

1. PROJECT FILE NO. **NRC-04-82-021** 2. EFFECTIVE DATE _____ 3. REQUISITION NO. _____ PROJECT NO. _____ 4. CERTIFIED FOR NATIONAL DEFENSE UNDER DMS REG. 2 AND/OR DMS REG. 1 RATING _____

5. ISSUED BY **U. S. Nuclear Regulatory Commission
Division of Contracts
Washington, DC 20555** CODE _____ 6. ADMINISTERED BY (If other than block 5) _____ CODE _____ 7. DELIVERY FOR DESTINATION NATION OTHER (See below)

8. CONTRACTOR NAME AND ADDRESS CODE _____ FACILITY CODE _____ 9. DISCOUNT FOR PROMPT PAYMENT **NET**

(Street, city, county, State, and ZIP code) **Atom Sciences, Inc.
114 Ridgeway Center
P. O. Box 138
Oak Ridge, TN 37830**

10. SUBMIT INVOICES (4 copies unless otherwise specified) TO ADDRESS SHOWN IN BLOCK **12**

11. SHIP TO/MARK FOR CODE _____ 12. PAYMENT WILL BE MADE BY CODE _____

**U. S. Nuclear Regulatory Commission
Office of Nuclear Regulatory Research
ATTN: Robert B. Neel
Washington, DC 20555** **U. S. Nuclear Regulatory Commission
Office of Resource Management
Division of Accounting and Finance
Washington, DC 20555** **ATTN: GOV/COM
ACCOUNTS**

13. THIS PROCUREMENT WAS ADVERTISED, NEGOTIATED, PURSUANT TO 10 U.S.C. 2304 (a)(1) 41 U.S.C. 252 (c)(1)(D)

14. ACCOUNTING AND APPROPRIATION DATA

B&R No. 60-19-31 FIN No. B8122 Total Amount: \$59,938.04

15. ITEM NO.	16. SUPPLIES SERVICES	17. QUANTITY	18. UNIT	19. UNIT PRICE	20. AMOUNT
	AWARD OF A FIRM FIXED PRICE CONTRACT FOR A FEASIBILITY STUDY ENTITLED, "BIOASSAYS USING RESONANCE IONIZATION SPECTROSCOPY." THE CONTRACT IS IN ACCORDANCE WITH ATOM SCIENCES, INC.'S PROPOSAL DATED OCTOBER 19, 1981 AND REVISED PROPOSAL DATED AUGUST 20, 1982 - BOTH OF WHICH ARE INCORPORATED HEREIN AND MADE A PART HEREOF.				

21. TOTAL AMOUNT OF CONTRACT \$ **59,938.04**

CONTRACTING OFFICER WILL COMPLETE BLOCK 22 OR 26 AS APPLICABLE

22. CONTRACTOR'S NEGOTIATED AGREEMENT (Contractor is required to sign this document and return 4 copies to issuing office.) Contractor agrees to furnish and deliver all items or perform all the services set forth or otherwise identified above and on any continuation sheets for the consideration stated herein. The rights and obligations of the parties to this contract shall be subject to and governed by the following documents: (a) this award/contract, (b) the solicitation, if any, and (c) such provisions, representations, certifications, and specifications, as are attached or incorporated by reference herein. (Attachments are listed herein.)

26. AWARD (Contractor is not required to sign this document.) Your offer on Solicitation Number _____, including the additions or changes made by you which additions or changes are set forth in full above, is hereby accepted as to the items listed above and on any continuation sheets. This award consummates the contract which consists of the following documents: (a) the Government's solicitation and your offer, and (b) this award/contract. No further contractual document is necessary.

23. NAME OF CONTRACTOR BY **Harold W. Schmitt** (Signature of person authorized to sign)

27. UNITED STATES OF AMERICA BY **[Signature]** (Signature of Contracting Officer)

24. NAME AND TITLE OF SIGNER (Type or print) **Harold W. Schmitt, President** 25. DATE SIGNED **9/27/82** 28. NAME OF CONTRACTING OFFICER (Type or print) **Kellogg V. Morton** 29. DATE SIGNED **9/27/82**

ARTICLE I - STATEMENT OF WORK

A. The work to be performed and the objectives to be met in this contract are as follows:

1. A study will be made of the feasibility of using RIS technology in making rapid, cost effective analyses of the elements uranium, thorium, and plutonium in urine.
2. Because of the ultra-sensitivity of RIS, other types of biological materials such as bone, hair, and fingernails might prove suitable for bioassay analysis and dosimetric measurement. The feasibility of these additional kinds of analysis, using Atom Sciences' technology, will be studied.
3. Methods of sample preparation will be evaluated to determine those suited to RIS analysis, which are simple, quick, and inexpensive to perform.
4. The feasibility of manufacturing a low cost analysis system for field use will be studied.
5. Exploration of the general theme that the new capability to count single atoms offers new possibilities and alternatives for bioassays, dosimetry, and other problems in radiation protection will proceed throughout the course of the work outlined in Statements 1, 2, and 3 above.
6. Contact will be made with personnel in the mills and mines, to aid in adapting and using the RIS technology to meet the needs of the nuclear industry.

B. The reporting requirements under this contract shall be as follows:

1. Monthly letter progress reports, in three copies to the project officer and one copy to the Contracting Officer, shall be due by the 30th day of each month beginning October 30, 1982 and ending May 30, 1983.
2. A final report to include the results of the work performed under this contract shall be submitted to the project officer in one (1) camera ready and three (3) copies, at the conclusion of this effort. In addition, one (1) copy of the final report shall be submitted to the Contracting Officer.

ARTICLE II - TIME OF DELIVERY AND PERFORMANCE

The period of performance under this contract commences on September 27, 1982 and shall continue through nine (9) months thereafter, at which time all work shall have been completed and the final report shall have been delivered. The monthly letter progress reports shall be delivered in accordance with ARTICLE I above.

ARTICLE III - PAYMENT

- A. Payment shall be made in the amount of \$6,743.04 to the contractor within thirty (30) days after receipt of each monthly letter progress report as required in ARTICLE I (B)(1). Payment shall not be made prior to receipt of said monthly progress report.
- B. Final payment shall be made in the amount of \$5,993.80 to the contractor within thirty (30) days after receipt of the final report as required in ARTICLE I (B)(2).
- C. All contractor invoices shall identify the contract number and the monthly letter progress report for which payment is claimed.
- D. If this contract provides for a discount, the contract shall indicate the contract's discount terms (Block 16 of Standard Form 33) on the face page of the invoice.

ARTICLE IV - TOTAL AMOUNT OF CONTRACT

The firm fixed price amount of this contract for delivery and acceptance of the services stipulated in ARTICLE I is \$59,938.04.

ARTICLE V - INSPECTION AND REVIEW OF WORK

A. Prior to Delivery

The Nuclear Regulatory Commission reserves the right to make periodic on-site inspections in accordance with the General Provision, entitled "Inspection". It shall be expressly understood that such inspections shall not constitute acceptance by the Government of any part of the work, but shall be for the purpose of providing coordination and technical guidance in interpretation of technical requirements.

B. After Delivery

1. All inspections, acceptance, and rejection decisions shall be made at destination by the Project Officer or his authorized representative.
2. Upon receipt of all deliverable items specified, the Project Officer or his authorized representative shall inspect each item for compliance with the specifications contained herein.
3. Acceptance or rejection of deliverable items shall be made in writing by the Project Officer within 15 calendar days after receipt of said deliverable items from the contractor. In the event of rejection of any portion of the work, completion of corrected items shall be received within 15 calendar days after receipt of notice of rejection. Final acceptance shall be made in writing only after the work has been corrected to the extent that it conforms to the specifications contained herein and has been approved by the Project Officer. The contractor shall be notified of final acceptance within 15 calendar days after receipt of the corrected items.

ARTICLE VI - KEY PERSONNEL

Pursuant to this ARTICLE (Key Personnel), the following individuals are considered to be essential to the successful performance of the work hereunder and shall not be replaced without the prior approval of the Contracting Officer. In such event, the contractor agrees to substitute persons possessing substantially equal abilities and qualifications satisfactory to the Contracting Officer.

Dr. James Parks, Technical Director, Principal Investigator

ARTICLE VII - TRAVEL REIMBURSEMENT

The contractor will be reimbursed for the following reasonable domestic travel costs incurred directly and specifically in the performance of this contract and accepted by the Contracting Officer:

1. Per diem shall be reimbursed at a daily rate not to exceed \$50.00. The per diem amount is comprised of lodging expense plus \$23.00 for meals and miscellaneous expense.
2. When travel is to one of the high-rate geographical areas listed below, actual subsistence costs shall be reimbursed at a daily rate not to exceed the rates indicated:

Washington, DC - \$75.00
Seattle (King County), WA - \$72.00

3. The cost of travel by privately owned automobile shall be reimbursed at the rate of 20¢ per mile.
4. The cost of travel by rented automobile shall be reimbursed on a reasonable actual expense basis.
5. All common carrier travel reimbursable hereunder shall be via economy class rates when available. If not available, reimbursement vouchers will be annotated that economy class accommodations were not available. First-class air travel is not authorized.
6. Receipts are required for common carrier transportation, lodging and miscellaneous items in excess of \$15.00.

ARTICLE VIII- TECHNICAL DIRECTION

- A. Performance of the work under this contract shall be subject to the technical direction of the NRC Project Officer named in ARTICLE VIII of this contract. The term "Technical Direction" is defined to include the following:
 1. Technical direction to the contractor which shifts work emphasis between areas of work or tasks, requires pursuit of certain lines of inquiry, fills in details or otherwise serves to accomplish the contractual scope of work.

2. Providing assistance to the contractor in the preparation of drawings, specifications or technical portions of the work description.
 3. Reviews and where required by the contract, approval of technical reports, drawings, specifications and technical information to be delivered by the contractor to the Government under the contract.
- B. Technical direction must be within the general scope of work stated in the contract. The Project Officer does not have the authority to and may not issue any technical direction which:
1. Constitutes an assignment of additional work outside the general scope of the contract.
 2. Constitutes a change as defined in the clause of the General Provisions, entitled "Changes".
 3. In any way causes an increase or decrease in the total estimated contract cost, the fixed fee, if any, or the time required for contract performance.
 4. Changes any of the expressed terms, conditions or specifications of the contract.
- C. ALL TECHNICAL DIRECTIONS SHALL BE ISSUED IN WRITING BY THE PROJECT OFFICER OR SHALL BE CONFIRMED BY SUCH PERSON IN WRITING WITHIN TEN (10) WORKING DAYS AFTER VERBAL ISSUANCE. A copy of said written direction shall be submitted to the Contracting Officer.

The contractor shall proceed promptly with the performance of technical directions duly issued by the Project Officer in the manner prescribed by this article and within such person's authority under the provisions of this article.

If, in the opinion of the contractor, any instruction or direction issued by the Project Officer is within one of the categories as defined in E(1) through (4) above, the contractor shall not proceed but shall notify the Contracting Officer in writing within five (5) working days after the receipt of any such instruction or direction and shall request the Contracting Officer to modify the contract accordingly. Upon receiving such notification from the contractor, the Contracting Officer shall issue an appropriate contract modification or advise the contractor in writing that, in the Contracting Officer's opinion, the technical direction is within the scope of this article and does not constitute a change under the Changes Clause.

- D. Any unauthorized commitment or direction issued by the Project Officer may result in an unnecessary delay in the contractor's performance, and may even result in the contractor expending funds for unallowable costs under the contract.
- E. A failure of the parties to agree upon the nature of the instruction or direction or upon the contract action to be taken with respect thereto shall be subject to the provisions of the contract clause entitled "Disputes"

ARTICLE IX - PROJECT OFFICER

Robert B. Neel is hereby designated as the Contracting Officer's authorized representative (hereinafter called Project Officer) for technical aspects of this contract. The Project Officer is not authorized to approve or request any action which results in or could result in an increase in contract cost; or terminate, settle any claim or dispute arising under the contract; or issue any unilateral directive whatever.

The Project Officer is responsible for: (1) monitoring the contractor's technical progress, including surveillance and assessment of performance, and recommending to the Contracting Officer changes in requirements; (2) interpreting the scope of work; (3) performing technical evaluation as required; (4) performing technical inspections and acceptances required by this contract; and (5) assisting the contractor in the resolution of technical problems encountered during performance. Within the purview of this authority, the Project Officer is authorized to review all costs requested for reimbursement by contractors and submit recommendations for approval, disapproval, or suspension for supplies, services required under the contract. The Contracting Officer is responsible for directing or negotiating any changes in terms, conditions, or amounts cited in the contract.

For guidance from the Project Officer to the contractor to be valid, it must: (1) be consistent with the description of work set forth in the contract; (2) not constitute new assignment of work or change to the expressed terms, conditions or specifications incorporated into this contract; (3) not constitute a basis for an extension to the period of performance or contract delivery schedule; and, as stated above, (4) not constitute a basis for any increase in the contract cost...

ARTICLE X - CONFLICT OF INTEREST

- A. Purpose. The primary purpose of this article is to aid in ensuring that the contractor:
1. is not placed in a conflicting role because of current or planned interest (financial, contractual, organizational, or otherwise) which relates to the work under this contract, and
 2. does not obtain an unfair competitive advantage over other parties by virtue of its performance of this contract.

- B. Scope. The restrictions described herein shall apply to performance or participation by the contractor as defined in 41 CFR s20-1.5402(f) in the activities covered by this article.
- C. Work for others. Notwithstanding any other provision of this contract, during the term of this contract, the contractor agrees to forego entering into consulting or other contractual arrangements with any firm or organization, the result of which may give rise to a conflict of interest with respect to the work being performed under this contract. The contractor shall ensure that all employees who are employed full time under this contract and employees designated as key personnel, if any, under this contract abide by the provision of this article. If the contractor believes with respect to itself or any such employee that any proposed consultant or other contractual arrangement with any firm or organization may involve a potential conflict of interest, the contractor shall obtain the written approval of the Contracting Officer prior to execution of such contractual arrangement.
- D. Disclosure after award.
1. The contractor warrants that to the best of its knowledge and belief and except as otherwise set forth in this contract, it does not have any organizational conflicts of interest, as defined in 41 CFR s20-1.5402(a).
 2. The contractor agrees that if after award it discovers organizational conflicts of interest with respect to this contract, it shall make an immediate and full disclosure in writing to the Contracting Officer. This statement shall include a description of the action which the contractor has taken or proposes to take to avoid or mitigate such conflicts. The NRC may, however, terminate the contract for convenience if it deems such termination to be in the best interests of the Government.
- E. Access to and use of information.
1. If the contractor in the performance of this contract obtains access to information, such as NRC plans, policies, reports, studies, financial plans, internal data protected by the Privacy Act of 1974 (Pub. L. 93-579), or data which has not been released to the public, the contractor agrees not to: (i) use such information for any private purpose until the information has been released to the public; (ii) compete for work for the Commission based on such information for a period of six (6) months after either the completion of this contract or the release of such information to the public, whichever is first, (iii) submit an unsolicited proposal to the Government based on such information until one year after the release of such information to the public, or (iv) release the information without prior written approval by the Contracting Officer unless such information has previously been released to the public by the NRC.

2. In addition, the contractor agrees that to the extent it receives or is given access to proprietary data, data protected by the Privacy Act of 1974 (Pub. L. 93-579), or other confidential or privileged technical, business, or financial information under this contract, the contractor shall treat such information in accordance with restrictions placed on use of the information.
 3. The contractor shall have, subject to patent and security provisions of this contract, the right to use technical data it produces under this contract for private purposes provided that all requirements of this contract have been met.
- F. Subcontracts. Except as provided in 41 CFR s20-1.5402(h), the contractor shall include this article, including this paragraph, in subcontracts of any tier. The terms "contract," "contractor," and "Contracting Officer," shall be appropriately modified to preserve the Government's rights.
- G. Remedies. For breach of any of the above proscriptions or for intentional nondisclosure or misrepresentation of any relevant interest required to be disclosed concerning this contract or for such erroneous representations as necessarily imply bad faith, the Government may terminate the contract for default, disqualify the contractor from subsequent contractual efforts, and pursue other remedies as may be permitted by law or this contract.
- H. Waiver. A request for waiver under this clause shall be directed in writing through the Contracting Officer to the Executive Director for Operations (EDO) in accordance with the procedures outlined in s20-1.5411.

ARTICLE XI - GENERAL PROVISIONS/ALTERATIONS

- A. This contract is subject to the attached provisions of APPENDIX A, General Provisions, entitled "Fixed Price Research and Development Contracts" revised 4/1/82.
- B. Provisions deleted in their entirety:
1. Payments (1-7.302-2)
 2. 4.1 Patent Rights - Acquisition by the Government.
- C. Provisions added:
1. Patent Rights (Small Business Firms and Nonprofit Organizations (March 1982) as seen below.

PATENT RIGHTS (Small Business Firms and
Nonprofit Organizations (March 1982)

a. Definitions

(1) "Invention" means any invention or discovery which is or may be patentable or otherwise protectable under Title 35 of the United States Code.

(2) "Subject Invention" means any invention of the contractor conceived or first actually reduced to practice in the performance of work under this contract.

(3) "Practical Application" means to manufacture in the case of a composition or product, to practice in the case of a process or method, or to operate in the case of a machine or system; and, in each case, under such conditions as to establish that the invention is being utilized and that its benefits are, to the extent permitted by law or Government regulations, available to the public on reasonable terms.

(4) "Made" when used in relation to any invention means the conception or first actual reduction to practice of such invention.

(5) "Small Business Firm" means a small business concern as defined at Section 2 of Public Law 85-536 (15 U.S.C. §632) and implementing regulations of the Administrator of the Small Business Administration. For the purpose of this clause, the size standards for small business concerns involved in Government procurement and subcontracting at 13 C.F.R. 121.3-8 and 13 C.F.R. 121.3-12, respectively, will be used.

(6) "Nonprofit Organization" means a university or other institution of higher education or an organization of the type described in section 501(c)(3) of the Internal Revenue Code of 1954 (26 USC §501(c)) and exempt from taxation under section 501(a) of the Internal Revenue Code (26 USC §501(a)) or any nonprofit scientific or educational organization qualified under a state nonprofit organization statute.

The contractor may retain the entire right, title, and interest throughout the world to each subject invention subject to the provisions of this clause and 35 U.S.C. 203. With respect to any subject invention in which the contractor retains title, the Federal Government shall have a non-exclusive, non-transferable, irrevocable, paid-up license to practice or have practiced for or on behalf of the United States the subject invention throughout the world.

c. Invention Disclosure, Election of Title and Filing of Patent Applications by Contractor.

(1) The contractor will disclose each subject invention to the * NRC within two months after the inventor discloses it in writing to contractor personnel responsible for patent matters. The disclosure to the NRC shall be in the form of a written report and shall identify the contract under which the invention was made and the inventor(s). It shall be sufficiently complete in technical detail to convey a clear understanding, to the extent known at the time of the disclosure, of the nature, purpose, operation, and the physical, chemical, biological or electrical characteristics of the invention. The disclosure shall also identify any publication, on sale or public use of the invention and whether a manuscript describing the invention has been submitted for publication and, if so, whether it has been accepted for publication at the time of disclosure. In addition, after disclosure to the NRC, the contractor will promptly notify the NRC of the acceptance of any manuscript describing the invention for publication or of any on sale or public use planned by the contractor.

(2) The contractor will elect in writing whether or not to retain title to any such invention by notifying the NRC within twelve months of disclosure to the contractor; provided that in any case where publication, on sale or public use has initiated the one year statutory period wherein valid patent protection can still be obtained in the United States, the period for election of title may be shortened by the NRC to a date that is no more than 60 days prior to the end of the statutory period.

(3) The contractor will file its initial patent application on an elected invention within two years after election or, if earlier, prior to the end of any statutory period wherein valid patent protection can be obtained in the United States after a publication, on sale, or public use. The contractor will file patent applications in additional countries within either ten months of the corresponding initial patent application or six months from the date

* NUCLEAR REGULATORY COMMISSION

Trade-marks to file foreign patent applications where such filing has been prohibited by a Secrecy Order.

(4) Requests for extension of the time for disclosure to the NRC, election, and filing may be granted at the discretion of the NRC.

d. Conditions When the Government May Obtain Title.

(1) The contractor will convey to the NRC upon written request, title to any subject invention:

(i) If the contractor fails to disclose or elect the subject invention within the times specified in c. above, or elects not to retain title.

(ii) In those countries in which the contractor fails to file patent applications within the times specified in c. above; provided, however, that if the contractor has filed a patent application in a country after the times specified in c., above, but prior to its receipt of the written request of the NRC, the contractor shall continue to retain title in that country.

(iii) In any country in which the contractor decides not to continue the prosecution of any application for, to pay the maintenance fees on, or defend in reexamination or opposition proceeding on, a patent on a subject invention.

e. Minimum Rights to Contractor

(1) The contractor will retain a nonexclusive, royalty-free license throughout the world in each subject invention to which the Government obtains title except if the contractor fails to disclose the subject invention within the times specified in c., above. The contractor's license extends to its domestic subsidiaries and affiliates, if any, within the corporate structure of which the contractor is a party and includes the right to grant sublicenses of the same scope to the extent the contractor was legally obligated to do so at the time the contract was awarded. The license is transferable only with the approval of the NRC except when transferred to the successor of that party of the contractor's business to which the invention pertains.

(2) The contractor's domestic license may be revoked or modified by the NRC to the extent necessary to achieve expeditious practical application

of the subject invention pursuant to an application for an exclusive license submitted in accordance with applicable provisions in the Federal Property Management Regulations. This license will not be revoked in that field of use or the geographical areas in which the contractor has achieved practical application and continues to make the benefits of the invention reasonably accessible to the public. The license in any foreign country may be revoked or modified at the discretion of the NRC to the extent the contractor, its licensees, or its domestic subsidiaries or affiliates have failed to achieve practical application in that foreign country.

(3) Before revocation or modification of the license, the NRC will furnish the contractor a written notice of its intention to revoke or modify the license, and the contractor will be allowed thirty days (or such other time as may be authorized by the NRC for good cause shown by the contractor) after the notice to show cause why the license should not be revoked or modified. The contractor has the right to appeal, in accordance with applicable regulations in the Federal Property Management Regulations concerning the licensing of Government-owned inventions, any decision concerning the revocation or modification of its license.

f. Contractor Action to Protect the Governments Interest

(1) The contractor agrees to execute or to have executed and promptly deliver to the NRC all instruments necessary to (i) establish or confirm the rights the Government has throughout the world in those subject inventions to which the contractor elects to retain title, and (ii) convey title to the NRC when requested under paragraph d. above, and to enable the Government to obtain patent protection throughout the world in that subject invention.

(2) The contractor agrees to require, by written agreement, its employees, other than clerical and non-technical employees, to disclose promptly in writing to personnel identified as responsible for the administration of patent matters and in a format suggested by the contractor each subject invention made under contract in order that the contractor can comply with the disclosure provisions of paragraph c. above, and to execute all papers necessary to file patent applications on subject inventions and to establish the Government's rights in the subject inventions. This disclosure format should require, as a minimum, the

information required by c.(1) above. The contractor shall instruct such employees through employee agreements or other suitable educational programs on the importance of reporting inventions in sufficient time to permit the filing of patent applications prior to U.S. or foreign statutory bars.

(3) The contractor will notify the NRC of any decision not to continue the prosecution of a patent application, pay maintenance fees, or defend in a reexamination or opposition proceeding on a patent, in any country, not less than thirty days before the expiration of the response period required by the relevant patent office.

(4) The contractor agrees to include, within the specification of any United States patent application and any patent issuing thereon covering a subject invention, the following statement, "This invention was made with Government support under (identify the contract) awarded by (the NRC). The Government has certain rights in this invention."

g. Subcontracts

(1) The contractor will include this clause, suitably modified to identify the parties, in all subcontracts, regardless of tier, for experimental developmental or research work to be performed by a small business firm or domestic nonprofit organization. The subcontractor will retain all rights provided for the contractor in this clause, and the contractor will not, as part of the consideration for awarding the subcontract, obtain rights in the subcontractor's subject inventions.

(2) The contractor will include in all other subcontracts, regardless of tier, for experimental, developmental or research work the patent rights clause required by Federal Procurement Regulation 1-9.707-5(a).

(3) In the case of subcontracts, at any tier, when the prime award with the Federal agency was a contract (but not a grant or cooperative agreement), the agency, subcontractor, and the contractor agree that the mutual obligations of the parties created by this clause constitute a contract between the subcontractor and the Federal agency with respect to those matters covered by this clause.

h. Reserved

i. Preference for United States Industry

Notwithstanding any other provision of this clause, the contractor agrees that neither it nor any assignee will grant to any person the exclusive right to use or sell any subject invention in the United States unless such person agrees that any products embodying the subject invention or produced through the use of the subject invention will be manufactured substantially in the United States. However, in individual cases, the requirement for such an agreement may be waived by the _____ NRC _____ upon a showing by the contractor or its assignee that reasonable but unsuccessful efforts have been made to grant licenses on similar terms to potential licensees that would be likely to manufacture substantially in the United States or that under the circumstances domestic manufacture is not commercially feasible.

j. March-in Rights

The contractor agrees that with respect to any subject invention in which it has acquired title, the _____ NRC _____ has the right in accordance with the procedures in _____ Office of Management and Budget Circular A-124 _____ to require the contractor, an assignee or exclusive licensee of a subject invention to grant a non-exclusive, partially exclusive, or exclusive license in any field of use to a responsible applicant or applicants, upon terms that are reasonable under the circumstances; and if the contractor assignee, or exclusive licensee refuses such a request, the _____ NRC _____ has the right to grant such a license itself if the _____ NRC _____ determines that:

(1) Such action is necessary because the contractor or assignee has not taken, or is not expected to take within a reasonable time, effective steps to achieve practical application of the subject invention in such field of use.

(2) Such action is necessary to alleviate health or safety needs which are not reasonably satisfied by the contractor, assignee, or their licensees;

(3) Such action is necessary to meet requirements for public use specified by Federal regulations and such requirements are not reasonably satisfied by the contractor, assignee, or licensees; or

(4) Such action is necessary because the agreement required by paragraph i of this clause has not been obtained or waived or because a licensee of the exclusive right to use or sell any subject invention in the United States is in breach of such agreement.

k. Special Provisions for Contracts with Non-profit Organizations

If the contractor is a non-profit organization, it agrees that:

(1) Rights to a subject invention in the United States may not be assigned without the approval of the NRC, except where such assignment is made to an organization which has as one of its primary functions the management of inventions and which is not, itself, engaged in or does not hold a substantial interest in other organizations engaged in the manufacture or sale of products or the use of processes that might utilize the invention or be in competition with embodiments of the invention provided that such assignee will be subject to the same provisions as the contractor);

(2) The contractor may not grant exclusive licenses under United States patents or patent applications in subject inventions to persons other than small business firms for a period in excess of the earlier of:

(i) five years from first commercial sale or use of the invention; or

(ii) eight years from the date of the exclusive license excepting that time before regulatory agencies necessary to obtain premarket clearance, unless on a case-by-case basis, the NRC approves a longer exclusive license. If exclusive field of use licenses are granted, commercial sale or use in one field of use will not be deemed commercial sale or use as to other fields of use, and a first commercial sale or use with respect to a product of the invention will not be deemed to end the exclusive period to different subsequent products covered by the invention.

(3) The contractor will share royalties collected on a subject invention with the inventor; and NRC.

(4) The balance of any royalties or income earned by the contractor with respect to subject inventions, after payment of expenses (including payments to inventors) incidental to the administration of subject inventions, will be utilized for the support of scientific research or education.

1. Communications. All communications regarding this clause should be referred to the NRC Contracting Officer

END OF CLAUSE