



DEPARTMENT OF THE NAVY

NAVAL SEA SYSTEMS COMMAND DETACHMENT  
RADIOLOGICAL AFFAIRS SUPPORT OFFICE (RASO)  
YORKTOWN, VA 23691-5098

71-0225

IN REPLY REFER TO

5104/00173  
Ser 11/ 01139  
02 OCT 1989

US Nuclear Regulatory Commission  
Division of Safeguards and Transportation  
Transportation Branch  
Washington, DC 20555

Gentlemen:

Renewal of Naval Research Laboratory Quality Assurance Program  
Approval for Radioactive Material Package No. 0225 is requested  
per enclosure (1).

Sincerely,

R. W. LOWMAN  
By Direction

Enclosure:

(1) NRL ltr 5100  
1244-1470 of  
25 Aug 89

Copy to:  
CNO (OP-45)  
NRL

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FEE NOT REQUIRED

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DEPARTMENT OF THE NAVY

NAVAL RESEARCH LABORATORY  
WASHINGTON, D.C. 20375-6000

IN REPLY REFER TO:

5100

1244-1470

AUG 25 1989

FROM: Commanding Officer, Naval Research Laboratory  
TO: Director, Naval Sea Systems Command Detachment, Radiological  
Affairs Support Office, Yorktown, VA 23691-5098

SUBJ: RENEWAL OF QUALITY ASSURANCE PROGRAM

ENCL: (1) NRC ltr SGTB:GMP, 71-0225 of 9 Aug 89  
(2) Quality Assurance Program for the Naval Research  
Laboratory

1. The Naval Research Laboratory (NRL) has been advised by the Nuclear Regulatory Commission, enclosure (1), that the Laboratory's Quality Assurance Program Approval for Radioactive Material Packages No. 0225 will expire on 30 Sep 89.

2. In accordance with the provisions of 10 CFR Part 71, Subpart H, the NRL Quality Assurance Program, enclosure (2), has been updated and is provided for your consideration and subsequent submission to the Nuclear Regulatory Commission for approval.

3. Since NRL is a government agency, it is our understanding that the \$150 renewal fee is not required.

4. Please contact Mr. J. N. Stone at (202)757-2232 or Autovon 297-2232 if you require additional information.

*J. N. Stone*

J. N. STONE  
By direction

**NAVAL RESEARCH LABORATORY  
4555 OVERLOOK AVENUE, S.W,  
WASHINGTON, D.C, 20375-5000**

**10 CFR PART 71  
QUALITY ASSURANCE PROGRAM**

**1. INTRODUCTION**

The Naval Research Laboratory conducts a broadly-based multi-disciplinary program of scientific research and advanced technological development directed toward new and improved materials, equipment, techniques, systems, and related operational procedures for the Navy.

As an important part of this mission, the Laboratory performs scientific research and development for other Naval Commands and, where specifically qualified, for other agencies of the Department of Defense and, in defense related efforts, for other Government agencies.

In support of this research effort, the Laboratory possesses a number of sealed, Type B sources which may be shipped for temporary use by Laboratory personnel at other locations or permanently transferred to other licensees. Such activities require the following Quality Assurance Program.

**2. ORGANIZATION**

The Naval Research Laboratory, see Attachment 1 for organization chart, is commanded by a Navy Captain, who appoints a Radiological Committee and assigns it the responsibility for overseeing all matters of radiological safety. The Committee consists of five civilian scientists, a Navy Officer, the Medical Officer, and the Radiological Safety Officer.

The Radiological Safety Officer is responsible for conducting the Laboratory's Radiological Safety Program, as well as for establishing and executing the Quality Assurance Program required by 10 CFR 71 - Subpart H. In addition, he is Head of the Safety Branch. Administratively, he reports to the Chief Staff Officer of the Command Support Division but, in matters pertaining to Radiological Safety or quality assurance, he reports directly to the Commanding Officer.

In administering the Quality Assurance Program, the Radiological Safety Officer must assure that all packaging is handled, shipped, stored, cleaned, assembled, inspected, tested, maintained, and repaired in accordance with the specifications in Subpart . . . . In addition, he shall assure that all packaging purchased for use in this program meets applicable specifications.

The Laboratory utilizes neither contractor nor consultant personnel in conducting this program and retains and exercises full responsibility for its successful execution.

### 3. QUALITY ASSURANCE PROGRAM

From time to time, the Laboratory may be required to ship a sealed, Type B source. Such shipments will be made only in commercially available packaging which is certified by the manufacturer as conforming to applicable NRC/DOT specifications. Any dispute involving the quality of these containers will be resolved by qualified, non-involved personnel appointed by the Commanding Officer,

In connection with the use of these shipping containers, the Radiological Safety Officer is responsible for establishing, executing, and revising a Quality Assurance Program in accordance with established procedures and, with management approval, ensuring that all applicable quality control procedures, engineering procedures, and specific provisions of container design approval are satisfied. The Program must emphasize control of the characteristics of the container which are critical to safety and assure that quality-related activities are performed with specified equipment under suitable environmental conditions, and that all prerequisites have been satisfied prior to inspection and test. It also must contain a training and indoctrination program which clearly defines its scope, objectives, and methods of implementation; instructs personnel performing quality-related activities as to the purpose, scope, and implementation of quality assurance procedures and instructions; trains and qualifies such personnel in the principles and techniques of the activity being performed; and provides for retraining, reexamining, and recertifying of these personnel to maintain proficiency.

The Quality Assurance Program is assessed regularly by management to assure that its scope, status, implementation, and effectiveness are adequate and that it complies with the criteria of Subpart H to 10 CFR 71.

#### **4. PROCUREMENT DOCUMENT CONTROL**

The Quality Assurance Program clearly delineates the sequence of actions to be followed in the preparation, review, approval, and control of procurement documents and requires that:

a. Procurement documents identify the requirements in Subpart H of 10 CFR 71 which must be complied with and described in the supplier's quality assurance program.

b. Procurement documents contain or reference the design basis technical requirements, including the applicable regulatory requirements, material and component identification requirements, drawing specifications, codes and industrial standards, test and inspection requirements, and special process instructions.

c. Procurement documents identify the documentation (drawings, specifications, procedures, inspection and fabrication plans, inspection and test records, personnel and procedures qualifications, and chemical and physical test results of material) to be prepared, maintained, and submitted to the purchaser for review and approval.

d. Procurement documents specify the procuring agency's right of access to the supplier's facilities and records and for source inspection and audit.

#### **5. INSTRUCTIONS, PROCEDURES, AND DRAWINGS**

Activities affecting quality shall be prescribed and accomplished in accordance with documented instructions, procedures, or drawings,

#### **6. DOCUMENT CONTROL**

The review, approval, and issue of documents, and changes thereto, are procedurally controlled, prior to release, to assure that they are adequate and that quality requirements are stated.

Changes to documents shall be reviewed and approved by the same organizations that performed the original review and approval, or by other equally qualified, responsible organizations. Approved changes shall be included in instructions, procedures, drawings, and other documents prior to implementation of the changes.

A master list, identifying the current revision number of instructions, procedures, specifications, drawings, and procurement documents, shall be established and maintained.

Applicable documents shall be available at the location where an activity is to be performed prior to commencing work.

#### **7. IDENTIFICATION AND CONTROL OF MATERIALS, PARTS, AND COMPONENTS**

If required, procedures will be established to identify and control materials, parts, and components, including partially fabricated sub-assemblies. Appropriate documentation, such as drawings, specifications, purchase orders, manufacturing and inspection documents, deviation reports, and physical and chemical mill test reports will be maintained to identify materials and parts important to the function of safety-related systems and components. Finally, identification of materials, parts, and components will be verified and documented prior to their release for fabrication, assembly, and installation.

#### **8. CONTROL OF SPECIAL PROCESSES**

Where necessary, special processes such as welding, heat treating, nondestructive testing, and cleaning will be procedurally controlled.

#### **9. INSPECTION**

A program for the inspection of activities affecting quality shall be established to verify conformance with documented instructions, procedures, and drawings for accomplishing the activities. Such inspections shall be conducted by personnel who are independent from the activity being inspected.

#### **10. CONTROL OF MEASURING AND TEST EQUIPMENT**

Measuring and test devices used in activities affecting quality shall be calibrated at specified intervals based upon required accuracy, purpose, degree of usage, stability requirements, and other conditions affecting measurements. Reference and transfer standards used in calibration shall be based on nationally recognized standards. When such standards do not exist, the basis for calibration shall be documented.

#### **11. HANDLING, STORAGE, AND SHIPPING**

Handling, preservation, storage, cleaning, packaging, and shipping shall be accomplished by qualified individuals in accordance with established procedures. They shall assure that all conditions for NRC package approval and DOT shipping requirements are satisfied prior to shipment. They also shall

assure that necessary shipping papers are prepared and that the departure, arrival, and destination of the package is established and monitored consistent with the safe transportation of the package.

#### **12. INSPECTION, TEST, AND OPERATING STATUS**

Procedures shall be established which will control the application and removal of inspection and welding stamps and other status indicators such as tags, labels, markings, and stamps to assure that required inspections, tests, and other critical operations are not bypassed and that the inspection, test, and operating status of packaging and components is known by affected organizations. The status of non-conforming, inoperative, or malfunctioning packages or components shall be clearly identified.

#### **13. NONCONFORMING MATERIAL, PARTS, OR COMPONENTS**

Procedures shall assure that affected organizations are made aware of nonconforming materials, parts, components, or services by means of identification, documentation, segregation, review disposition, and notification.

#### **14. QUALITY ASSURANCE RECORDS**

Sufficient, identifiable, and retrievable quality assurance records shall be maintained to provide documentary evidence of the quality and safety of the items and activities affecting quality and safety. These records shall include operating logs; results of reviews, inspections, tests, audits, and material analyses; qualification of personnel, procedures, and equipment; and other documentation such as drawings, specifications, procurement documents, calibration procedures, and reports, as well as reports of nonconformance and corrective actions. A list of these records and their storage locations shall be maintained.

Where applicable, inspection and test records shall contain the following:

- a. a description of the type of observation
- b. evidence of completing and verifying a manufacturing, inspection, or test operation
- c. date and results of the inspection or test
- d. information on conditions adverse to quality
- e. identification of inspector or data recorder

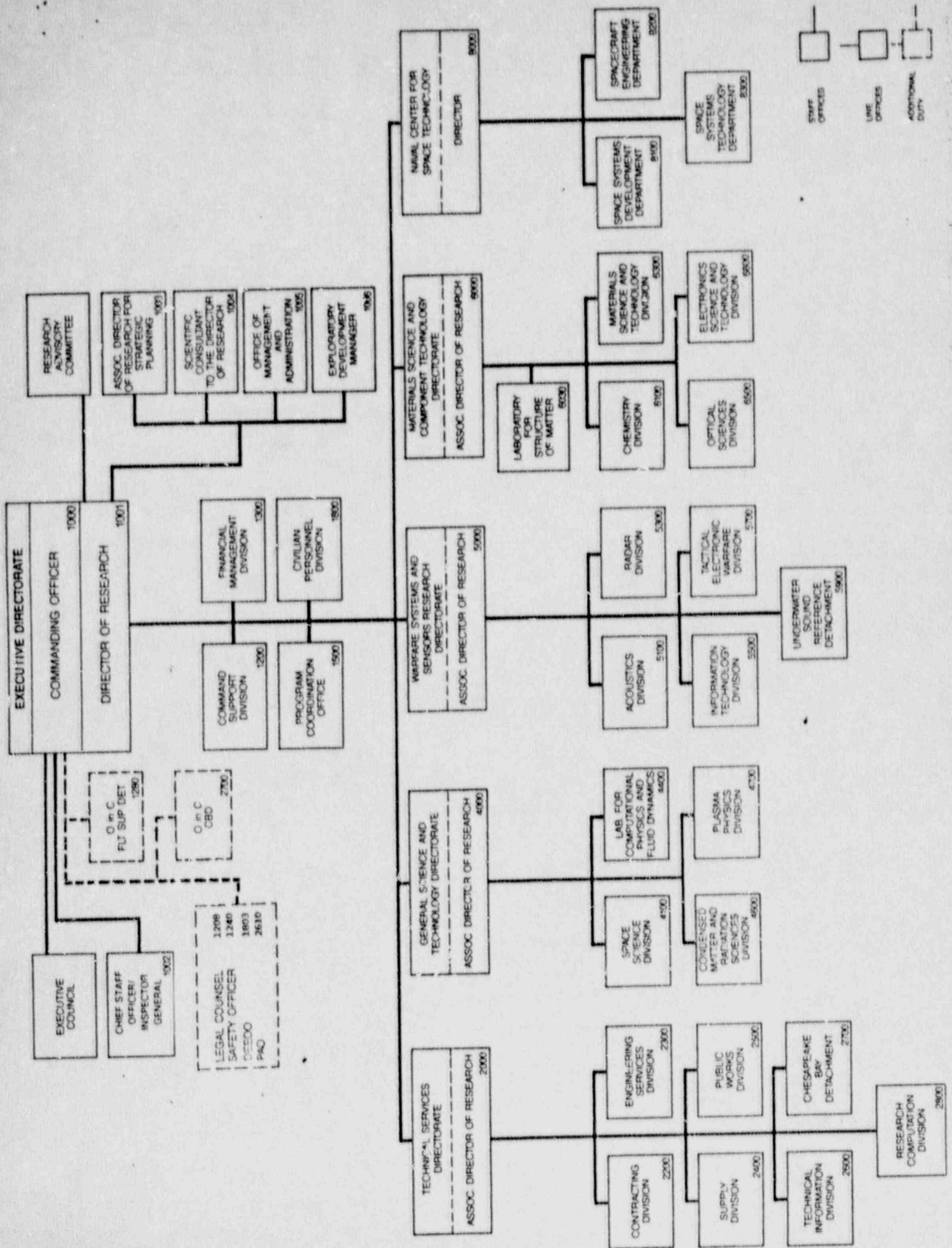
f. evidence as to the acceptability of the results.

Design related records shall be maintained for the life of the shipping container while all other records shall be maintained for at least two years.

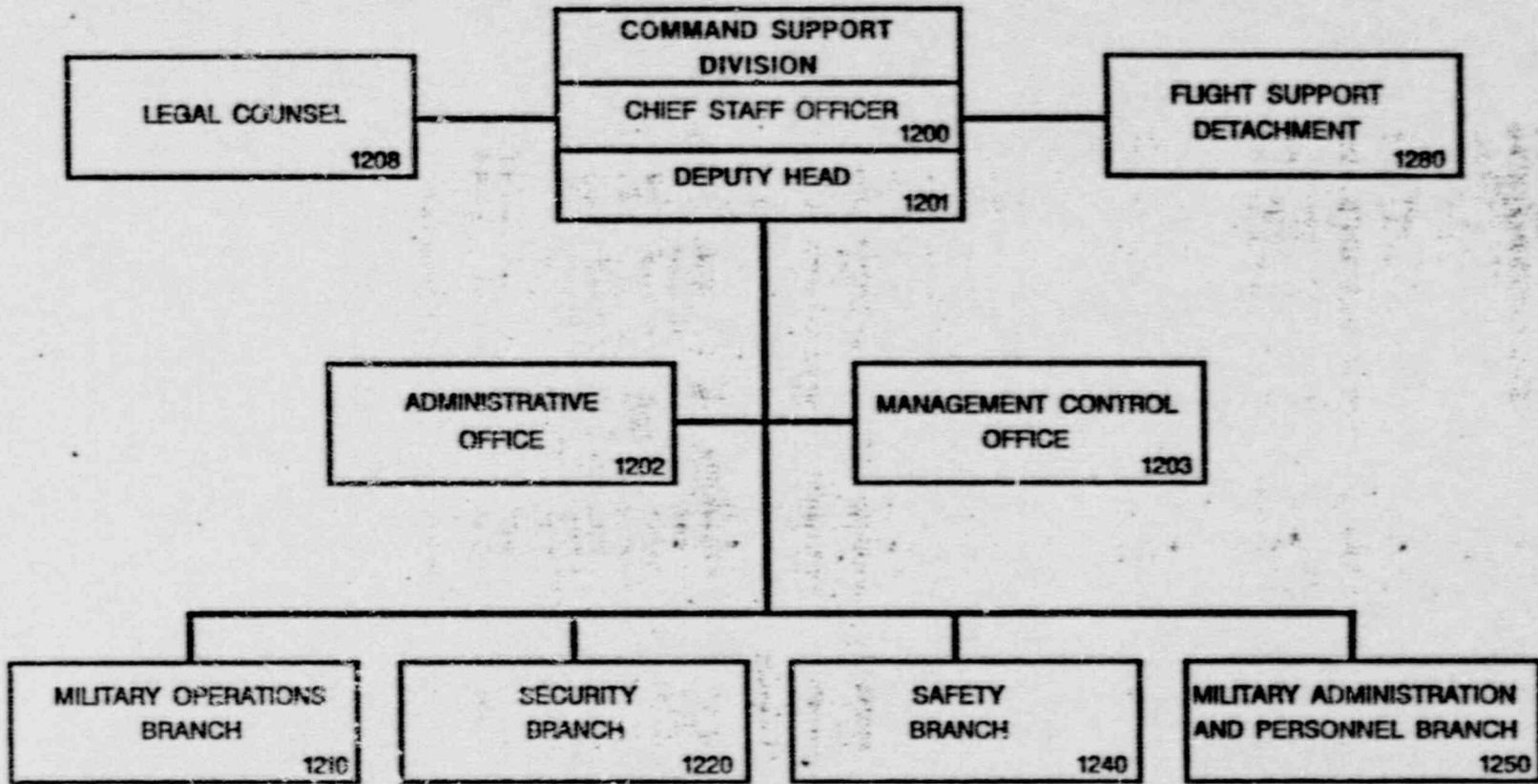
## **15. AUDITS**

Each activity covered by this Program shall be audited at least once per year by personnel having no direct responsibility in the areas being audited. Audits are performed in accordance with pre-established, written procedures and the results are documented and reviewed with management responsible for the area audited. Responsible management shall take such actions as are necessary to correct reported deficiencies and a timely reaudit shall verify implementation of corrective actions to minimize recurrence of the deficiencies.





ATTACHMENT 1 (a)



DATE: 1 FEBRUARY 1939	APPROVED: <i>[Signature]</i> COMMANDING OFFICER	NAVAL RESEARCH LABORATORY	COMMAND SUPPORT DIVISION	CHART NO: 1B
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Attachment 1 (b)

NRNOTE 5400  
30 January 1989



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

AUG 09 1989

RECEIVED  
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SAFETY DIVISION  
46  
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SGTB:GMB  
71-0225

Department of the Navy  
ATTN: Commanding Officer  
Naval Research Lab  
Washington, DC 20375

Gentlemen:

Your Quality Assurance Program Approval for Radioactive Material Packages No. 0225 expires on September 30, 1989.

If you are an NRC licensee and conduct activities under the General Licenses of Subpart C of 10 CFR Part 71, or if you are an Agreement State licensee subject to the requirements of 10 CFR Part 71, you are required by 10 CFR Part 150.20 to hold a quality assurance (QA) program approved by the Commission as satisfying the provisions of Subpart H of 10 CFR Part 71. You should request renewal of your quality assurance program at least 30 days prior to the expiration date. This will provide for continuation of your QA program to satisfy part of the provisions of Subpart C of 10 CFR Part 71 until a final determination has been taken on your application.

Unless an exemption is provided by 10 CFR 170.11, an application fee of \$150.00, as required by 10 CFR Part 170.31, should be included with your request for renewal. This notice of expiration should not be construed that such notice will be provided in the future. If you do not desire to renew your QA program, please let me know.

Sincerely,

*Charles E. MacDonald*  
Charles E. MacDonald, Chief  
Transportation Branch  
Division of Safeguards and  
Transportation, NMSS

Encl (1) to NRL  
ltr 1240-1470

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