gaseous form need not be tested for leakage and devices containing only tritium need not be tested for any purpose.

(E) Have the test required by Section 30192 (c)(2)(D) and all other services involving the radioactive material, its shielding and containment, performed by a person holding an appropriate specific license therefor.

(F) Maintain records of all tests performed on the devices as required under this section, including the dates and results of the tests and the names and addresses of the persons conducting the tests.

(G) Upon the occurrence of a failure of or damage to, or any indication of a possible failure of or damage to, the shielding or containment of the radioactive material or the on-off mechanism or indicator, immediately suspend operation of the device until it has been repaired by or disposed of to a person holding an appropriate specific license therefor.

(H) Within 30 days after the occurrence of a failure of or damage to the shielding or containment of the radioactive material or the on-off mechanism or indicator or upon the detection of 0.005 microcuries or more of removable radioactive material, furnish to the department a complete description of the device (manufacturer, type, serial number) and a brief description of the event and the remedial action taken.

### Group 3. Standards For Protection Against Radiation

#### Article 1. General

**30253. General Requirement.** Each user shall, with respect to all radiation sources under his control, take all precautions necessary to provide reasonably adequate protection to property and to the lives, health, and safety of all individuals subject to exposure to radiation from such sources.

**30254. Inspection.** (a) Each user shall afford to the Department or other official agency specifically designated by the Department, at all reasonable times, opportunity to inspect materials, machines, activities, facilities, premises, and records pursuant to these regulations.

(b) During an inspection, inspectors may consult privately with workers as specified below. The user may accompany inspectors during other phases of an inspection.

(1) Inspectors may consult privately with workers concerning matters of occupational radiation protection and other matters related to applicable provisions of Department regulations and licenses to the extent the inspectors deem necessary for the conduct of an effective and thorough inspection.

(2) During the course of an inspection any worker may bring privately to the attention of the inspectors, either orally or in writing, any past or present condition which he has reason to believe may have contributed to or caused any violation of the Radiation Control Law, these regulations, or license condition, or any unnecessary exposure of an individual to radiation from licensed radioactive material or a registered radiation machine under the user's control. Any such notice in writing shall comply with the requirements of subsection (h) hereof.

(3) The provision of paragraph (b) (2) of this section shall not be interpreted as authorization to disregard instructions pursuant to Section 30280 (b)(1).

(c) If, at the time of inspection, an individual has been authorized by the workers to represent them during inspections, the user shall notify the inspectors of such authorization and shall give the workers' representative an opportunity to accompany the inspectors during the inspection of physical working conditions.

(d) Each worker's representative shall be routinely engaged in work under control of the user and shall have received instructions as specified in Section 30280 (b)(1).

(e) Different representatives of users and workers may accompany the inspectors during different phases of an inspection if there is no resulting interference with the conduct of the inspection. However, only one workers' representative at a time may accompany the inspectors.

(f) With the approval of the user and the workers' representative, an individual who is not routinely engaged in work under control of the user, for example, a consultant to the user or to the workers' representative, shall be afforded the opportunity to accompany inspectors during the inspection of physical working conditions.

(g) Notwithstanding the other provisions of this section, inspectors are authorized to refuse to permit accompaniment by an individual who deliberately interferes with a fair and orderly inspection. With regard to any area containing proprietary information, the workers' representative for that area shall be an individual previously authorized by the user to enter that area.

(h) Any worker or representative of workers who believes that a violation of the Radiation Control law, these regulations or license conditions exists, or has occurred in work under a license or registration with regard to radiological working conditions in which the worker is engaged, may request an inspection by giving notice of the alleged violation to the California State Department of Health or other official agency specifically designated by the Department. Any such notice shall be in writing, shall set forth the specific grounds for the notice, and shall be signed by the worker or representative of the workers. A copy shall be provided to the user by the Department no later than at the time of inspection except that, upon the request of the worker giving such notice, his name and the name of individuals referred to therein shall not appear in such copy or on any record published, released, or made available by the Department except for good cause shown.

(i) If, upon receipt of such notice, the Chief, Radiologic Health Section, California State Department of Health, determines that the complaint meets the requirements set forth in subsection (h) hereof, and that there are reasonable grounds to believe that the alleged violation exists or has occurred, he shall cause an inspection to be made as soon as practicable, to determine if such alleged violation exists or has occurred.

Inspections pursuant to this section need not be limited to matters referred to in the complaint.

(j) No user shall discharge or in any manner discriminate against any worker because such worker has filed any complaint or instituted or caused to be instituted any proceeding under these regulations or has testified or is about to testify in any such proceeding or because of the exercise by such worker on behalf of himself or others of any option afforded by this section.

(k) If the Chief, Radiologic Health Section, Department of Health, determines with respect to a complaint under subsection (h) hereof that an inspection is not warranted because there are no reasonable grounds to believe that a violation exists or has occurred, the complainant shall be notified in writing of such determination. The complainant may obtain review of such determination by submitting a written statement of position to the Director of Health, State of California, who will provide the user with a copy of such statement by certified mail, excluding, at the request of the complainant, the name of the complainant. The user may submit an opposing written statement of position with the Director of Health who will provide the complainant with a copy of such statement by certified mail. Upon the request of the complainant, the Director of Health, or his designee, may hold an informal conference in which the complainant and the user may orally present their views. An informal conference may also be held at the request of the user, but disclosure of the identity of the complainant will be made only following receipt of written authorization from the complainant. After considering all written or oral views presented, the Director of Health shall affirm, modify, or reverse the determination of the Chief, Radiologic Health Section, Department of Health, and furnish the complainant and the user a written notification of his decision and the reason therefor.

(l) If the Department determines that an inspection is not warranted because the requirements of subsection (h) hereof have not been met, it shall notify the complainant in writing of such determination. Such determination shall be without prejudice to the filing of a new complaint meeting the requirements of subsection (h) hereof.

## **Article 6. Records, Reports, and Notifications**

**30293. Records.** (a) Each user shall maintain accurate and complete written records, as follows:

- (1) The results of each required calibration, survey, and test.
- (2) Each receipt, transfer, and disposal of a source of radiation.



**30294. Reports of Theft or Loss of Sources of Radiation.** Each user shall report immediately by telephone, (916) 445-0931, and confirm promptly by letter to the State Department of Health, 714 P Street, Sacramento, California 95814, or other official agency specifically designated by the department, the theft or loss, as soon as such theft or loss becomes known to the user, of

- (a) any radiation machine; or
- (b) any quantity of radioactive material in excess of that specified in Section 30356, Appendix B.\*

**30295. Notification of Incidents.** (a) Immediate Notification. Each user shall report promptly by telephone, (916) 455-0931, and confirm promptly by letter to the State Department of Health, 714 P Street, Sacramento, California 95814, or other official agency specifically designated by the department, any incident involving any source of radiation subject to this regulation possessed by him and which may have caused or which threatens to cause

(1) a dose to the whole body of any individual 25 rems or more, a dose to the skin of the whole body of any individual of 150 rems or more; or a dose to the feet, ankles, hands, or forearms of any individual of 375 rems or more; 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 Section 30355, Appendix A, 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 user shall, within 24 hours, notify the State Department of Public Health, 714 P Street, Sacramento, California 95814, or other official agency specifically designated by the department, by telephone and prompt confirming letter of any incident involving any source of radiation subject to this regulation possessed by him and which may have caused or which threatens to cause

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

\* 10 microcuries for N<sup>63</sup>, insoluble in air.

\*\* 50 microcuries per milliliter, insoluble in air for Ni<sup>63</sup>.

(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 Section 30355, Appendix A, Table II<sup>\*</sup>; or

(3) damage to property in excess of \$1,000.

(c) An overexposure of a film badge dosimeter or other type dosimeter assigned to an individual is considered presumptive evidence of exposure to the individual, and the user shall advise the department of such exposure as required by subsections (a) and (b) of this section.<sup>\*\*</sup>

\* 5 microcuries for Ni<sup>63</sup>, insoluble in air.

\*\* There is no requirement to wear a film badge when operating an Electron Capture Detector equipped gas chromatograph.

# SHIPPER'S CERTIFICATE

THIS PARCEL CONTAINS AN EXCEPTED RADIOACTIVE ARTICLE

**Shipping Name:** Excepted Radioactive Material — Instruments and Articles

**Hazard Class Radioactive Material Identification Number:** UN 2911

**Containing:** 8 millicuries — Nickel 63 — SOLID FORM

NO D.O.T. LABEL REQUIRED (paragraph 7, Radiation Safety Manual)

This package conforms to the conditions and limitations specified in 49 CFR 173.422 and IATA Dangerous Goods regulations Section 5.7.28 for excepted radioactive material, instruments, and articles.

## Name and Address of Shipper:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Shipping Date:** \_\_\_\_\_

**By:** \_\_\_\_\_

**Title:** \_\_\_\_\_

**Phone:** (     ) \_\_\_\_\_

- Decontamination (Radioactive)
- Disposal (VIG will send disposal certificate to customer)
- Correct Defect

Explanation of Defect: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

- Chemical Cleaning per Purchase Order No. \_\_\_\_\_
- Detector Repair per Purchase Order No. \_\_\_\_\_
- Credit (Part must be accompanied by return authorization)

## Send to:

**Varian, Walnut Creek Instrument Division**  
**2700 Mitchell Drive**  
**Walnut Creek, CA 94598-1675**  
**Attention: Radiation Safety Officer**

## Notes:

1. Categorization, labeling, and Shipper's Declaration are *not* required.
2. Each article must be marked "RADIOACTIVE"
3. Securely package in cardboard container (minimum size 4" x 4").
4. Place a completed copy of this document inside the outer container.
5. The consignment must be described on the air way bill as "Excepted Radioactive Material — Instruments and Articles — UN 2911."

## IMPORTANT DOCUMENT

Keep this certificate and future leak test records for display on request by an inspecting radiation official. Failure to supply records may result in a citation, suspension of your license, and/or a fine.

### CERTIFICATE OF LEAK TEST

This document is to certify that the Electron Capture Detector Cell indicated below has been surveyed for external radioactive contamination as indicated in the Nickel<sup>63</sup> Radiation Safety manual, Publication 03-913999-00, Section 3.

The removable radioactivity from the surface of this Electron Capture Cell was measured to be:

Isotopes: Nickel 63 Amount: 0.36 x 10<sup>-3</sup> micro Curie Date: 2-23-90  
Model No. 02-197200 Serial No.: A7625 Cell No.: 8811

**NOTE:** Varian, Walnut Creek Instrument Division is required by the U.S. NRC and State of California Department of Health to inform you that the Ni<sup>63</sup> ECD must be leak tested every 36 months. Commitments in your specific license supersede the above.

\* Nebraska authorities require a survey every 6 months.



Jerry Van Osenbruggen  
Radiation Safety Officer  
Varian, Walnut Creek Instrument Division  
2700 Mitchell Drive  
Walnut Creek, Ca. 94598-1675  
Phone: (415) 945-2133

## Note of Acknowledgement

### To Varian Radiation Safety Officer:

I am aware that Nickel 63 Electron Capture Detectors must be tested for radioactive leakage every three (3) years or in accordance with my license (whichever is shorter). I know that I am required to keep records which indicate that these tests have been performed. (Nebraska requires a semi-annual leak test.)

I know that non-license holders may use the 03-949041-00 Varian Wipe Kits, but that the analysis must be performed by a specific licensee.

- I will call (415) 945-2133 to request a wipe kit when I need to perform a leak test.
- I will take care of this myself.
- I will return the ECD for service before the three years are up and have a leak test performed at no extra charge.

For Varian's records, as required by the Radiation Authorities, I give you:

Company Name & Address: NUS Corporation, 999 W. Valley Rd., Wayne PA 19087

(Location of Use) Mobile laboratory headquartered at :

999 W. Valley Rd., Wayne, PA 19087

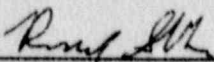
Responsible Person's Name & Function: Russell Sloboda

Senior Chemist

Telephone Number: 215-687-9510

ECD Serial Number: A7625

Date Received: 3/5/90

Signature: 

- Our organization has a Radiation Safety Officer and she is informed of my possession.
- I read the Radiation Safety Manual and am prepared to follow the regulations.

I am aware of the following:

- The wipe kit is sent to me at no charge. For analysis, I return the kit with a \$25.00 check ENCLOSED. Canadian customers, please ENCLOSE U.S. \$27.00, U.S. bank check or include proof of payment to Varian Canada, Inc., 45 River Drive, Georgetown, Ontario L7G2J4.
- Varian's wipe kit may also be used on Ni<sup>63</sup> Electron Capture Detectors of different make.



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20555

SEP 18 1990

NUS CORPORATION  
ATTN: Mr. Garth Glenn  
999 West Valley Road  
Wayne, PA 19406

REFUND OF APPLICATION FEE

1. BACKGROUND:

Check Received August 21, 1990  
Application Dated May 3, 1990  
Check Number 5688  
Check Amount \$230

2. REFUND:

Amount \$230

This refund is now being processed and will be sent as soon as possible.

3. REASON FOR REFUND:

No licensing action necessary for May 3, 1990, application since requested activity is covered under the general license under 10 CFR 31.5.

NOTE: ENCLOSED IS A COPY OF THE MAY 23, 1990 FEDERAL REGISTER NOTICE CONTAINING THE COMMISSION'S REVISED FEE REGULATIONS WHICH WENT INTO EFFECT JULY 2, 1990. IF YOU HAVE ANY QUESTIONS CONCERNING THE FEES TO BE SUBMITTED WITH FUTURE APPLICATIONS, PLEASE CONTACT US AT 301-492-4650.

*MS*  
*9/17/90*  
Maurice Messier  
License Fee and Debt Collection Branch  
Division of Accounting and Finance  
Office of the Controller

Enclosure: May 23, 1990  
Federal Register notice

BETWEEN:

LICENSE FEE MANAGEMENT BRANCH, ARM  
AND  
REGIONAL LICENSING SECTIONS

(FOR LFMS USE)  
INFORMATION FROM LTS

PROGRAM CODE: 03123  
STATUS CODE: 3  
FEE CATEGORY: \_\_\_\_\_  
EXP. DATE: 0  
FEE COMMENTS: \_\_\_\_\_

LICENSE FEE TRANSMITTAL

A. REGION

1. APPLICATION ATTACHED

APPLICANT/LICENSEE: NUS CORPORATION  
RECEIVED DATE: 900515  
DOCKET NO: 3031736  
CONTROL NO.: 112525  
LICENSE NO.: \_\_\_\_\_  
ACTION TYPE: NEW LICENSEE

2. FEE ATTACHED \$230

AMOUNT: \_\_\_\_\_  
CHECK NO.: ~~5686~~

3. COMMENTS

SIGNED  
DATE

*[Signature]*  
\_\_\_\_\_  
5/17/90

B. LICENSE FEE MANAGEMENT BRANCH (CHECK WHEN MILESTONE 03 IS ENTERED 1✓1)

1. FEE CATEGORY AND AMOUNT: 3P \$230

2. CORRECT FEE PAID. APPLICATION MAY BE PROCESSED FOR:

AMENDMENT \_\_\_\_\_  
RENEWAL \_\_\_\_\_  
LICENSE  \_\_\_\_\_

3. OTHER \_\_\_\_\_

SIGNED  
DATE

*Rita Jacques*  
\_\_\_\_\_  
5/22/90