

APR 19 1994

Dr. Ronald O. Hultgren  
Deputy Assistant Manager  
Energy Research and Development  
DOE Oak Ridge Field Office  
P.O. Box 2001  
Oak Ridge, Tennessee 37831-6269

Dear Dr. Hultgren:

A proposal from DOE's Oak Ridge National Laboratory for performance of the enclosed Statement of Work (SOW) under Job Code J5053 for the Nuclear Regulatory Commission (NRC), Office of Nuclear Material Safety and Safeguards is requested.

The enclosed SOW details the required work and should be used as the basis for preparing a proposal. The proposal must consist of an NRC Form 189 with required supporting supplemental information. As a minimum, the proposal must substantiate the laboratory's understanding of the SOW requirements, identify key personnel who will perform the work, address any potential organizational conflict-of-interest issues, and note any anticipated problem areas or deviations from the SOW. The proposal must be submitted within 30 calendar days from the date of this request.

The proposal should be sent in an original and four copies to:

U. S. Nuclear Regulatory Commission  
Office of Nuclear Material Safety and Safeguards  
ATTN: Director, Program Management, Policy Development  
and Analysis Staff, Mail Stop: 6-E-6  
Washington, DC 20555

Work under this task is anticipated to be unclassified.

If you have any questions, please contact Daniel Huang (301-504-2487). Thank you for your assistance.

Sincerely,  
ORIGINAL SIGNED BY:

John J. Linehan, Director  
Program Management, Policy Development  
and Analysis Staff  
Office of Nuclear Material Safety  
and Safeguards

Enclosures: As stated

cc: R. Barber, DOE, EH-33  
D. Phillips, OR (fax)  
D. O'Connor, ORNL (fax)  
C. Pugh, ORNL (fax)  
P. Y. Lu, ORNL (fax) 615-574-9888

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SLBaggett, SCDB JWLubinski, SCDB GDeegan, IMNS #2

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|------|------------|---|-------------|---|----------|---|-------------|
| OFC  | RMB:PMDA   | E | RMB:PMDA    | E | RMB:PMDA | N | PMDA:NMSS   |
| NAME | DTHuang:cc |   | GGBeveridge |   | KMcDarby |   | JJL Linehan |
| DATE | 04/18/94   |   | 04/19/94    |   | 04/19/94 |   | 04/19/94    |

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UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

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Sincerely,

A handwritten signature in dark ink, appearing to read "John J. Linehan".

John J. Linehan, Director  
Program Management, Policy Development  
and Analysis Staff  
Office of Nuclear Material Safety  
and Safeguards

Enclosures: As stated

cc: R. Barber, DOE, EH-33  
D. Phillips, OR  
D. O'Connor, ORNL  
C. Pugh, ORNL  
P. Y. Lu, ORNL



## STATEMENT OF WORK

PROJECT TITLE: General License Inventory System Management and Analysis  
JOB CODE: J5053  
B&R NO: 45019401100  
ISSUING OFFICE: Office of Nuclear Material Safety and Safeguards (NMSS)  
NRC PROJECT MANAGER: Daniel T. Huang (301-504-2487)  
TECHNICAL MONITOR: John W. Lubinski (301-504-2689)

### 1.0 BACKGROUND

A general license is issued to commercial and industrial firms, research, educational and medical institutions, individuals in the conduct of their business, and Federal, State or local governments to acquire, receive, possess, use or transfer byproduct material in accordance with NRC regulations. In accordance with Section 32.52 of 10 CFR Part 32, all vendors who initially transfer devices to generally licensed users are required to submit a quarterly report of all transfers. This report identifies each general licensee by name and address, a person who serves as a point of contact between the NRC and the general licensee, the type and model of the device, and the quantity and type of byproduct material contained in the device. These reports are submitted to the NRC on a quarterly basis. General licensees are also required to notify the NRC if the devices that are in their possession are transferred back to the manufacturer or an authorized recipient.

Agreement State vendors also submit these quarterly reports. Agreement States are those states that the NRC has authorized to issue licenses and regulate nuclear materials within their state. Except for Federal Agencies, the general licensees who are located within Agreement States are not to be included in this contract. Federal Agencies that are located within Agreement States are within NRC jurisdiction and are included in this project.

Over the years, information from the quarterly reports have been entered into a computerized database called the General License Database (GLDB). The database contains a listing of all of the general licensees along with the number of devices in their possession. The database also keeps track of all transfers of devices from the general licensees to the manufacturer or an authorized recipient. There are approximately 35,000 general licensees located throughout the U.S. in the database.

All of the information in the GLDB and the information submitted by the general licensees is classified as company confidential and therefore will need to be handled in accordance with the NRC Manual Chapter 2301, Appendix II to protect the confidentiality of the reports.

### 2.0 OBJECTIVE

The objective of this project is to (1) provide database and information

management, (2) perform quality assurance and control, and (3) handle company confidential information. The information received from vendors and general licensees via quarterly and transfer reports is to be incorporated into the GLDB. The performing organization must analyze the existing system and information handling procedures and provide recommendations for improving the efficiency and accuracy of the current system and procedures. The performing organization must also provide special reports from the GLDB ad hoc function. Status reports and draft and final technical reports shall be provided.

### 3.0 TECHNICAL AND OTHER SPECIAL QUALIFICATIONS REQUIRED

This project would require technical staff with a sound knowledge of the use and development of computer based inventory and tracking systems and be able to perform works specified in Section 6.0 below. The performing organization will be in constant communication with NRC staff during the course of the project.

### 4.0 LEVEL OF EFFORT

The estimated level of effort for the completion of this project is as follows:

|                | Technical staff year | Non-Technical staff year |
|----------------|----------------------|--------------------------|
| Task I         | 0.70                 | 0.0                      |
| Task II        | 0.60                 | 2.4                      |
| Task III       | <u>0.85</u>          | <u>0.0</u>               |
| Total estimate | 2.15                 | 2.4                      |

### 5.0 PERIOD OF PERFORMANCE

The period of performance for the work specified in this project shall commence on the effective date of this agreement and continue through December 31, 1997.

### 6.0 WORK REQUIRED

The performing organization shall update the GLDB on a Ramis based system with the information received from the quarterly and transfer reports received from vendors and general licensees. The contractor shall also analyze the existing system and provide recommendations for improving its efficiency and accuracy. The contractor shall perform the tasks specified below:

#### 6.1 Task I - Procedure Development

The following procedures shall be developed and submitted to the Office of Nuclear Material Safety and Safeguards Technical Monitor (NMSS TM) for review and approval prior to implementation and



commencement of Task II.

- A. The contractor shall develop procedures for handling quarterly reports received from vendors and transfer reports received from general licensees and for all data input into the GLDB.
- B. The contractor shall develop a quality assurance and control program to cover handling of all incoming information and all data input into the GLDB. These procedures shall cover such areas as, but not limited to, the following:
  - 1. Handling of incoming quarterly reports.
  - 2. Audits of data input.
  - 3. Handling of transfer reports.
  - 4. Handling telephone calls from general licensees or vendors.
  - 5. Maintenance of the vendor information.
  - 6. Verification of appended records.
  - 7. Filing of quarterly and transfer reports.
  - 8. Corrections to the GLDB.
  - 9. Audits of information previously added to the GLDB.
- C. The contractor shall develop and implement security procedures in accordance with the NRC Manual Chapter 2301, Appendix II to protect the confidentiality of the incoming reports.

Task I shall be completed within three months from the effective date of this contract and, after approved by the NMSS TM, be implemented for Task II.

## 6.2 Task II - On-going Data Processing

The contractor shall be required to perform the following on an on-going basis to support the GLDB:

- A. Input information from quarterly and transfer reports from vendors and general licensees under NRC jurisdiction into the appropriate files in the GLDB. NRC will transfer these reports to the contractor.
- B. Verify that the quarterly and transfer reports are complete and accurate. This includes contacting the vendor or general licensee to obtain additional information.
- C. Maintain the Vendor File within the GLDB. The Vendor File includes information on all vendors of generally licensed devices.
- D. Maintain a list of quarterly reports received from vendors and contact vendors who have not submitted reports in

accordance with 10 CFR 32.52, or Agreement State equivalent, to request that they submit the reports.

- E. Maintain the Recipient File within the GLDB. This includes updating information for existing recipients and adding new recipients.
- F. Maintain the Gauge File within the GLDB. The file contains information pertaining to the gauges possessed by each general licensee.
- G. Perform quality assurance audits of the data input.
- H. Perform daily appends and cancels of data sets in accordance with the GLDB User's Manual.
- I. Input corrections to the GLDB as necessary.
- J. File quarterly and transfer reports in alphabetical order and return to NMSS TM via the monthly letter status report.
- K. Report the number of each type of device distributed quarterly and number of new and existing general licensees receiving the devices.
- L. Correct existing information in the GLDB, such as adding zip codes, correcting isotope amounts, model numbers, and device types, and randomly verifying information input from previously received quarterly reports.
- M. Provide special reports from the GLDB ad hoc function.

This task shall begin after NMSS PO has approved Task I and shall continue through September 30, 1997.

### 2.3 Task III - Analyze the Existing System

The contractor shall analyze the existing GLDB and the procedures for handling information concerning general licensees' possession of devices containing radioactive materials and provide recommendations for improving the efficiency of the system and the accuracy of the GLDB. As part of performing the analysis, the contractor shall consider the following:

- A. Whether the 9370 computer system is adequate or if the GLDB should be moved to a PC based system. In determining the adequacy of a PC based GLDB, the contractor shall consider having the other systems frequently used by the Sealed Source Safety Section on the same PC and consider the compatibility of the GLDB with these systems and the existing equipment and software used by the Sealed Source Safety Section. If the contractor suggest moving the GLDB to a PC, the contractor shall provide the specifications of

an adequate PC for all systems frequently used by the Sealed Source Safety Section.

- B. Whether the software should be changed to produce faster processing time, include more user friendly input screens, include more useful printouts, or include more quality control checks.
- C. Whether the system ensures the information in the GLDB is current.
- D. The accessibility of the system to NRC staff, in headquarters and the regions.
- E. The accessibility of the system to Agreement State programs.
- F. The availability of confidential and sensitive data. In doing so, consider if the system should be designed so certain persons may access information that is not confidential or proprietary.
- G. Cost of developing the new system and the on-going cost of operating the system.
- H. Whether the proposed changes would require changing existing NRC regulations.
- I. Implementation of the security plan.
- J. The date the proposed system could be ready for NRC use.

Task III shall begin three months after Task II has commenced and shall be completed within the following six months.

## 7.0 REPORTING REQUIREMENTS

### 7.1 Monthly Letter Status Reports (MLSR)

The performing organization shall submit a Monthly Letter Status Report (MLSR) submitted by the 15th day of each month with distribution as stated in Section 12.0. The recommended format for the MLSR should contain the following sections: a Work Progress Status Section and a Financial Status Section.

#### Section I - Task(s) Work Progress Status Section

For each Task, the performing organization shall provide the following work progress status information:

- a. Descriptive Data



- The Task Number and Title.
- The Principal Investigator (Team Leader) and telephone number.
- The NRC Task Technical Monitor and telephone number.

b. Task Funding Status (for each active Task, as appropriate)

Facility Name/Docket Number:  
 Cost Ceiling:  
 Period Costs:  
 FY-XX Cost to Date:  
 Cumulative Costs to Date:  
 Percent Expended to Date Against Ceiling:  
 Percent Work Completed:

c. Scheduled Milestone Information

For each active task, provide the scheduled milestone information in the following format:

| <u>Task #</u>  | <u>Title</u> | <u>Deliverable Type of Title</u>                                | <u>Planned Completion Date</u>                                                                      | <u>Revised Completion Date</u>                                                                                                   | <u>Task Exp. Date</u>                          | <u>Status</u>                         |
|----------------|--------------|-----------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------|---------------------------------------|
| Number of Task | Task Title   | Provide a brief summary of the work/title; include any reports. | The day, month and year scheduled for completion or time-frame if a date is not known or projected. | The revised day, month and year based on a change. (The reason for the change must be given in the "problem/resolution section.) | The day, month and year that the task expires. | Discussion of the status of the task. |

d. Deliverables Submitted During the Reporting Period

For each task issued the performing organization shall provide the information related to deliverables submitted during the reporting period in the following format:

| <u>Task #</u>  | <u>Title</u> | <u>Deliverables Type/Title</u> | <u>Date</u>                 | <u>Status</u>             |
|----------------|--------------|--------------------------------|-----------------------------|---------------------------|
| Number of task | Task title   | Brief summary of work/title    | Date deliverables completed | Current status of project |

e. Work Performed During the Reporting Period



This section should contain a clear, succinct discussion of the work performed on the task order during the period. As a minimum the discussion should support the costs for the reporting period. Verbiage such as "worked on all tasks", or "Mr. XXXXX worked on Task 2" are not particularly useful and reduce the effectiveness of the MLSR as a management tool and for historical documentation.

Any travel taken during the reporting period should also be summarized in this section of the report. Each travel summary should identify the person(s) traveled, the duration of the travel, the purpose of the travel, and a summary of the work accomplished.

f. Problems/Resolution

All problems encountered during the period shall be clearly and succinctly identified and stated. Then, the resolution or the proposed resolution should be briefly described. It should be clearly evident from a reading of the description who has the action to solve the problem, should it still exist at the time the report is written.

All problems, regardless of status, should be recorded in the "Problem/Resolution" section of the MLSR for documentation and historical reference purposes. If the problem still exists in a subsequent month, in whole or in part, it should be described as it currently exists; otherwise, it should be deleted from the report.

Problems or circumstances that require a change in the level of effort or costs, scope or travel requirements are to be described in the MLSR for documentation purposes but are to be dealt with separately in a letter addressed and sent to the NMSS PM with a copy to the NMSS TM.

g. Plans for the Next Period

Provide a brief description of the work to be performed or accomplished during the next reporting period. If a milestone is expected to be completed during the next reporting period, so state.

Section II - Contract Financial Status Section

Provide the total direct staff effort used, the amount of funds expended (costed) during the period, the total amount of funds costed during the current fiscal year to date, and the cumulative amount of funds costed (all fiscal years) to date. The costs should be reported as whole numbers rounded to the nearest dollar. The financial status shall be reported for each task order and a total contract summary in the format depicted in NRC Manual

Chapter 1102, Part IV, Figures 1 and 2 (Note: the format may vary from contractor to contractor depending on the accounting categories used).

## 7.2 Technical Information To Be Attached To MLSR

Each month, the performing organization shall attach a list of the general licensees who have indicated a lost or damaged device or illegal transfer of a device to the MLSR. Any discrepancies in the existing GLDB procedures shall be discussed. Quarterly, that is enclosed with every third MLSR, processed quarterly and transfer reports shall be submitted and a list, by device type, of the number of gauges distributed in the quarter and the number of existing and new general licensees receiving the gauges.

## 7.3 Technical Reports

The performing organization shall prepare draft and final formal technical reports for each task. The draft technical report shall be submitted to the NRC within one month of the completion date of each task. Within 30 calendar days following submission of the draft report, the NMSS TM will provide written comments, if any, to the contractor. The final report shall be submitted within 30 calendar days after receipt of the NRC's comments. Final technical reports shall be submitted in the NUREG format, and a camera-ready copy provided. All reports shall be prepared in accordance with NRC Manual Chapter 1102, Part IV, Paragraph 18. Upon report completion, the performing organization shall provide appropriate copies as shown in Section 12.0.

## 8.0 MEETINGS AND TRAVEL

The NMSS TM may meet with the contractor, at their facility, up to four times per year. These meetings, one to two days duration each, shall be held to discuss submitted data and to provide direction to the contractor.

The contractor will be required to spend up to five days per year at the NRC Headquarters in Rockville, Maryland, to analyze existing Sealed Source Safety Section equipment and information systems.

The NMSS TM may request the contractor to meet with the NMSS TM at the conclusion of a task to discuss the results of the work. These meetings will be one day in duration and held at the NRC Headquarters in Rockville, Maryland, or as requested in writing by the NMSS TM. All other domestic travel requires the prior approval of the NMSS TM.

No foreign travel is required or approved.

## 9.0 NRC FURNISHED MATERIAL

The NMSS TM shall furnish access to as much information as contained in the General License Database of general licensees. The NRC shall



provide access codes to the system and a copy of the security plan. A user's manual, developed for the GLDB on the 9370, will be provided. A listing of the Agreement States will be provided such that those general licensees not under NRC jurisdiction may be excluded from this project. All of the above material will be furnished at the time the contract is awarded.

#### 10.0 ACQUIRED MATERIAL

The performing organization must notify NMSS (Attn: Director, PMDA) and the NMSS TM prior to acquisition of any capital, automated data processing or word processing equipment. Prior to purchase of property with NRC funds, the performing organization shall conduct utilization reviews of the performing organization and other appropriate sources of unrequired, excess and surplus property. Property identified during these reviews that meet NRC project needs shall be transferred to the project in lieu of purchase. The performing organization shall monitor MOU Property assigned to the project on a regular basis to identify unrequired MOU Property. Unrequired MOU Property shall be reported to NRC for utilization screening using the procedures followed for MOU Property disposal at project close-out.

#### 11.0 SCHEDULE OF DELIVERABLES

The performing organization will provide draft and final formal technical reports for each task as described in Section 7.3 above. They will be submitted on the following schedule:

| <u>TASK NO.</u> | <u>DELIVERABLE</u> | <u>COMPLETION DATE</u>                |
|-----------------|--------------------|---------------------------------------|
| 1               | draft report       | 4 months after project initiation     |
|                 | final report       | 1 month after receipt of NRC comments |
| 2               | draft report       | 10/30/97                              |
|                 | final report       | 1 month after receipt of NRC comments |
| 3               | draft report       | 7 months after initiation of Task II  |
|                 | final report       | 1 month after receipt of NRC comments |

The performing organization will also provide quarterly and transfer reports, and special reports from the GLDB ad hoc function as described in Task II and Section 7.2 above.

#### 12.0 DISTRIBUTION

The following is a summary of the required reporting distribution under this project:

| <u>DISTRIBUTION</u> | <u>MONTHLY<br/>LETTER<br/>STATUS<br/>REPORTS</u> | <u>MEETING,<br/>WORKSHOP,<br/>AND TRIP<br/>REPORTS</u> | <u>DRAFT<br/>FORMAL<br/>TECH.<br/>REPORTS</u> | <u>FINAL<br/>FORMAL<br/>TECH.<br/>REPORTS</u> |
|---------------------|--------------------------------------------------|--------------------------------------------------------|-----------------------------------------------|-----------------------------------------------|
| NMSS PM             | 1                                                | 1                                                      | 1                                             | 1                                             |

|                                       |   |   |   |     |
|---------------------------------------|---|---|---|-----|
| NMSS TM                               | 1 | 1 | 5 | 1*  |
| NMSS/PMDA Director                    | 1 | 1 | 0 | 0   |
| NRC Document Control                  | 1 | 1 | 0 | 1   |
| Freedom of Info.<br>and Pub. Services | 0 | 0 | 0 | 1** |

- \* Camera-ready and electronic media  
 \*\* Camera-ready (NUREGs only)

#### NOTES:

1. The P.O. will clearly identify, by FIN, all documents transmitted to NRC.
2. A diskette containing the database developed under this project will be provided to the NMSS PM with the final technical report.
3. Proprietary information will be properly identified by the P.O. in accordance with 10 CFR § 2.790, "Availability of Official Records," and will not be submitted to the NRC Public Document Room.

### 13.0 DISPOSAL OF PROPERTY

Prior to closeout of this project, a reconciled report shall be developed by the performing organization to record available equipment and material purchased with NRC funds. The report should contain the Memorandum of Understanding (MOU) Property description or nomenclature, manufacturer, model number, serial number, quantity, acquisition cost, receipt date, condition code, and performing organization's property identification number. The report shall also identify any ongoing or contemplated NRC projects on which the MOU Property could be used. If no MOU Property is assigned to the project, the performing organization shall provide a negative report. Any other reasons shall be noted a part of the report. This report should be submitted as soon as possible after a project completion or termination decision has been made, but not later than 60 days after the termination date. The report should be submitted to the Office of NMSS, Attn: Director, PMDA.

### 14.0 TECHNICAL DIRECTION

Project Manager - Daniel T. Huang (301-504-2487)  
 Technical Monitor - John W. Lubinski (301/504-2689)

The NMSS PM is the focal point for all contract-related activities. All work assignments and program funding actions are initiated by the NMSS PM. All proposed work scope or schedule changes must be processed through the NMSS PM.

The NMSS TM is responsible for providing technical guidance to the performing organization regarding staff interpretations of the technical aspects of regulatory requirements along with copies of relevant documents (e.g., Regulatory Guides) when requested by the performing organization. All work products must be reviewed and approved by the NMSS TM before they are submitted as final documents. All technical



directions given to the performing organization must be consistent with the work scope and schedule. The NMSS TM is not authorized to unilaterally make changes to the approved work scope or schedule, or give the performing organization any direction that would increase costs over approved levels.

Directions for changes in cost or period of performance will be provided by the performing organization; or for Department of Energy (DOE), by the DOE Operations Office after receipt of an appropriate Standard Order for DOE Work (SOEW) (NRC Form 173) from NMSS.

If the performing organization is a DOE laboratory and receives guidance which is believed to be invalid under the criteria cited above, the performing organization shall immediately notify the NMSS PM. If the NMSS PM and the performing organization are not able to resolve the question within five days, the performing organization shall notify the DOE Operations Office.

#### 15.0 QUALITY ASSURANCE

The NMSS PM has the option of auditing all documentation including project correspondence, drafts, calculations, and unrefined data.

All reports, including those which do not contain numerical analyses must be reviewed by the performing organization's management and approved with two signatures, one of which is for the performing organization's management at a level above the TM.

When revisions for the reports are issued, a section must be included in the revised report to document dates of, reasons for, and scope of all changes made since the issuance of the first performing organization's approved report.

NRC has the option of appointing a Peer Group to review the draft report and make changes to the final report. The performing organization may recommend candidates for the Peer Group for approval by the NMSS TM. In the occasion of dissent in the content of the final report, the dissenting party will have the option of stating its viewpoints and findings in a section of the report.

#### 16.0 OFFICE OF MANAGEMENT AND BUDGET

The Office of Management and Budget has approved this information collection under control number 3150-0001.