

FOIA # 97-0K-059

Contract Between

*The United States of America
and
The Regents of the University of California*

For Management of the
Lawrence Berkeley National Laboratory

Supplemental Agreement to
Contract No. DE-AC03-76SF00098



Effective October 1, 1997

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RECITALS

THIS SUPPLEMENTAL AGREEMENT is effective the first day of October, 1997, by and between the UNITED STATES OF AMERICA (hereinafter referred to as the "Government"), acting through the UNITED STATES DEPARTMENT OF ENERGY (hereinafter referred to as "DOE"), and THE REGENTS OF THE UNIVERSITY OF CALIFORNIA, (hereinafter referred to as, the "Contractor" or the "University"), a corporation established by the Constitution of the State of California.

PREAMBLE

WHEREAS, DOE is an executive agency of the United States that discharges its responsibilities for conducting research and development in a number of scientific and technical areas at highly specialized facilities owned by the United States and managed and operated by contractors. These responsibilities are executed pursuant to, and this contract is authorized by, the Atomic Energy Act of 1954, as amended (42 U.S.C. §§ 2011, *et seq.*), the DOE Organization Act, as amended (42 U.S.C. §§ 7101, *et seq.*), and other applicable laws; and

WHEREAS, the University is now engaged in the operation of the Lawrence Berkeley National Laboratory, which is a highly specialized facility of DOE and a federally funded research and development center sited on University property, and the performance of services related thereto pursuant to Contract W-7405-ENG-48 which was initially executed on behalf of the Government by the War Department on April 20, 1943, modified a number of times and, as modified, transferred to the Atomic Energy Commission on January 1, 1947, by Executive Order No. 9816; modified a number of times and, as modified, transferred to the Energy Research and Development Administration by Public Law 93-438, October 11, 1974; further modified and transferred to the Department of Energy by Public Law 95-91, August 4, 1977; converted to this contract number on February 2, 1982; and thereafter amended by additional modifications; and

WHEREAS, The University, as a non-profit research university of the State of California, manages the Laboratory and performs research and development in support of the national defense, as a public service to the nation, under a cost-reimbursement contract which provides reasonable assurance, pursuant to and subject to the limitations of, its terms, that funds or indemnifications are available to the University to safeguard it against liabilities or losses associated with its role as the Contractor; and

WHEREAS, The University is responsible for performing agreed-upon scientific and technical programs with the highest possible quality; fostering an environment at the Laboratory conducive to scientific inquiry, the pursuit of new knowledge, and the development of creative ideas related to important national interests; and managing the Laboratory in accordance with world-class standards; and

WHEREAS, DOE and the University recognize that in performing the contract there must be an appropriate balance between the conduct of world-class scientific and technical research and the conduct of activities necessary for the prudent operation of the facility, the management of the workforce, and the safe conduct of research; and

WHEREAS, The University has established a Council on National Laboratories advisory to the President of the University on matters related to the operation of the DOE laboratories that it manages; and

WHEREAS, DOE and the University recognize the importance and mutual benefit to be derived from continued complementary and beneficial programs between the University and the Laboratory; and

WHEREAS, DOE and the University recognize that the unique nature of the programs conducted at the Laboratory requires a particularly cooperative and professional relationship to assure that in performing the work of this contract the Parties achieve their common objectives, including their obligations of public accountability; and

WHEREAS, DOE and the University desire that the contract foster performance, in all operations, befitting the world class status of the Laboratory and, moreover, further the objectives of the September 25, 1995 Statement of the President of the United States on the management of national laboratories; and

WHEREAS, DOE and the University believe that contract oversight by both Parties should be conducted in a manner that achieves greater cost efficiency and avoids duplication of effort; and

WHEREAS, the Parties desire to extend the term of this contract, to modify the contract in certain other respects, and to incorporate the entire agreement of the Parties into this Supplemental Agreement;

NOW THEREFORE, the agreement of the Parties under this contract shall be as follows:

1.0 GENERAL

CLAUSE 1.1 - DEAR 952.202-1 DEFINITIONS (OCT 1995) (MODIFIED)

(a) "Commercial component" means any component that is a commercial item.

(b) "Commercial items" means--

(1) Any item, other than real property, that is of a type customarily used for nongovernmental purposes and that--

(i) Has been sold, leased, or licensed to the general public; or

(ii) Has been offered for sale, lease, or license to the general public;

(2) Any items that evolved from an item described in subparagraph (b)(1) above through advances in technology or performance and that is not yet available in the commercial marketplace, but will be available in the commercial marketplace in time to satisfy the delivery requirements under a Government solicitation;

(3) Any items that would satisfy a criterion expressed in subparagraphs (b)(1) or (b)(2) above, but for--

(i) Modifications of a type customarily available in the commercial marketplace; or

(ii) Minor modifications of a type not customarily available in the commercial marketplace made to meet federal Government requirements. "Minor" modifications means modifications that do not significantly alter the nongovernmental function or essential physical characteristics of an item or component, or change the purpose of a process. Factors to be considered in determining whether a modification is minor include the value and size of the modification and the comparative value and size of the final product. Dollar values and percentages may be used as guideposts, but are not conclusive evidence that a modification is minor;

(4) Any combination of items meeting the requirements of subparagraphs (b)(1), (2), (3), or (5) that are of a type customarily combined and sold in combination to the general public;

(5) Installation services, maintenance services, repair services, training services, and other services if such services are procured for support of an item referred to in subparagraphs (b)(1), (2), (3), or (4) above, and if the source of such services--

(i) Offers such services to the general public and the federal Government contemporaneously and under similar terms and conditions; and

(ii) Offers to use the same work force for providing the federal Government with such services as the source uses for providing such services to the general public;

(6) Services of a type offered and sold competitively in substantial quantities in the commercial marketplace based on established catalog or market prices for specific tasks performed under standard commercial terms and conditions. This does not include services that are sold based on hourly rates without an established catalog or market price for a specific service performed;

(7) Any item, combination of items, or service referred to in subparagraphs (b)(1) through (b)(6), notwithstanding the fact that the item, combination of items, or service is transferred between or among separate divisions, subsidiaries, or affiliates of a Contractor; or

(8) A nondevelopmental item, if the procuring agency determines the item was developed exclusively at private expense and sold in substantial quantities, on a competitive basis, to multiple state and local Governments.

(c) "Component" means any item supplied to the federal Government as part of an end item or of another component.

(d) "Contracting Officer" means a person with the authority to enter into, administer, and/or terminate contracts and make related determinations and findings. The term includes certain authorized representatives of the Contracting Officer acting within the limits of their authority as delegated by the Contracting Officer.

(e) "Contractor" or "University" means The Regents of the University of California.

(f) "Contractor's managerial personnel" means any officer or officers of The Regents of the University of California; Laboratory Director; Laboratory Deputy Director(s); Associate Director(s); Laboratory Counsel; Chief Financial Officer; Human Resources Director; and anyone acting in any of the above-named positions.

(g) "DOE" means the Department of Energy.

(h) "DOE Directive" means those DOE Orders, Notices, Manuals, Guides, Standards, and other Contracting Officer directions which are referred to in Appendix G, List of Applicable Directives.

(i) "Head of Agency" means the Secretary, Deputy Secretary or Under Secretary of the United States Department of Energy.

(j) "Head of the Contracting Activity" (HCA) means a DOE Official who has been designated an HCA and delegated authority by the Procurement Executive to award contracts and appoint contracting officers.

(k) "Laboratory" means Lawrence Berkeley National Laboratory (LBNL).

(l) "Laboratory Director" means the Director of the Laboratory, or an Acting Director, or designated representative.

(m) "Nondevelopmental item" means—

(1) Any previously developed item of supply used exclusively for governmental purposes by a federal agency, a state or local government, or a foreign government with which the United States has a mutual defense cooperation agreement;

(2) Any item described in subparagraph (m)(1) above of this definition that requires only minor modification or modifications of a type customarily available in the commercial marketplace in order to meet the requirements of the procuring department of agency; of

(3) Any item of supply being produced that does not meet the requirements of subparagraph (m)(1) or (m)(2) above solely because the item is not yet in use.

(n) "Procurement Executive" means the Director of the DOE Headquarters procurement organization .

(o) "Subcontract" means any agreement (other than one involving an employer-employee relationship) entered into by a federal Government prime contractor or subcontractor calling for supplies or services required for performance of the contract or subcontract.

CLAUSE 1.2 - FAR 52.215-33 ORDER OF PRECEDENCE (JAN 1986) (DEVIATION)

In the event of any inconsistency in this contract, the inconsistency shall be resolved by giving precedence as follows: (a) contract clauses; (b) statement of work (Clause 2.1 and Appendix E); (c) other appendices; and (d) other documents referred to in the contract whether incorporated by reference or otherwise.

CLAUSE 1.3 - FAR 52.252-6 AUTHORIZED DEVIATIONS IN CLAUSES (APR 1984) (MODIFIED)

(a) The use in this solicitation or contract of any Federal Acquisition Regulation (FAR) (48 CFR Chapter 1) clause with an authorized deviation is indicated by the addition of "(DEVIATION)" after the date of the clause.

(b) The use in this solicitation or contract of any Department of Energy Acquisition Regulation (DEAR) (48 CFR Chapter 9) clause with an authorized deviation is indicated by the addition of "(DEVIATION)" after the date of the clause.

(c) Minor changes in wording to any FAR clause or DEAR clause used in this contract is not considered a deviation and will be indicated by the addition of "(MODIFIED)" after the date of the clause. These minor changes do not alter the meaning, intent, or basic principles expressed in these clauses.

CLAUSE 1.4 - APPENDICES (SPECIAL)

The appendices listed in the Table of Contents are attached to the contract and are hereby incorporated into the contract.

CLAUSE 1.5 - THIRD PARTIES (SPECIAL)

Nothing contained in this contract, or its amendments, shall be construed to grant, vest, or create any rights in any person not a Party to this contract. This provision is not intended to limit or impair the rights which any person may have under applicable federal statutes.

CLAUSE 1.6 - FAR 52.203-5 COVENANT AGAINST CONTINGENT FEES (APR 1984)

(a) The Contractor warrants that no person or agency has been employed or retained to solicit or obtain this contract upon an agreement or understanding for a contingent fee, except a bona fide employee or agency. For breach or violation of this warranty, the Government shall have the right to annul this contract without liability or, in its discretion, to deduct from the contract price or consideration, or otherwise recover, the full amount of the contingent fee.

(b) (1) "Bona fide agency," as used in this clause, means an established commercial or selling agency, maintained by a Contractor for the purpose of securing business, that neither exerts nor proposes to exert improper influence to solicit or obtain Government contracts nor holds itself out as being able to obtain any Government contract or contracts through improper influence.

(2) "Bona fide employee," as used in this clause, means a person, employed by a Contractor and subject to the Contractor's supervision and control as to time, place, and manner of performance, who neither exerts nor proposes to exert improper influence to solicit or obtain Government contracts nor holds out as being able to obtain any Government contract or contracts through improper influence.

(3) "Contingent fee," as used in this clause, means any commission, percentage, brokerage, or other fee that is contingent upon the success that a person or concern has in securing a Government contract.

(4) "Improper influence," as used in this clause, means any influence that induces or tends to induce a Government employee or officer to give consideration or to act regarding a Government contract on any basis other than the merits of the matter.

CLAUSE 1.7- UNIVERSITY-DIRECTED RESEARCH AND DEVELOPMENT (SPECIAL)

The Contractor may conduct University-directed research and development at or for the Laboratory using fees paid to the Contractor under this contract. The Parties agree that the source of funding for work described in this clause, shall be limited to the program performance fee paid in accordance with Clause 5.3, Program Performance Fee. Work performed at the Laboratory under this clause shall be performed on a non-interference basis with any DOE directed and funded work of the Laboratory, and shall be within the general scope of work and in accordance with the terms of this contract. The Contractor will provide information to DOE regarding work to be performed under this clause in accordance with procedures developed and agreed to by the Parties. Nothing in this clause otherwise impairs the Parties' rights and obligations under Clause 2.5, Agreements to Perform Work for Non-DOE Activities.

2.0 STATEMENT OF WORK/PERFORMANCE

CLAUSE 2.1 - STATEMENT OF WORK (SPECIAL)

The Contractor shall furnish intellectual leadership and the necessary personnel and management expertise required for the management and operation of the Laboratory in the performance of work under this contract in accordance with its terms and the Statement of Work included as Appendix E to this contract. The scope of work of this contract includes:

- Fundamental and applied research in the energy sciences, including advanced materials research, chemical sciences, earth sciences, fossil, fusion, and nuclear energy research, and conservation and renewable energy research;
- Basic research in the general sciences including nuclear physics, high energy physics, and astrophysics as well as accelerator and advanced detector research and development;
- Life and environmental sciences research in the genetics, structures and function of biological systems, biomedical applications, and the characterization and improvement of the environment;
- The maintenance of a strong, multi-disciplinary, scientific and engineering, computational and information sciences base responsive to scientific issues of national importance;
- Development and operation of unique national experimental facilities for use by qualified investigators;
- The advancement of science, mathematics, and engineering education;
- Performance of technology transfer and work for others including programs designed to enhance national competitiveness in the global economy; and
- Management and operation of the Laboratory facilities and site.

CLAUSE 2.2 - WORK AUTHORIZATION (SPECIAL)

(a) Work programs shall be developed by the Contractor and approved by DOE in accordance with applicable DOE directives, and shall constitute work to be performed under this contract during the pertinent periods involved. Such work programs may include program and project performance objectives and milestones. The Contractor shall consult with DOE, as necessary, during the process of developing work programs. Subject to the other provisions of this contract, changes in the agreed work program, not constituting major changes, may be made by the Contractor when it appears to the Contractor, to be in the best interest of the scientific and technical objectives of the agreed work program to do so. It is understood that the nature of the research and development work under this contract is of a specialized character not readily reducible to production schedules. In view of these circumstances, it is agreed that the research and development work is performed on a best efforts basis.

(b) Due to the critical character of the work from the standpoint of national significance, it is understood by the Parties hereto that very close collaboration will be required between the Contractor and DOE with respect to direction, emphasis, trends and adequacy of the total program.

(c) (1) The annual work program and budget are principal devices used by DOE in program development, integration, execution, and cost estimating. To make the work program and budget

most effective in assuring comprehensive coverage of DOE missions, it is the responsibility of DOE to keep the operators of DOE's laboratories continually advised of DOE's overall program goals, scientific and technological problems, and its current long range objectives. In light of such information, the Contractor will propose possible new objectives and present preliminary work programs in the area of its competence which, from its point of view, will either strengthen the overall DOE program or provide additional support in areas which, in the Contractor's judgment, are being inadequately exploited, or initiate new areas of investigation which appear of potential importance.

(2) It is the responsibility of DOE to formulate overall program budgets, taking into consideration the proposals submitted by the Contractor, consistent with funds appropriated by the Congress and all its other program needs.

(3) The Contractor shall prepare a final work program and budget consistent with DOE's overall program budget. Upon DOE approval, it is the Contractor's responsibility to conduct its work program within limits established by these approvals unless and until they are modified by DOE.

(d) In accordance with the basic considerations stated in paragraph (c) above, the Contractor and DOE will utilize the Program Budget procedures on a Government fiscal year basis for the establishment of the Laboratory Program Budget. Procedures for the presentation of work programs and cost estimates shall be jointly developed. In order to meet the requirements of Government budgetary practice, the Parties agree:

(1) As early as possible in each calendar year, DOE shall supply the Contractor with the dollar amounts for the Laboratory contained in the President's Budget, with Program assumptions and guidance which the Contractor will be expected to consider in the development of its program and budget, and with all changes to existing budget and accounting policies and procedures to be used in the current budget preparation.

(2) Prior to April 1 (or such other date as may be agreed upon) the Contractor shall submit to DOE for approval a comprehensive work program for the next two fiscal years, together with a description of the current work program, and the Contractor shall submit a budget estimate for the next two fiscal years, together with a revised budget estimate for the current fiscal year.

(3) As soon as possible after October 1 of each year, DOE shall issue Work Authorizations and an Approved Funding Program to the Contractor for the current fiscal year.

(e) (1) DOE approved work programs, program performance expectations and milestones as appropriate, and budget estimates shall be reflected in Work Authorizations/ Annual Program Letters/Activity Data Sheets/Program Baseline Summaries and Approved Funding Programs. These documents will be issued to the Contractor as soon as possible after funds become available. If, in preparing Work Authorizations/Annual Program Letters/Activity Data Sheets/Program Baseline Summaries and Approved Funding Programs, it is determined that changes are needed in the work program and budget estimates submitted by the Contractor, DOE and the Contractor shall agree upon the changes in the work before final issuance of these documents.

(2) The Work Authorizations/Annual Program Letters, and with respect to work funded by the office of Environmental Management, Program Baseline Summaries or, and Approved Funding Programs specify the funds available for work under the contract for the fiscal year and, in addition, may establish limitations on costs to be incurred for individual portions of the work. The Contractor shall comply with such limitations and shall promptly notify the Contracting Officer, in writing, whenever it becomes apparent that there is likely to be an overrun with respect

to any specific limitation in the Work Authorization/Annual Program Letters, and with respect to the work funded by the office of Environmental Management, Program Baseline Summaries, and Approved Funding Programs. Funds made available for work under the contract, and set forth in Approved Funding Programs or other funding documents, shall not be reduced except by written agreement of the Parties.

(3) Additional programs and projects to be conducted at the Laboratory within the scope of the contract may be established by agreement between the DOE and the Contractor.

(f) A contract modification shall be issued to the Contractor on or before September 30 of each year (or such other date as may be agreed upon) to provide additional funds, and further contract modifications may be issued or entered into from time to time to provide appropriate modifications in the total amount of funds made available under the contract. DOE agrees to use its best efforts to provide stable funding in support of the contract work and it is DOE's intention that there shall be so provided at all times sufficient funds to support the work program at the level authorized by DOE.

(g) During the course of the work, DOE shall review the work program and its costs based upon information submitted by the Contractor and may, after consultation with the Contractor, revise the Work Authorizations and Approved Funding Programs established by DOE under paragraph (e) above and with the agreement that the Contractor make any necessary revisions to the documents cited in this clause.

(h) It is the intent of the Contractor and DOE to agree from time to time upon long-term work programs covering certain portions of the work to be performed under this contract.

(i) The Contractor shall maintain current cost information adequate to reflect the cost of performing the work under this contract at all times while the work is in progress, and shall prepare and furnish to the Government such written estimates of cost and information in support thereof as the Contracting Officer may request.

CLAUSE 2.3 - INTELLECTUAL AND SCIENTIFIC FREEDOM (SPECIAL)

(a) The Parties recognize the importance of fostering an atmosphere at the Laboratory conducive to scientific inquiry and the development of new knowledge and creative and innovative ideas related to important national interests.

(b) The Parties further recognize that the free exchange of ideas among scientists and engineers at the Laboratory and colleagues at universities, colleges, and other laboratories or scientific facilities is vital to the success of the scientific, engineering, and technical work performed by Laboratory personnel.

(c) In order to further the goals of the Laboratory and the national interest, it is agreed by the Parties that the scientific and engineering personnel at the Laboratory shall be accorded the rights of publication or other dissemination of research, and participation in open debate and in scientific, educational, or professional meetings or conferences, subject to the limitations included in technology transfer agreements and such other limitations as may be required by the terms of this contract.

CLAUSE 2.4 - LONG-RANGE PLANNING, PROGRAM DEVELOPMENT AND
BUDGETARY ADMINISTRATION (SPECIAL)

- (a) Basic considerations. Throughout the process of planning, and budget development and approval, the Parties recognize the desirability for close consultation, for advising each other of plans or developments on which subsequent action will be required, and for attempting to reach mutual understanding in advance of the time that action needs to be taken.
- (b) Institutional planning. It is the intent of the Parties to develop annually an Institutional Plan covering a five-year period. Development of the Institutional Plan is a component of the strategic planning process by which the Parties, through mutual consultation, reach agreement on the general types and levels of activity which will be conducted at the Laboratory for the period covered by the plan. The Institutional Plan approved by DOE provides guidance to the Contractor for long-range planning of Laboratory programs, site and facility development, and for budget preparation. It also serves as a baseline for placement of work at the Laboratory.
- (c) DOE approval. DOE approval of the program proposals and budget estimates will be reflected in work authorizations and financial plans developed and issued to the Contractor.

CLAUSE 2.5 - AGREEMENTS TO PERFORM NON-DOE ACTIVITIES (SPECIAL)

- (a) The Contractor may perform work at the Laboratory for other federal and non-federal entities that is not funded by DOE appropriations, as authorized by the Contracting Officer. The Contractor shall comply with all laws, regulations, and DOE policy in the conduct of such work.
- (b) The Contractor shall maintain and administer an approved system of accounting for and controlling work performed for all work-for-others activities. The Contractor shall comply with the following requirements with regard to the nature of the outside work to be performed, the Laboratory equipment, facilities or personnel required, and the financial and contractual arrangements proposed to pay for the cost of the work:
- (1) The work shall be consistent with or complementary to the missions of the facility to which the work is to be assigned;
 - (2) The work shall not adversely impact execution of assigned DOE programs of the facility;
 - (3) The work shall not place the facility in direct competition with the domestic private sector;
and
 - (4) The work shall not create a detrimental future burden on DOE resources.
- (c) Except as provided in the approved system of accounting for and control of work-for-others activities, all clauses of this contract shall be deemed to be applicable to the performance of such work. This clause shall not be construed as amending or superseding the requirements of Clause 2.1, Statement of Work.
- (d) Any uncollectible receivables resulting from the Contractor utilizing the Contractor's own funding for reimbursable work shall be the responsibility of the Contractor and the Government shall not have any liability to the Contractor therefor. The Contractor is permitted to provide advance payment utilizing the Contractor's own funds for reimbursable work to be performed by

the Contractor at the Laboratory for non-Federal entities in instances where advance payment from that entity is required pursuant to DOE policy and such advance payment cannot be obtained. The Contractor is also permitted to advance continuation funding utilizing the Contractor's own funds for Federal entities when the term or the funds on a Federal interagency agreement have elapsed. The Contractor utilization of the Contractor's own funds does not relieve the Contractor of its responsibility to comply with all other DOE requirements for work-for-others applicable to this contract.

CLAUSE 2.6 – PERFORMANCE-BASED MANAGEMENT (SPECIAL)

(a) Performance-based management system. This contract is a management and operating contract arrangement that is performance-based. This performance-based management contract uses clearly defined performance objectives, criteria, and measures agreed to in advance on a fiscal year basis. These standards are used for the appraisal and evaluation of work under this contract for operations and administrative areas. This performance-based management contract is supported by a system that includes: (1) the utilization of self-assessment and integrated oversight methodologies, systems, and processes to enhance operational efficiency and performance effectiveness; (2) the use of peer review and self-assessment in the appraisal and evaluation of science and technology/programmatic performance performed under this contract; and, (3) such other administrative processes and procedures as the Parties may mutually agree to, from time to time, as they deem necessary to effect the intent of this clause and Appendix F to this contract.

(b) Appendix F. Laboratory appraisal and evaluation. Appendix F to this contract describes the various components of the Laboratory appraisal and evaluation process, including the criteria for the conduct of peer review of science and technology, the current performance objectives, criteria, and measures for operations and administration, and the relative weights and scoring scheme for overall evaluation and appraisal of Contractor performance.

(c) Evaluation of science and technology.

(1) A major element of the evaluation and appraisal of the Contractor's performance of science and technology shall be the comprehensive and balanced peer review process conducted by the Contractor for the Laboratory through the University President's Council on the National Laboratories (the President's Council). The criteria for the peer review of science and technology performance at the Laboratory are described in Appendix F to this contract.

(2) The President's Council, on an ongoing basis, reviews the strategic planning and overall quality of science at the Laboratory, specifically monitoring the effectiveness of the Laboratory management efforts in fostering an atmosphere conducive to scientific inquiry and intellectual freedom. The President's Council periodically reviews selected crosscutting programmatic topics of importance to the Laboratory and DOE; topics for review will be suggested by Laboratory staff, DOE, and the President's Council.

(3) The results of the President's Council peer review process will provide the basis for the Contractor's self-assessment of the Contractor's performance of science and technology which will be provided to DOE consistent with the provisions of Appendix F.

(4) DOE will validate the Contractor's self-assessment for integrity of the process and will utilize the self-assessment and other pertinent information in formulating DOE's appraisal and evaluation of Contractor performance in science and technology.

(d) Evaluation of operations and administrative performance.

(1) With respect to the Contractor's performance in operations and administration, the Contractor shall, on an annual basis, provide to DOE, consistent with the provisions of Appendix F, a self-assessment of its performance against the performance objectives, criteria, and measures set forth in Appendix F (Appendix F POCMs).

(2) (i) The Parties will annually review the Appendix F POCMs and modify them upon agreement of the Parties. It is expected that the performance measures will be modified by the Contractor and DOE to respond to DOE initiatives, to drive improvement, and to reflect lessons learned. The Parties will use functional area specific teams with representatives from the Albuquerque and Oakland Operations Offices, the three University-operated DOE laboratories, and the University President's Office to develop any desired revisions to the POCMs applicable to all three laboratories. A steering committee with senior management from DOE and the University will be used to review and approve revisions to Appendix F and to resolve any team issues.

(ii) To the extent agreement cannot be reached as to the appropriate performance objectives for a given fiscal year, the issue will be resolved within 90 days in the following sequence: first, consideration by UC/DOE Leadership Group and then, should there be no agreement, a review and final determination by the cognizant DOE Program Secretarial Officer (PSO).

(3) DOE, in formulating its appraisal and evaluation of Contractor performance of work covered under this subparagraph, will give primary emphasis and consideration to the Contractor's self-assessment against Appendix F POCMs, recognizing that the Contracting Officer may take into account other pertinent information derived from the DOE appraisal program as provided in subparagraph (e) below. With respect to the evaluation and appraisal of performance in functional areas included in the DOE's Business Management Integrated Oversight program, the DOE's validation of the Contractor self-assessment and its appraisal and evaluation of Contractor performance in those areas shall be conducted in a manner consistent with the applicable Contracting Officer directive.

(e) Laboratory appraisal. Annually, the Contracting Officer shall provide a written assessment of the Contractor's performance at the Laboratory, which shall be based upon the DOE appraisal program and the Contracting Officer's evaluation of the Contractor's self-assessment.

(f) Partnership for performance. The Parties agree to continue their informal "Partnership for Performance" program to drive performance improvement, reduce cost of operations, streamline oversight practices, achieve the adaptation of best business practices to the extent practicable, and to provide best-value support of scientific and technical excellence to ensure the continued relevance of the Laboratory and maximum contribution to national interests.

CLAUSE 2.7 - DEAR 970.5204-20 MANAGEMENT CONTROLS (AUG 1993) (MODIFIED)

(a) The Contractor shall be responsible for maintaining, as an integral part of its organization, effective systems of management controls for both administrative and programmatic functions. Management controls comprise the plan of organization, methods, and procedures adopted by management to reasonably ensure that the mission and functions assigned to the Contractor are properly executed; efficient and effective operations are promoted; resources are safeguarded against waste, loss, mismanagement, and unauthorized use or misappropriation; all encumbrances and costs that are incurred under the contract are in compliance with the terms and conditions of

this contract; all collections accruing to the Contractor in connection with work under this contract, expenditures, and all other transactions and assets are properly recorded, managed, and reported; and financial, statistical, and other reports necessary to maintain accountability and managerial control are accurate, reliable, and timely. The systems of controls employed by the Contractor shall be documented and satisfactory to DOE. Such systems shall be an integral part of the Contractor's management functions, including defining specific roles and responsibilities for each level of management, and holding employees accountable for the adequacy of the management systems and controls in their areas of assigned responsibility. The Contractor shall, as part of the performance-based management process required in Clause 2.6, Performance-Based Management, and the internal audit program required elsewhere in this contract, periodically review the management systems and controls employed in programs and administrative areas to ensure that they are adequate to provide reasonable assurance that the objectives of the systems are being accomplished and that these systems and controls are working effectively.

(b) The Contractor shall be responsible for maintaining, as a part of its operational responsibilities, a baseline quality assurance program that implements documented performance and quality standards, and control and assessment techniques.

3.0 FINANCIAL MANAGEMENT

CLAUSE 3.1 - DEAR 970.5204-9 ACCOUNTS, RECORDS, AND INSPECTION (JUN 1996) (MODIFIED)

- (a) Accounts. The Contractor shall maintain a separate and distinct set of accounts, records, documents, and other evidence showing and supporting (1) all allowable costs incurred, (2) collections accruing to the Contractor in connection with the work under this contract, other applicable credits, Contractor's indirect costs and program performance fee under this contract, and (3) the receipt, use, and disposition of all Government property coming into the possession of the Contractor under this contract. The system of accounts employed by the Contractor shall be satisfactory to DOE and in accordance with generally accepted accounting principles consistently applied.
- (b) Inspection and audit of accounts and records. All books of account and records relating to this contract shall be subject to inspection and audit by DOE or its authorized representative in accordance with the provisions of Clause 11.1, Access to and Ownership of Records, at all reasonable times, before and during the period of retention provided for in paragraph (d) below, and the Contractor shall afford DOE proper facilities for such inspection and audit.
- (c) Audit of subcontractors' records. The Contractor also agrees, with respect to any subcontracts, (including fixed-price or unit-price subcontracts or purchase orders) where, under the terms of the subcontract, costs incurred are a factor in determining the amount payable to the subcontractor of any tier, to either conduct an audit of the subcontractor's costs or arrange for such an audit to be performed by the cognizant government audit agency through the Contracting Officer.
- (d) Disposition of records. Except as agreed upon by the Government and the Contractor, all financial and cost reports, books of account and supporting documents, system files, data bases, and other data evidencing costs allowable, collections accruing to the Contractor in connection with the work under this contract, other applicable credits, and fee accruals under this contract, shall be the property of the Government, and shall be delivered to the Government or otherwise disposed of by the Contractor either as the Contracting Officer may from time to time direct during the progress of the work or, in any event, as the Contracting Officer shall direct upon completion or termination of this contract and final audit of accounts hereunder. Except as otherwise provided in this contract, including Clause 11.1, Access to and Ownership of Records, all other records in the possession of the Contractor relating to this contract shall be preserved by the Contractor for a period of three years after final payment under this contract or otherwise disposed of in such manner as may be agreed upon by the Government and the Contractor.
- (e) Reports. The Contractor shall furnish progress reports and schedules, financial and cost reports, and other reports concerning the work under this contract as the Contracting Officer may from time to time require.
- (f) Inspections. The DOE shall have the right to inspect the work and activities of the Contractor under this contract at such time and in such manner as it shall deem appropriate.
- (g) Subcontracts. The Contractor further agrees to require the inclusion of provisions similar to those in paragraphs (a) through (g) and paragraph (i) in all subcontracts (including fixed-price or unit-price subcontracts or purchase orders) of any tier entered into hereunder where, under the

terms of the subcontract, costs incurred are a factor in determining the amount payable to the subcontractor.

(h) Internal audit. The Contractor agrees to conduct an internal audit and examination, satisfactory to DOE, of the records, operations, expenses, and the transactions with respect to costs claimed to be allowable under this contract annually and at such other times as may be mutually agreed upon. The results of such audit, including the working papers, shall be submitted or made available to the Contracting Officer.

(i) Comptroller General.

(1) The Comptroller General of the United States, or an authorized representative, shall have access to and the right to examine any of the Contractor's directly pertinent records involving transactions related to this contract or a subcontract hereunder.

(2) This paragraph may not be construed to require the Contractor or subcontractor to create or maintain any record that the Contractor or subcontractor does not maintain in the ordinary course of business or pursuant to a provision of law.

(3) Nothing in this contract shall be deemed to preclude an audit by the General Accounting Office of any transaction under this contract.

CLAUSE 3.2 - DEAR 970.5204-13 ALLOWABLE COSTS (MANAGEMENT AND OPERATING) (JUN 1997) (DEVIATION)

(a) Compensation for Contractor's Services. Payment for the allowable costs and the Contractor's indirect costs as hereinafter defined, and of the fees as described in Clause 5.3, Program Performance Fee, shall constitute full and complete compensation for the performance of the work under this contract.

(b) Allowable costs. The allowable cost of performing the work under this contract shall be the costs and expenses that are actually incurred by the Contractor in the performance of the contract work in accordance with its terms, that are necessary or incident thereto, and that are determined to be allowable as set forth in paragraph (c).

(c) Determination of allowability. The determination of the allowability of cost shall be based on:

(1) Allowability and reasonableness in accordance with FAR 31.201-2(d) and 31.201-3, provided, however, that the following standard shall be substituted for the first and second sentences of FAR 31.201-3(a): A cost is reasonable if, in its nature and amount, it reflects the action that a prudent person would have taken under the circumstances prevailing at the time the decision to incur the cost was made;

(2) Standards promulgated by the Cost Accounting Standards Board, if applicable; otherwise, generally accepted accounting principles and practices appropriate to the particular circumstances; and

(3) Recognition of all exclusions and limitations set forth in this clause or elsewhere in this contract as to types or amounts of items of cost. Allowable costs shall not include the cost of any item described as unallowable in paragraph (e) below except as indicated therein. Failure to mention an item of cost specifically in paragraph (d) or paragraph (e) below shall not imply either that it is allowable or that it is unallowable.

(d) Examples of items of allowable cost. Subject to the other provisions of this clause, the following examples of items of cost of work done under this contract shall be allowable to the extent indicated:

(1) Bonds and insurance, including self-insurance, as provided in Clause 4.1, Insurance - Litigation and Claims.

(2) Cafeteria, net cost of operating plant-site cafeteria, dining rooms, and canteens, attributable to the performance of the contract.

(3) Communication costs, including telephone services, local and long-distance calls, telegrams, cablegrams, postage, and similar items.

(4) Consulting services (including legal and accounting), and related expenses, as approved by the Contracting Officer except as made unallowable by subparagraphs (e)(27) and (e)(34).

(5) Costs incurred or expenditures made by the Contractor, as directed, approved or ratified by the Contracting Officer and not unallowable under any other provisions of this contract.

(6) Establishment and maintenance of financial institution accounts in connection with the work hereunder including, but not limited to, service charges, the cost of disbursing cash, necessary guards, cashiers, and paymasters. If payments to employees are made by check, facilities and arrangements for cashing checks may be provided without expense to the employees, subject to the approval of the Contracting Officer.

(7) Indemnification of the Pension Benefit Guaranty Corporation, pursuant to the Employee Retirement Income Security Act of 1974, in accordance with FAR 31.205-6(j)(3)(iv).

(8) Litigation expenses (including reasonable counsel fees and the premium for bail bond) necessary to defend adequately an on-site uniformed guard against whom a civil or criminal action is brought based upon an act or acts of the guard undertaken within the course and scope of employment, subject to the approval or ratification, in writing, of the Contracting Officer.

(9) Indirect costs and other oversight costs only to the extent provided in paragraph (f) below.

(10) Losses and related expenses (including settlements made with the consent of the Contracting Officer) sustained by the Contractor in the performance of this contract and certified, in writing, by the Contracting Officer to be reasonable, except the losses and expenses expressly made unallowable under other provisions of this contract. Such certification will not be unreasonably withheld.

(11) Materials, supplies, and equipment, including freight transportation, material handling, inspection, storage, salvage, and other usual expenses incident to the procurement, use, and disposition thereof, subject to approvals required under other provisions of this contract.

(12) Patents, purchased design, license fees, and royalty payments to the extent expressly provided for under other provisions in this contract or as approved by the Contracting Officer, and preparation of invention disclosures, reports and related documents, and searching the art to the extent necessary to make such invention disclosures in accordance with the cost of DOE funded technology transfer in accordance with paragraph (c), Allowable Cost, of Clause 7.1, Technology

Transfer Mission, and with Clause 7.7, Patent Rights - Nonprofit Management and Operating Contractors.

(13) Payments to educational institutions for tuition and fees or institutional allowances in connection with fellowship or other research, educational, or training programs.

(14) Personnel costs and related expenses incurred in accordance with the Personnel Appendix (Appendix A). Appendix A sets forth in detail personnel costs and related expenses allowable under this contract. The Contractor will advise the Contracting Officer of any proposed change to the Contractor's personnel policies which relate to this item of cost. Examples of personnel costs and related expenses included in Appendix A are as follows:

(i) Employee relations, welfare, morale, etc.; programs including incentive or suggestion awards; employee counseling services, health or first-aid clinics; house or employee publications; and wellness/fitness centers;

(ii) Legally required contributions to old-age and survivor's insurance, unemployment compensation plans, and workers compensation plans, (whether or not covered by insurance); voluntary or agreed-upon plans providing benefits for retirement, separation, life insurance, hospitalization, medical-surgical and unemployment (whether or not such plans are covered by insurance);

(iii) Recruitment of personnel (including help-wanted advertisement), including service of employment agencies at rates not in excess of standard commercial rates, employment office, travel of prospective employees at the request of the Contractor for employment interviews.

(iv) Salaries and wages; bonuses and incentive compensation; overtime, shift differential, holiday, and other premium pay for time worked; nonwork time, including vacations, holidays, sick, funeral, military, jury, witness, and voting leave; salaries and wages to employees in their capacity as union stewards and committeemen for time spent in handling grievances, or serving on labor management (Contractor) committees; provided, however, that the Contracting Officer's approval is required in each instance of total compensation to an individual employee in excess of the annual rate established in Appendix A when it is proposed that a total of 50 percent or more of such compensation be reimbursed under DOE cost-type contracts. Total compensation, as used here, includes only the employee's base salary, bonus, and incentive compensation payments;

(v) Training of personnel (except special education and training courses and research assignments calling for attendance at educational institutions which require specific approval by the Contracting Officer on a case-by-case basis), including apprenticeship training programs designed to improve efficiency and productivity of contract operations, to develop needed skills, and to develop scientific and technical personnel in specialized fields required in the contract work; and

(vi) Travel (except foreign travel, which, unless delegated, requires specific approval by the Contracting Officer on a case-by-case basis); incidental subsistence and other allowances of Contractor employees, in connection with performance of work under this contract (including new employees reporting for work and transfer of employees, the transfer of their household goods and effects, and the travel and subsistence of their dependents);

(15) Reasonable litigation and other legal expenses, including counsel fees, if incurred in accordance with Clause 4.1, Insurance - Litigation and Claims, and the DOE-approved Contractor Litigation Management Procedures (including cost guidelines) as such procedures may be revised from time to time, and if not otherwise made unallowable in this contract.

(16) Rentals and leases of land, buildings, and equipment owned by third parties, allowances in lieu of rental, charges associated therewith, and costs of alteration, remodeling, and restorations, subject to approval by the Contracting Officer except as otherwise provided in this contract.

(17) Repairs, maintenance, inspection, replacement, and disposal of Government-owned property and the restoration or clean-up of site and facilities to the extent approved by the Contracting Officer and allowable under paragraph (g) of Clause 6.12, Property.

(18) Stipends and payments made to reimburse travel or other expenses of faculty members and students who are not employed under this contract but are participating in research, educational or training activities under this contract to the extent such costs are incurred in connection with fellowship or other research, educational, or training programs approved by the Contracting Officer.

(19) Subcontracts and purchase orders, including procurements from Contractor-controlled sources, subject to approvals required by other provisions of this contract.

(20) Subscriptions to trade, business, technical and professional periodicals.

(21) Taxes, fees, and charges levied by public agencies which the Contractor is required by law to pay, except those which are expressly made unallowable under other provisions of this contract.

(22) Technology Transfer costs to the extent provided under paragraph (c) of Clause 7.1, Technology Transfer Mission.

(23) Utility services, including electricity, gas, water and sewage.

(e) Examples of items of unallowable costs. The following examples of items of costs are unallowable under this contract to the extent indicated:

(1) Advertising and public relations costs designed to promote the Contractor or its products, including the costs of promotional items and memorabilia such as models, gifts, and souvenirs, and the cost of memberships in civic and community organizations; except those advertising and public relations costs:

(i) Approved, in advance, by the Contracting Officer as clearly in furtherance of work performed under the contract;

(ii) Specifically required by the contract;

(iii) That arise from requirements of the contract and that are exclusively for recruiting personnel, acquiring scarce items for contract performance, disposing of scrap or surplus materials, the transfer of Federally-owned or originated technology to state and local governments and to the private sector, or acquisition of contract-required supplies and services; or

(iv) Where the primary purpose of the activity is to facilitate contract performance in support of the DOE mission.

(2) Bad debts (including expenses of collection) and provisions for bad debts arising out of other business of the Contractor.

(3) Bidding expenses and cost of proposals except for such expenses and costs which are incurred pursuant to the provisions of the contract, including but not limited to Clause 2.5, Agreements to Perform Non-DOE Activities.

(4) Bonuses and similar compensation under any other name, which:

(i) Are not pursuant to an agreement between the Contractor and employee prior to the rendering of the services or an established plan consistently followed by the contract or,

(ii) Are in excess of those costs which are allowable by the Internal Revenue Code and regulations thereunder, or

(iii) Provide total compensation to an employee in excess of reasonable compensation for the services rendered.

(5) Central and branch office expenses of the Contractor, except as included in the payment in lieu of Contractor's indirect costs set forth in (b) above.

(6) Charges for late premium payment related to employee deferred compensation plan insurance.

(7) Commissions, bonuses, and fees (under whatever name) in connection with obtaining or negotiating for a Government contract or a modification thereto, except when paid to bona fide employees or bona fide established selling organizations maintained by the Contractor for the purpose of obtaining Government business.

(8) Contingency reserves.

(9) Contributions, donations, and gifts, including cash, property, or services, regardless of the recipient, except as otherwise provided in this contract or otherwise approved by the Contracting Officer.

(10) Costs of alcoholic beverages.

(11) Costs of bonds and insurance, notwithstanding any other provision of this contract, are unallowable to the extent they are incurred to protect and indemnify the Contractor and/or subcontractor against otherwise unallowable costs, unless such insurance or bond is required by law, the express terms of this contract, or is authorized, in writing, by the Contracting Officer. The cost of commercial insurance to protect the contractor against the costs of correcting its own defects in material or workmanship is an unallowable cost.

(12) Costs of gifts, except gifts do not include awards for performance or awards made in recognition of employee achievements pursuant to an established Contractor plan or policy.

(13) Costs incurred in connection with any criminal, civil, or administrative proceeding commenced by the federal Government or a state, local or foreign government, as provided in Clause 4.4, Cost Prohibitions Related to Legal and Other Proceedings.

(14) Costs of independent research and development excluding Laboratory Directed Research and Development, unless specifically provided for elsewhere in this contract.

(15) Costs of software maintenance made unallowable under subparagraph (e) (1) (iii) (G) of Clause 7.2, Rights in Data - Technology Transfer Activities.

(16) Costs made unallowable by Clause 11.5, Printing.

(17) Costs made unallowable by Clause 4.5, Costs Associated with Discriminatory Employee Actions.

(18) Costs made unallowable by Clause 3.13, Legislative Lobbying Cost Prohibition.

(19) Depreciation in excess of that calculated by application of methods approved for use by the Internal Revenue Service under the Internal Revenue Code of 1954, as amended, including the straight-line declining balance (using a rate not exceeding twice the rate which would have been used had the depreciation been computed under the straight-line method), or sum-of-the-years digits method, on the basis of expected useful life, to the cost of acquisition of the related fixed assets less estimated salvage or residual value at the end of the expected useful life.

(20) Dividend provisions or payments and, in the case of sole proprietors, and partners, distributions of profit.

(21) Entertainment, including costs of amusement, diversion, social activities, and directly associated costs such as tickets to shows or sports events, meals, lodging, rentals, transportation, and gratuities; costs of membership in any social, dining, or country club, or organization. Costs made specifically unallowable under this cost principle are not allowable under any other cost principle.

(22) Facilities capital cost of money. (CAS 414 and CAS 417).

(23) Fines and penalties, unless, with respect to civil fines and penalties only, the Contractor demonstrates to the Contracting Officer that—

(i) Such a civil fine or penalty was incurred as a result of compliance with specific terms and conditions of the contract or written instructions from the Contracting Officer; or

(ii) Such a civil fine or penalty was imposed without regard to fault and could not have been avoided by the exercise of due care.

(24) Government-furnished property, except to the extent that cash payment therefor is required pursuant to procedures of DOE applicable to transfers of such property to the Contractor from others.

(25) Insurance (including any provisions of a self-insurance reserve) on any person where the Contractor under the insurance policy is the beneficiary, directly or indirectly; insurance against loss of or damage to Government property as defined in Clause 6.12, Property, except as authorized by the Contracting Officer; and insurance covering any cost which is unallowable under any provision of this contract.

(26) Interest, however represented (except (i) Interest incurred in compliance with other contract clauses including Clause 4.6, State and Local Taxes, or (ii) imputed interest costs relating to leases classified and accounted for as capital leases under generally accepted accounting principles (GAAP), provided that the decision to enter into a capital leasing arrangement has been specifically authorized and approved by DOE in accordance with applicable procedures and such interest costs are recorded in an appropriately specified DOE account established for such purpose), bond discounts and expenses, and costs of financing and refinancing operations.

(27) Legal, accounting, and consulting services and related costs incurred in connection with the preparation and issuance of stock rights, organization, or reorganization; prosecution or defense of antitrust suits; prosecution of claims against the United States; contesting actions or proposed actions of the United States; and prosecution or defense of patent infringement litigation (unless initiated at the request of DOE, or except where incurred pursuant to the Contractor's performance of the Government-funded technology transfer mission and in accordance with Clause 4.1, Insurance-Litigation and Claims).

(28) Losses or expenses:

(i) On, or arising from the sale, exchange, or abandonment of capital assets, including investments;

(ii) On other contracts, including the Contractor's contributed portion under cost-sharing contracts;

(iii) In connection with price reductions to and discount purchases by employees and others from any source;

(iv) That are compensated for by insurance or otherwise or which would have been compensated by insurance required by law or by written direction of the Contracting Officer but which the Contractor failed to procure or maintain through its own fault or negligence;

(v) That result directly from willful misconduct or bad faith on the part of any of the Contractor's managerial personnel;

(vi) That represent liabilities to third persons, that are not allowable under Clause 4.1, Insurance-Litigation and Claims; or

(vii) That represent liabilities to third persons for which the Contractor has expressly accepted responsibility under other terms of this contract.

(29) Maintenance, depreciation, and other costs incidental to the Contractor's idle or excess facilities (including machinery and equipment), other than reasonable standby facilities.

(30) Memberships in trade, business, and professional organizations, except as approved by the Contracting Officer.

(31) Premium Pay for wearing radiation-measuring devices for Laboratory and all-tier cost-type subcontract employees.

(32) Recreation costs, except for the costs of employees' participation in Contractor-sponsored sports teams or employee organizations designed to improve Contractor employee loyalty, team work, or physical fitness.

(33) Rental expenses for commercial automobile, unless approved by the Contracting Officer or authorized by Appendix A.

(34) Salary or other compensation (and expenses related thereto) of any individual employed under this contract as a consultant or in another comparable employment capacity who is an employee of another organization and concurrently performing work on a full-time annual basis for that organization under a cost-type contract with DOE, except to the extent that the other contractor is reimbursed for the services of the individual.

(35) Special construction industry "funds" financed by employer contributions for such purposes as methods and materials research, public and industry relations, market development, and disaster relief, except as specifically provided elsewhere in this contract.

(36) Storage of records pertaining to this contract after final payment by the Government to the Contractor under Clause 3.5(f), Payments and Advances, unless storage thereafter is required by the Contracting Officer.

(37) Taxes, fees, and charges in connection with financing, refinancing, or refunding operations, including listing of securities on exchanges, taxes which are paid contrary to Clause 4.6, State and Local Taxes; federal taxes on net income and excess profits; special assessments on land which represent capital improvements; and taxes on accumulated funding deficiencies of, or prohibited transactions involving, employee deferred compensation plans pursuant to Section 4971 or Section 4975 of the Internal Revenue Code of 1954, as amended, respectively.

(38) Travel expenses of the officers, proprietors, executives, administrative heads, and other employees of the Contractor's central office or branch office organizations concerned with the general management, supervision, and conduct of the Contractor's business as a whole, except to the extent that particular travel is in connection with the contract and approved by the Contracting Officer.

(39) Travel costs of Contractor employees incurred for lodging, meals and incidental expenses which are not in accordance with Appendix A.

(f) (1) Indirect costs. DOE will pay the Contractor a fixed amount for indirect costs for each annual period, or portion thereof as set forth below:

<u>During the Period:</u>	<u>The Amount will be:</u>
10/01/97 - 9/30/98	\$1,100,000
10/01/98 - 9/30/99	\$1,100,000
10/01/99 - 9/30/00	\$1,100,000
10/01/00 - 9/30/01	\$1,100,000
10/01/01 - 9/30/02	\$1,100,000

The University utilizes an integrated system of accounts for the collection of all general and administrative costs associated with University government contracts, including this contract, calculated in accordance with OMB Circular A-21. The above amount is an allocation of the costs of such general and administrative attributable to this contract. This sum shall be paid to the Contractor in equal monthly installments and shall not be subject to adjustment except as provided in Clause 13.2, Termination.

(2) Laboratory Administration Office Costs. DOE will pay the Contractor the costs of the Laboratory Administration Office (LAO) within the University's Office of the President in the amounts not to exceed for the period as set forth below:

<u>During the Period:</u>	<u>The Not to Exceed Amount will be:</u>
10/01/97 - 9/30/98	\$450,000
10/01/98 - 9/30/99	\$450,000
10/01/99 - 9/30/00	\$450,000
10/01/00 - 9/30/01	\$450,000
10/01/01 - 9/30/02	\$450,000

These costs shall be a direct charge to Laboratory overhead and shall be paid by the Laboratory to LAO in equal monthly installments of 1/12th the annual amount. All funds not required shall be refunded to the Laboratory and applied to reduce Laboratory overhead. The allowability of costs charged shall be determined in accordance with OMB Circular A-21 and shall be subject to an annual audit of costs.

CLAUSE 3.3 - DEAR 970.5204-75 PRE-EXISTING CONDITIONS ALTERNATE I
(JUN 1997)

(a) Any liability, obligation, loss, damage, claim (including without limitation, a claim involving strict or absolute liability), action, suit, civil fine or penalty, cost, expense or disbursement, which may be incurred or imposed, or asserted by any party, and arising out of any condition, act or failure to act which occurred before the effective date of this Supplemental Agreement, in conjunction with the management and operation of Lawrence Berkeley National Laboratory, shall be deemed incurred under Contract No. DE-AC03-76SF00098, Modification No. M145 dated November 20, 1992.

(b) The obligations of DOE under this provision are subject only to the availability of appropriated funds.

CLAUSE 3.4 - DEAR 970.5204-15 OBLIGATION OF FUNDS (APR 1994) (MODIFIED)

(a) Obligation of funds. The amount presently obligated by the Government with respect to this contract is \$3,427,687,834.70 through modification A252. Such amount may be increased unilaterally by DOE by written notice to the Contractor and may be increased or decreased by written agreement of the Parties (whether or not by formal modification of this contract). Estimated collections from others for work and services to be performed under this contract are not included in the amount presently obligated. Such collections, to the extent actually received by the Contractor, shall be processed and accounted for in accordance with applicable DOE Directives. Nothing in this paragraph (a) is to be construed as authorizing the Contractor to exceed limitations stated in financial plans established by DOE and furnished to the Contractor from time to time under this contract.

(b) Limitation on payment by the Government. Except as otherwise provided in this contract and except for costs which may be incurred by the Contractor pursuant to Clause 13.2, Termination, or costs of claims allowable under the contract occurring after completion or termination and not released by the Contractor at the time of financial settlement of the contract in accordance with Clause 3.5, Payments and Advances, payment by the Government under this contract on account of allowable costs shall not, in the aggregate, exceed the amount obligated with respect to this contract, less the total of the Contractor's program performance fee. Unless expressly negated in this contract, payment on account of those costs excepted in the preceding sentence which are in excess of the amount obligated with respect to this contract shall be subject to the availability of (1)

collections accruing to the Contractor in connection with the work under this contract and processed and accounted for in accordance with applicable DOE Directives, and (2) other funds which DOE may legally use for such purpose, provided DOE will use its best efforts to obtain the appropriation of funds for this purpose if not otherwise available.

(c) Notices—Contractor excused from further performance. The Contractor shall notify DOE, in writing, whenever the unexpended balance of available funds (including collections available under paragraph (a) above), plus the Contractor's best estimate of collections to be received and available during the 45-day period hereinafter specified, is in the Contractor's best judgment sufficient to continue contract operations at the programmed rate for only 45 days and to cover the Contractor's unpaid fees as described in Clause 5.3, Program Performance Fee, and outstanding encumbrances and liabilities on account of costs allowable under the contract at the end of such period. Whenever the unexpended balance of available funds (including collections available under paragraph (a) above), less the amount of the Contractor's program performance fee then earned but not paid, is in the Contractor's best judgment sufficient only to liquidate outstanding encumbrances and liabilities on account of costs allowable under this contract, the Contractor shall immediately notify DOE and shall make no further encumbrances or expenditures (except to liquidate existing encumbrances and liabilities), and, unless the Parties otherwise agree, the Contractor shall be excused from further performance (except such performance as may become necessary in connection with termination by the Government) and the performance of all work hereunder will be deemed to have been terminated for the convenience of the Government in accordance with the provisions of Clause 13.2, Termination.

(d) Financial plans, cost and encumbrance limitations. In addition to the limitations provided for elsewhere in this contract, DOE may, through financial plans, such as Approved Funding Programs, or other directives issued to the Contractor, establish controls on the costs to be incurred and encumbrances to be made in the performance of the contract work. Such plans and directives may be amended or supplemented from time to time by DOE. The Contractor hereby agrees (1) to comply with the specific limitations (ceilings) on costs and encumbrances set forth in such plans and directives, (2) to comply with other requirements of such plans and directives, and (3) to notify DOE promptly, in writing, whenever it has reason to believe that any limitation on costs and encumbrances will be exceeded or substantially underrun. When such costs and commitments exceed or fall below authorized financial levels, the Parties may agree upon appropriate adjustments designed to assume compliance with overall funding limitations.

(e) Government's right to terminate not affected. The giving of any notice under this clause shall not be construed to waive or impair any right of the Government to terminate the contract under the provisions of Clause 13.2, Termination.

CLAUSE 3.5 - DEAR 970.5204-16 PAYMENTS AND ADVANCES (JUN 1997) (MODIFIED)

(a) Fee payments. Program performance fee payments shall be withdrawn against the payments cleared financing arrangement made by direct payment or withdrawn from funds advanced or available under this contract as determined by the Contracting Officer. The Contracting Officer may direct the Contractor to offset against any such fee payment, the amounts owed to the Government by the Contractor, including any amounts owed for disallowed costs under this contract after notice in accordance with Clause 5.11, Notice of Intent to Disallow Costs, and reduction in fee taken under Clause 5.3, Program Performance Fee. No fee payments may be withdrawn against the payments cleared financing arrangement without prior written approval of the Contracting Officer.

(b) Payments on account of allowable costs. The Parties have agreed that payment for allowable costs or payments for other items specifically approved, in writing, by the Contracting Officer shall

be made from advances of Government funds. When pension contributions are paid by the Contractor to the retirement fund less frequently than quarterly, accrued costs therefor shall be excluded from costs for payment purposes until such costs are paid. If pension contributions are paid on a quarterly or more frequent basis, accrual therefor may be included in costs for payment purposes, provided that they are paid to the fund within 30 days after the close of the period covered. If payments are not made to the fund within such 30-day period, pension contribution costs shall be excluded from cost for payment purposes until payment has been made.

(c) Use of Special Financial Institution Account. All advances of Government funds shall be withdrawn pursuant to a payments cleared financing arrangement in favor of the financial institution or, in the option of the Government, shall be made by direct payment or any other payment mechanism to the Contractor, and shall be deposited only in the Special Financial Institution Account referred to in the Special Financial Institution Account Agreement, which is incorporated into this contract as Appendix B. No part of the funds in the Special Financial Institution Account shall be (1) commingled with any funds of the Contractor or (2) used for a purpose other than that of making payments for costs allowable under this contract, payments for program performance fee under this contract, or payments for other items specifically approved, in writing, by the Contracting Officer. If the Contracting Officer determines that the balance of such Special Financial Institution Account exceeds the Contractor's current needs, the Contractor shall promptly make such disposition of the excess as the Contracting Officer may direct.

(d) Title to funds advanced. Title to the unexpended balance of any funds advanced and of any Special Financial Institution Account established pursuant to this clause shall remain in the Government and be superior to any claim or lien of the financial institution of deposit or others. It is understood that an advance to the Contractor hereunder is not a loan to the Contractor, and will not require the payment of interest by the Contractor, and that the Contractor acquires no right, title or interest in or to such advance other than the right to make expenditures therefrom, as provided in this clause.

(e) Review and approval of costs incurred. The Contractor shall prepare and submit annually as of September 30, a "Statement of Costs Incurred and Claimed" (Cost Statement) for the total of net expenditures accrued (*i.e.*, net costs incurred) for the period covered by the Cost Statement. The Contractor shall certify the Cost Statement subject to the penalty provisions for unallowable costs as stated in Sections 306 (b) and (h) of the Federal Property and Administrative Services Act of 1949 (41 U.S.C. §256), as amended. DOE, after audit and appropriate adjustment, will approve such Cost Statement. This approval by DOE will constitute an acknowledgment by DOE that the net costs incurred are allowable under the contract and that they have been recorded in the accounts maintained by the Contractor in accordance with DOE accounting policies, but will not relieve the Contractor of responsibility for DOE's assets in its care, for appropriate subsequent adjustments, or for errors later becoming known to DOE.

(f) Financial settlement. The Government shall promptly pay to the Contractor the unpaid balance of allowable costs, program performance fee, and the pro rata share of the Contractor's indirect costs upon termination of the work, expiration of the term of the contract, or completion of the work and its acceptance by the Government after (1) compliance by the Contractor with DOE's patent clearance requirements, and (2) the furnishing by the Contractor of:

(i) An assignment of the Contractor's rights to any refunds, rebates, allowances, accounts receivable, collections accruing to the Contractor in connection with the work under this contract, or other credits applicable to allowable costs under the contract;

(ii) A closing financial statement;

(iii) The accounting for Government-owned property required by Clause 6.12, Property; and

(iv) A release discharging the Government, its officers, agents, and employees from all liabilities, obligations, and claims arising out of or under this contract subject only to the following exceptions:

(A) Specified claims in stated amounts or in estimated amounts where the amounts are not susceptible to exact statement by the Contractor;

(B) Claims, together with reasonable expenses incidental thereto, based upon liabilities of the Contractor to third parties arising out of the performance of this contract; provided that such claims are not known to the Contractor on the date of the execution of the release; and provided further that the Contractor gives notice of such claims, in writing, to the Contracting Officer promptly, but not more than one year after the Contractor's right of action first accrues. In addition, the Contractor should provide prompt notice to the Contracting Officer of all potential claims under this clause, whether in litigation or not (see also Clause 4.1, Insurance-Litigation and Claims);

(C) Claims for reimbursement of costs (other than expenses of the Contractor by reason of any indemnification of the Government against patent liability), including reasonable expenses incidental thereto, incurred by the Contractor under the provisions of this contract relating to patents; and

(D) Claims recognizable under Clause 4.3, Nuclear Hazards Indemnity Agreement.

(g) Deductions. In arriving at the amount due the Contractor under this clause, there shall be deducted (1) any claim which the Government may have against the Contractor in connection with this contract, and (2) deductions due under the terms of this contract, and not otherwise recovered by or credited to the Government. The unliquidated balance of the Special Financial Institution Account may be applied to the amount due and any balance shall be returned to the Government forthwith.

(h) Claims. Claims for credit against funds advanced for payment shall be accompanied by such supporting documents and justification as the Contracting Officer shall prescribe.

(i) Discounts. The Contractor shall take and afford the Government the advantage of all known and available cash and trade discounts, rebates, allowances, credits, salvage, and commissions unless the Contracting Officer finds that action is not in the best interest of the Government.

(j) Collections. All collections accruing to the Contractor in connection with the work under this contract, except for the Contractor's program performance fee, Contractor's indirect costs, and royalties or other income accruing to the Contractor from technology transfer activities in accordance with this contract, shall be Government property and shall be processed and accounted for in accordance with applicable DOE Directives, and to the extent consistent with those requirements shall be deposited in the Special Financial Institutional Account or otherwise made available for payment of allowable costs under this contract, unless otherwise directed by the Contracting Officer.

(k) Direct payment of charges. The Government reserves the right, upon ten days written notice from the Contracting Officer to the Contractor, to pay directly to the persons concerned, all amounts due which otherwise would be allowable under this contract. Any payment so made shall discharge the Government of all liability to the Contractor therefor.

CLAUSE 3.6 - FINANCIAL MANAGEMENT SYSTEM (SPECIAL)

The Contractor shall maintain and administer a financial management system that includes the currently existing integrated accounting system and (a) is suitable to provide proper accounting in accordance with DOE requirements for assets, liabilities, collections accruing to the Contractor in connection with the work under this contract, expenditures, costs, and encumbrances; (b) permits the preparation of accounts and accurate, reliable financial and statistical reports; and (c) assures that accountability for the assets can be maintained. The Contractor shall submit to DOE for written approval an annual plan for new financial management systems and/or subsystems and major enhancements and/or upgrades to the currently existing financial systems and/or subsystems. The Contractor shall notify DOE 30 days in advance of any planned implementation of any substantial deviation from this plan and, as requested by the Contracting Officer, shall submit any such deviation to DOE for written approval before implementation.

CLAUSE 3.7 - INTEGRATED ACCOUNTING (SPECIAL)

Integrated accounting procedures are required for use under this contract. The Contractor's financial management system shall include an integrated accounting system which is linked to DOE's accounts through the use of reciprocal accounts and which has electronic capability to transmit monthly and year-end self-balancing trial balances to the DOE's Primary Accounting System for reporting financial activity under this contract in accordance with requirements imposed by the Contracting Officer pursuant to applicable DOE Directives.

CLAUSE 3.8 - FAR 52.230-2 COST ACCOUNTING STANDARDS (APR 1996) (MODIFIED)

(a) Unless the contract is exempt under 48 CFR 9903.201-1 and 9903.201-2, the provisions of 48 CFR Part 9903 are incorporated herein by reference and the Contractor, in connection with this contract, shall-

(1) (CAS-covered Contracts Only) By submission of a Disclosure Statement, disclose, in writing, the Contractor's cost accounting practices as required by 48 CFR 9903.202-1 through 9903.202-5, including methods of distinguishing direct costs from indirect costs and the basis used for allocating indirect costs. The practices disclosed for this contract shall be the same as the practices currently disclosed and applied on all other contracts and subcontracts being performed by the Contractor and which contain a Cost Accounting Standards (CAS) clause. If the Contractor has notified the Contracting Officer that the Disclosure Statement contains trade secrets and commercial or financial information which is privileged and confidential, the Disclosure Statement shall be protected and shall not be released outside of the Government.

(2) Follow consistently the Contractor's cost accounting practices in accumulating and reporting contract performance cost data concerning this contract. If any change in cost accounting practices is made for the purposes of any contract or subcontract subject to CAS requirements, the change must be applied prospectively to this contract and the Disclosure Statement must be amended accordingly. If the contract price or cost allowance of this contract is affected by such changes, adjustment shall be made in accordance with subparagraph (a)(4) or (a)(5) below, as appropriate.

(3) Comply with all CAS, including any modifications and interpretations indicated thereto contained in 48 CFR Part 9904 in effect on the date of award of this contract or, if the Contractor has submitted cost or pricing data, on the date of final agreement on price as shown on the

Contractor's signed certificate of current cost or pricing data. The Contractor shall also comply with any CAS (or modifications to CAS) which hereafter become applicable to a contract or subcontract of the Contractor. Such compliance shall be required prospectively from the date of applicability to such contract or subcontract.

(4) (i) Agree to an equitable adjustment, if appropriate, if the contract cost is affected by a change which, pursuant to subparagraph (a)(3) above the Contractor is required to make to the Contractor's established cost accounting practices.

(ii) Negotiate with the Contracting Officer to determine the terms and conditions under which a change may be made to a cost accounting practice, other than a change made under other provisions of subparagraph (a)(4); provided that no agreement may be made under this provision that will increase costs paid by the Government.

(iii) Negotiate an equitable adjustment, if appropriate, when the Parties agree to a change to a cost accounting practice, other than a change under subparagraph (a)(4)(i) above.

(5) Agree to an adjustment of the contract price or cost allowance, as appropriate, if the Contractor or a subcontractor fails to comply with an applicable Cost Accounting Standard, or to follow any cost accounting practice consistently and such failure results in any increased costs paid by the Government. Such adjustment shall provide for recovery of the increased costs to the Government, together with interest thereon computed at the annual rate established under Section 6621 of the Internal Revenue Code of 1986 (26 U.S.C. §6621) for such period, from the time the payment by the Government was made to the time the adjustment is effected. In no case, shall the Government recover costs greater than the increased cost to the Government, in the aggregate, on the relevant contracts subject to the price adjustment, unless the Contractor made a change in its cost accounting practices of which it was aware or should have been aware at the time of price negotiations and which it failed to disclose to the Government.

(b) If the Parties fail to agree whether the Contractor or a subcontractor has complied with an applicable CAS in 48 CFR Part 9904 or a CAS rule or regulation in 48 CFR Part 9903 and as to any cost adjustment demanded by the Government, such failure to agree will constitute a dispute under the Contract Disputes Act (41 U.S.C. §601).

(c) The Contractor shall permit any authorized representatives of the Government to examine and make copies of any documents, papers, or records relating to compliance with the requirements of this clause.

(d) The Contractor shall include in all negotiated subcontracts which the Contractor enters into, the substance of this clause, except paragraph (b), and shall require such inclusion in all other subcontracts, of any tier, including the obligation to comply with all CAS in effect on the subcontract award date or if the subcontractor has submitted cost or pricing data, on the date of final agreement on price as shown on the subcontractor's signed Certificate of Current Cost or Pricing Data. This requirement shall apply only to negotiated subcontracts in excess of \$500,000 where the price negotiated is not based on—

(1) Established catalog or market prices of commercial items sold in substantial quantities to the general public; or

(2) Prices set by law or regulation, except that the requirement shall not apply to negotiated subcontracts exempt from the requirement to include a CAS clause as specified in 48 CFR 9903.201-1.

CLAUSE 3.9 - FAR 52.230-6 ADMINISTRATION OF COST ACCOUNTING STANDARDS
(APR 1996) (MODIFIED)

For the purpose of administering the Cost Accounting Standards (CAS) requirements under this contract, the Contractor shall take the steps outlined in paragraphs (a) through (g) below:

(a) Submit to the Contracting Officer a description of any cost accounting practice change, the total potential impact of the change on contracts containing a CAS clause, and a general dollar magnitude of the change which identifies the potential shift of costs between CAS-covered contracts by contract type (*i.e.*, firm-fixed-price, incentive, cost-plus-fixed-fee, etc.) and other Contractor business activity. As related to CAS-covered contracts, the analysis should identify the potential impact on funds of the various Agencies/Departments (*e.g.*, Department of Energy, National Aeronautics and Space Administration, Department of Defense, etc.) as follows:

(1) For any change in cost accounting practices required in accordance with subparagraph (a)(3) and subparagraph (a)(4)(i) of the clause at FAR 52.230-2, Cost Accounting Standards; or subparagraph (a)(3) and subparagraphs (a)(4)(i) or (a)(4)(iv) of the clause at FAR 52.230-5, Cost Accounting Standards - Educational Institution, within 60 days (or such other date as may be mutually agreed to) after award of a contract requiring this change.

(2) For any change in cost accounting practices proposed in accordance with subparagraph (a)(4)(ii) or (iii) of the clauses at FAR 52.230-2, Cost Accounting Standards and FAR 52.230-5, Cost Accounting Standards - Educational Institution, or with subparagraph (a)(3) of the clause at FAR 52.230-3, Disclosure and Consistency of Cost Accounting Practices, not less than 60 days (or such other date as may be mutually agreed to) before the effective date of the proposed change.

(3) For any failure to comply with an applicable CAS or to follow a disclosed practice (as contemplated by subparagraph (a)(5) at FAR 52.230-2, Cost Accounting Standards and FAR 52.230-5, Cost Accounting Standards - Educational Institution, or by subparagraph (a)(4) at FAR 52.230-3, Disclosure and Consistency of Cost Accounting Practices):

(i) Within 60 days (or such other date as may be mutually agreed to) after the date of agreement with the initial finding of noncompliance, or

(ii) In the event of Contractor disagreement with the initial finding of noncompliance, within 60 days of the date the Contractor is notified by the Contracting Officer of the determination of noncompliance.

(b) After a Contracting Officer determination of materiality, submit a cost impact proposal in the form and manner specified by the Contracting Officer within 60 days (or such other date as may be mutually agreed to) after the date of determination of the adequacy and compliance of a change submitted pursuant to paragraph (a) above. The cost impact proposal shall be in sufficient detail to permit evaluation, determination, and negotiation of the cost impact upon each separate CAS-covered contract and subcontract.

(1) Cost impact proposals submitted for changes in cost accounting practices required in accordance with subparagraphs (a)(3) and (a)(4)(i) of the clause at FAR 52.230-2, Cost Accounting Standards; or subparagraphs (a)(3) and (a)(4)(i) or (a)(4)(iv) of the clause at FAR 52.230-5, Cost Accounting Standards - Educational Institution; shall identify the applicable standard or cost principle and all contracts and subcontracts containing the clauses entitled, Cost Accounting Standards or Cost Accounting Standards - Educational Institution, which have an award date before the effective date of that standard or cost principle.

(2) Cost impact proposals submitted for any change in cost accounting practices proposed in accordance with subparagraphs (a)(4)(ii) or (iii) of the clauses at FAR 52.230-2, Cost Accounting Standards, and FAR 52-230-5, Cost Accounting Standards - Educational Institution; or with subparagraph (a)(3) of the clause at FAR 52.230-3, Disclosure and Consistency of Cost Accounting Practices; shall identify all contracts and subcontracts containing the clauses at FAR 52.230-2, Cost Accounting Standards, FAR 52.230-5, Cost Accounting Standards - Educational Institution, and FAR 52.230-3, Disclosure and Consistency of Cost Accounting Practices.

(3) Cost impact proposals submitted for failure to comply with an applicable CAS or to follow a disclosed practice as contemplated by subparagraph (a)(5) of the clauses at FAR 52.230-2, Cost Accounting Standards and FAR 52.230-5, Cost Accounting Standards - Educational Institution; or by subparagraph (a)(4) of the clause at FAR 52.230-3, Disclosure and Consistency of Cost Accounting Practices, shall identify the cost impact on each separate CAS covered contract from the date of failure to comply until the noncompliance is corrected.

(c) If the submissions required by paragraphs (a) and (b) above are not submitted within the specified time, or any extension granted by the Contracting Officer, an amount not to exceed ten percent of each subsequent amount determined payable related to the Contractor's CAS-covered prime contracts, up to the estimated general dollar magnitude of the cost impact, may be withheld until such time as the required submission has been provided in the form and manner specified by the Contracting Officer.

(d) Agree to appropriate contract and subcontract amendments to reflect adjustments established in accordance with subparagraphs (a)(4) and (a)(5) of the clauses at FAR 52.230-2 and 52.230-5 or with subparagraphs (a)(3) or (a)(4) of the Disclosure and Consistency of Cost Accounting Practices clause at FAR 52.230-3.

(e) For all subcontracts subject to the clauses at FAR 52.230-2, 52.230-3, or 52-230-5-

(1) So state in the body of the subcontract, in the letter of award, or in both (self-deleting clauses shall not be used); and

(2) Include the substance of this clause in all negotiated subcontracts. In addition, within 30 days after award of the subcontract, submit the following information to the Contractor's cognizant contract administration office for transmittal to the contract administrative office cognizant of the subcontractor's facility:

(i) Subcontractor's name and subcontract number.

(ii) Dollar amount and date of award.

(iii) Name of contractor making the award.

(iv) Any changes the subcontractor has made or proposes to make to cost accounting practices that affect prime contracts or subcontracts containing the clauses at FAR 52.230-2, 52-230-3, or 52-230-5, unless these changes have already been reported.

(f) Notify the Contracting Officer, in writing, of any adjustments required to subcontracts under this contract and agree to an adjustment, based on them, to this contract price or estimated cost and fee, if appropriate. This notice is due within 30 days after proposed subcontract adjustments are received and shall include a proposal for adjusting the higher-tier subcontract or the prime contract appropriately.

(g) For subcontracts containing the CAS clause, require the subcontractor to comply with all standards in effect on the date of award or of final agreement on price, as shown on the subcontractor's signed Certificate of Current Cost or Pricing Data, whichever is earlier.

**CLAUSE 3.10 - LIABILITY WITH RESPECT TO COST ACCOUNTING STANDARDS
(SPECIAL)**

(a) The Contractor is not liable to the Government for increased costs or interest resulting from its failure to comply with the Clause 3.8, Cost Accounting Standards, and Clause 3.9, Administration of Cost Accounting Standards, if its failure to comply with the clauses is caused by the Contractor's compliance with published DOE financial management policies and procedures or other requirements established by the DOE's Chief Financial Officer or Procurement Executive.

(b) The Contractor is not liable to the Government for increased costs or interest resulting from its subcontractors' failure to comply with the clauses at FAR 52.230-2, Cost Accounting Standards, and FAR 52.230-6, Administration of Cost Accounting Standards, if: (1) the Contractor includes in each covered subcontract a clause making the subcontractor liable to the Government for increased costs or interest resulting from the subcontractor's failure to comply with the clauses; and (2) the Contractor seeks the subcontract price adjustment and cooperates with the Government in the Government's attempts to recover from the subcontractor.

CLAUSE 3.11 - DEAR 952.251-70 CONTRACTOR EMPLOYEE TRAVEL DISCOUNTS (JUN 1995) (MODIFIED)

Consistent with contract-authorized travel requirements, the Contractor shall use best efforts to make use of the travel discounts offered to federal travelers, through use of contract airline fares, offered hotel and motel lodging rates, and negotiated car rental rates, when use of such discounts would result in lower overall trip costs and the services are reasonably available to Contractor employees performing official Government contract business. Vendors providing these services may require that the Contractor employee traveling on Government business be furnished with a letter of identification signed by the Contracting Officer.

(a) Contracted airlines. Airlines participating in travel discounts are listed in commercial publications. Regulations governing the use of contracted airlines are contained in the Federal Travel Regulation (FTR). Chapter 301-15 sets out the authorized methods of obtaining contract fares when such fares are available to cost-reimbursable Contractor employees.

(b) Hotels/motels. Participating hotels and motels which extend discounts are listed in commercial publications, which show rates and facilities and identify by code those properties which offer reduced rates to cost-reimbursable contractor employees while traveling on official contract business.

(c) Car rentals. The Military Traffic Management Command (MTMC) Department of Defense, negotiates rate agreements with car rental companies for special flat rates and unlimited mileage. Participating car rental companies which offer these terms to cost-reimbursable contractor employees while traveling on official contract business are listed in commercial publications.

(d) Procedures for obtaining service. (1) Identification and method of payment requirements for participating federal contract airlines are listed in the FTR. Available travel discount airfares may be ordered by an eligible contractor or Travel Management Center (TMC), provided the letter of

identification signed by the Contracting Officer accompanies the order. In appropriate instances, such as geographical proximity, contractors may obtain discount airfares through a DOE office or a cooperating local travel agency when a TMC is not available. Some airlines allow the purchase of discounted airfares with cash or credit card; (2) In the case of hotel and motel accommodations, reservations may be made by the Contractor employee directly with the hotel or motel but the employee must display, on arrival, the letter of identification and any other identification required by the hotel or motel proprietorship; and (3) For car rentals, generally the same procedures as in subparagraph (d)(2) above will be followed in arranging reservations and obtaining discounts.

(e) Standard letter of identification. Contractors shall prepare for the Contracting Officer a letter of identification based on the following format:

Format for Government Contractors to Qualify for Travel
Discounts (To be typed on agency official letterhead)

To: (Source of ticketing, accommodations or rental)

Subject: Official Travel of Government Contractor

(Full name of traveler), bearer of this letter, is an employee of (company name) which is under contract to this agency under the Government contract (contract number). During the period of the contract (give dates), the employee is eligible and authorized to use available discount rates for contract-related travel in accordance with your contract and/or agreement with the federal Government.

(Signature, title and telephone number of the Contracting Officer)

CLAUSE 3.12 - FAR 52.242-13 BANKRUPTCY (JUL 1995)

In the event the Contractor enters into proceedings relating to bankruptcy, whether voluntary or involuntary, the Contractor agrees to furnish, by certified mail, written notification of the bankruptcy to the Contracting Officer responsible for administering the contract. This notification shall be furnished within five days of the initiation of the proceedings relating to bankruptcy filing. This notification shall include the date on which the bankruptcy petition was filed, the identity of the court in which the bankruptcy petition was filed, and a listing of Government contract numbers and contracting offices for all Government contracts against which final payment has not been made. This obligation remains in effect until final payment under this contract.

CLAUSE 3.13 - DEAR 970.5204-17 LEGISLATIVE LOBBYING COST PROHIBITION (JAN 1996)

(a) Pursuant to the allowable cost provisions established elsewhere under the contract, costs associated with the following activities are not reimbursable under the contract:

(1) Attempts to influence the outcome of any federal, state, or local election, referendum, initiative, or similar procedure, through in-kind or cash contributions, endorsements, publicity, or similar activities;

(2) Establishing, administering, contributing to, or paying the expenses of a political party, campaign, political action committee, or other organization established for the purpose of influencing the outcomes of elections;

(3) Any attempt to influence (i) the introduction of federal or state legislation, or (ii) the enactment or modification of any pending federal or state legislation through communication with any member or employee of the Congress or state legislature (including efforts to influence state or local officials to engage in similar lobbying activity), or with any Government official or employee in connection with a decision to sign or veto enrolled legislation;

(4) Any attempt to influence (i) the introduction of federal or state legislation, or (ii) the enactment or modification of any pending federal or state legislation by preparing, distributing or using publicity or propaganda, or by urging members of the general public or any segment thereof to contribute to, or participate in, any mass demonstration, march, rally, fund raising drive, lobbying campaign or letter writing or telephone campaign; or

(5) Legislative liaison activities, including attendance at legislative sessions or committee hearings, gathering information regarding legislation, and analyzing the effect of legislation, when such activities are carried on in support of or in knowing preparation for an effort to engage in unallowable activities.

(6) Contractor costs incurred to improperly influence (directly or indirectly) federal, state, or local executive branch action on regulatory and contract matters, other than costs incurred in regard to contract proposals.

(b) Costs of the following activities are excepted from the coverage of paragraph (a) above ; provided that the resultant contract costs are reasonable and otherwise comply with the allowable cost provisions of the contract:

(1) Providing Members of Congress, their staff members, or staff of cognizant legislative committees, in response to a request (written or oral, prior or contemporaneous) from Members of Congress, their staff members, or staff of cognizant legislative committees, or as otherwise directed by the Contracting Officer, information or expert advice of a factual, technical, or scientific nature, with respect to topics directly related to the performance of the contract or proposed legislation. In providing this information or expert advice, the Contractor shall indicate to the recipient that it is not presenting the views of DOE. Reasonable costs for transportation, lodging, or meals incurred by Contractor employees for the purpose of providing such information or advice shall also be reimbursable, provided the request for information or expert advice is a prior written request signed by a Member of Congress, and provided such costs also comply with the allowable cost provisions of the contract.

(2) Providing state legislatures or subdivisions thereof, their staff members, or staff of cognizant legislative committees, in response to a prior written request from a state legislator, or as otherwise directed by the Contracting Officer, information or expert advice of a factual, technical, or scientific nature, with respect to topics directly related to the performance of the contract or proposed legislation. In providing this information or expert advice, the Contractor shall indicate to the recipient that it is not presenting the views of DOE. Reasonable costs for transportation, lodging, or meals incurred by Contractor employees shall also be reimbursable, provided such costs also comply with the allowable costs provision of the contract.

(3) Any lobbying made unallowable under subparagraph (a)(3) above to influence state legislation in order to reduce contract cost or to avoid material impairment of the Contractor's authority to perform the contract, if authorized by the Contracting Officer.

(4) Any activity specifically authorized by statute to be undertaken with funds from the contract.

(c) Unallowable lobbying costs incurred, if any, shall not be charged to DOE, paid for with DOE funds, or recorded as allowable cost in DOE's system of accounts.

(d) The Contractor's annual certification submitted as part of its annual claim (*i.e.*, Voucher Accounting for Net Expenditures Accrued required under Clause 3.5, Payments and Advances) or cost incurred statement, that the costs claimed are allowable under the contract, shall also serve as the Contractor's certification that it has complied with the requirements and standards of this clause.

(e) The Contractor shall maintain adequate records to demonstrate that the annual certifications of claimed costs as being allowable comply with the requirements of this clause.

(f) Time logs, calendars, or similar records shall not be created for purposes of complying with this clause during any particular calendar month when (1) an employee engages in legislative liaison activities (as delineated in paragraphs (a) and (b) above) 25 percent or less of the employee's compensated hours of employment during that calendar month, and (2) within the preceding five-year period, the Contractor has not materially misstated allowable or unallowable costs of any nature, including legislative liaison costs. When conditions (f)(1) and (2) above are met, the Contractor is not required to establish records to support the allowability of claimed costs in addition to records already required or maintained. Also, when conditions (f)(1) and (2) of this clause are met the absence of time logs, calendars, or similar records will not serve as a basis for disallowing costs by contesting estimates of legislative liaison activity time spent by employees during any calendar month.

(g) During contract performance, the Contractor should resolve, in advance, any significant questions or disagreements between the Contractor and DOE concerning compliance with this clause.

(h) In providing information or expert advice under subparagraphs (b)(1) and (b)(2) above, the Contractor shall advise the Contracting Officer in advance or as soon as practicable.

CLAUSE 3.14 - PENSION PLAN (SPECIAL)

(a) Adoption of these principles and procedures shall not be deemed nor be intended to create rights in third parties nor abrogate existing rights of pension plan members performing services under this contract. All assets and liabilities associated with employee contributions to the Contractor's Defined Contribution Plan and the Tax-Deferred 403(b) Plan shall be excluded from these principles and procedures. The following stipulations apply, as appropriate, to the defined benefit pension plan, the University of California Retirement Plan (UCRP), covering University of California employees working under contracts at DOE-owned and Contractor-operated facilities.

(b) Basic requirements.

(1) DOE shall be notified prospectively of each change to the UCRP that could have a significant impact on current or future Departmental funding or liabilities.

(i) Changes covered by this provision include any change to a benefit, right or feature of the Plan and any change to a funding method or assumption.

(ii) A significant impact is a change that requires the approval of the Regents of the University of California.

(2) Prospective notice will be provided to the DOE for each newly adopted pension plan or change requiring prospective notice as described in subparagraph (b)(1)(i) above, including any changes to non-DOE-reimbursed segments of commingled pension plans.

(3) For the purposes of this clause, prospective notice shall mean in advance of consideration of each change to the UCRP by the Regents of the University as trustees of the pension plan.

(4) The pension plan shall be submitted to an annual, full-scope audit by an outside independent auditor. The Contractor shall provide a report of such audit to DOE within seven months after the end of the plan year to which the audit applies.

(5) The Contractor shall maintain a separate annual accounting of liabilities and assets attributable to each Laboratory. Market value of assets on an accrual basis at the beginning of a plan year shall equal the assets at market value on an accrual basis at the end of the prior year based on the separate annual accounting of the prior plan year. The procedures for annual accounting of contributions to UCRP are for each plan year (July 1 through June 30), the Contractor will provide an annual accounting of assets associated with DOE-funded employer contributions and employee contributions under Contract No. DE-AC03-76SF00098 as follows:

(i) Market value of assets at the beginning of a plan year;

(ii) (A) Employer contributions made during a plan year, less the employer contributions transferred to the Social Security Administration on behalf of contract employee members of UCRP who elected Social Security coverage in 1976 or 1977; and

(B) Employee contributions made during a plan year, less the employee contributions transferred to the Social Security Administration on behalf of contract employee members of UCRP who elected Social Security coverage in 1976 or 1977;

(iii) The dollar amount of investment income from applying the rate of return on the accrual-basis market value of UCRP assets to subparagraphs (b)(5)(i), (ii), (iv) and (v);

(iv) Benefits disbursed on account of contract employees during the plan year, including return of accumulated employee contributions;

(v) Administrative expenses paid from the trust shall be allocated to the Laboratories in the same proportion that the market value of assets assigned to the Laboratory segment bears to the market value of the total asset fund as of the beginning of the plan year. However, there may be situations agreed to by the DOE where specific expenses would directly be charged to each Laboratory in addition to the proportionate share of expenses; and

(vi) Market value of assets at the end of the plan year = [subparagraphs (b)(5)(i) + (ii) + (iii) - (iv) - (v)]. The annual accounting shall include the market value of such assets as of June 30, 1991, and as of the end of each plan year thereafter.

(6) "Contract service assets" means the accrual basis market value given by the accounting which is referred to in subparagraph (b)(5).

(7) All plan provisions of the UCRP are applicable to all eligible employees of the Contractor, including those employed at a DOE Laboratory and, as such, a single contribution rate, expressed as a percentage of covered compensation, is calculated for the Plan. This single rate is to be applied to all members of the Plan in order to determine the contribution, if any. For purposes of assessing the liabilities of the DOE segment of the Plan as described in paragraphs (e), (f), and (g), the DOE will have no liabilities to the Plan beyond that associated with Laboratory employees who are members of the Plan..

(8) The DOE will be given prospective notice of any changes in the scope of the administration of the DOE-reimbursed pension plans that require a change in administration cost of five percent or more. Changes in administration cost resulting directly from normal inflation in administration costs or per specific DOE requests do not require notice.

(9) If and when the funded status (measured by dividing the actuarial value of assets by the entry age liability of UCRP), reaches 150 percent, the President of the University will initiate a review of the surplus situation and provide to DOE a copy of the Contractor's recommendations to bring the fund into conformity with the long-term needs of the Plan. Any recommendation by the Contractor for the disposition of the Plan assets in connection with a Plan termination or spin-off will be consistent with the then applicable federal and state laws relating to qualified pension plans and ensure equitable distribution of excess Plan assets to DOE and the University-reimbursed Plan segments as provided in this clause.

(10) The DOE will pay costs for any special retirement and/or actuarial analysis that it requests during the period of the contract.

(11) DOE has the right to take any action it deems appropriate and consistent with applicable law with reference to the pension plan.

(c) Funding requirements.

(1) Contributions to the Plan will be based on the actuarial valuation for the Plan and will be approved by the Contractor's Plan Trustees (The Regents of the University of California).

(2) DOE agrees to continue to fund for the contract term(s), as extended, the employer cost of UCRP for contract employees at the contribution rates established from time to time by Contractor, subject to the following restriction: The DOE funded contribution shall not exceed the full funding limit as defined in the Internal Revenue Code, Section 412.

(3) The DOE funding policy is intended to be congruent with the basic objectives of the cost accounting standards (CAS) and will generally result in funding consistent with the CAS. If this policy causes a temporary, technical inconsistency with the CAS, the contractor shall immediately notify the cognizant Contracting Officer and Chief Financial Officer. Contractors have recourse to the cost principles found at DEAR 970.3102-2(1), (2) and (3) and shall avoid penalties on that basis.

(4) If more than five percent of the members of each Laboratory transfer from the Contractor's private operations to the DOE Laboratories annually, or vice versa, appropriate adjustments shall be made to the pension fund or segments' assets and liabilities.

(d) Reporting requirements for designated contracts. The following reports shall be submitted by the last day of the plan year to DOE for each Laboratory.

(1) The annual actuarial valuation report includes information in the annual separate actuarial valuations for each Laboratory which DOE may reasonably request. DOE shall pay the cost of all

separate valuations. At a minimum, these reports shall include: an itemized cashflow; the aggregate covered compensation; a distribution of active members by age, service, and salary; separate distributions of retirees and terminated vested members by age and benefit amount; a brief description of each amortization base, if any, and its date, original amount, and annual payment; an itemization of the changes in the numbers of actives, retirees and terminated vested members during the plan year; the rate of interest currently credited to employee contributions; a statement of the Financial Accounting Standards (FAS) 35 liabilities; a statement of the current liability under Internal Revenue Code Section 412; a development of the total actuarial gain or loss; a statement of actuarial assumptions and methods; calculation of the assets of each Laboratory; calculation of the actuarial asset value; calculation of contribution requirements; and a statement of the changes, if any, in benefits, assumptions or methods since the last report.

(2) A copy of the Financial Accounting Standards Board Statement 87 report prepared each year to satisfy the expense-reporting requirement of the Office of Management and Budget.

(3) In order to report the funded status (surplus or deficit) of each Laboratory's portion of UCRP to the DOE, the Contractor will measure the liabilities using the Entry Age Normal actuarial method and the Actuarial Value of Assets as defined in the valuation report indicated in subparagraph (d)(1) above.

(e) Terminating operations. When operations at a DOE Laboratory are terminated and no further work is to occur under this contract, the following rules shall apply:

(1) No further benefits for service shall accrue after the contract termination date, or such earlier date as agreed to by the DOE and the Contractor.

(2) The Contractor shall take steps to return to the DOE a portion of the UCRP assets attributable to the contract employees through a spin-off-reversion transaction. Such a transaction shall be accomplished by the Contractor's (i) establishing a Spin-off Plan for certain contract employees and transferring the assets to the Spin-off Plan as set forth below, (ii) terminating the Spin-off Plan and receiving back any assets in excess of those needed to provide benefits to the members in the Spin-off Plan, and (iii) transferring the reverted assets (less any tax or other liabilities imposed upon the Contractor because of the receipt of the assets) to the DOE. The Contractor's participation in the transactions described in the preceding sentence is conditioned upon its receiving satisfactory rulings from the Internal Revenue Service and any other appropriate government agencies that the transactions contemplated by the sentence will have no adverse effect on the Contractor, the UCRP, or the members of the UCRP.

(3) Procedures with respect to the spin-off and reversion.

(i) The liabilities as of the effective date of the Spin-off Plan for members to be covered by the Spin-off Plan shall be calculated by using the UCRP Plan provisions, actuarial assumptions, and actuarial cost methods as then in effect. The only members to be covered by the Spin-off Plan (the "Spin-off Members") are members of the UCRP as of the Spin-off date who are terminated active and inactive Laboratory members, excluding pensioners, survivors, and members receiving disability income under the UCRP.

(ii) Assets to be transferred to the Spin-off Plan shall be determined by a formula to be negotiated between the Parties, subject to an IRS ruling and in compliance with the laws of the State of California as to permitted agreements that may be contained in the aforementioned formula. If permitted, assets for the Spin-off Plan shall be determined generally in accordance with the following formula.

A - B where

A = Market value of assets assigned to the DOE Laboratories as determined from paragraph (b)(5) as of the last business day of the calendar quarter which ends coincident with, or next preceding, the effective date of the spin-off. From the effective date of spin-off to the date of transfer of the assets, interest will be credited at the rate established for a one year Treasury bill as published by the Federal Reserve.

B = Liabilities associated with pensioners, survivors, members receiving disability income (including projected benefit increases), and active members (contract employees) who are retained by the Contractor determined as of the last business day of the calendar quarter which ends coincident with, or next preceding, the effective date of the spin-off. In determining these liabilities, the present value of future ad hoc benefit improvements shall be included based on past practices.

If, for technical, administrative, or regulatory reasons, the preceding formula proves inapplicable, the Contractor and DOE shall bargain in good faith to produce a result which would be as equitable to both parties as the preceding formula and in compliance with applicable law.

(iii) The Parties agree that any disposition of contract service assets or transfer of liabilities upon a spin-off shall be consistent with the then applicable federal and state laws relating to qualified defined benefit pension plans and shall be subject to obtaining such rulings and/or approvals from cognizant Federal and State agencies as may be required by law or deemed prudent by the Contractor or DOE.

(A) When a Spin-off Plan has been established, UCRP shall retain the liabilities associated with pensioners, members receiving UCRP disability income, and survivors and contract employees who are retained by the Contractor.

(B) Under a Spin-off Plan acceptable to the DOE and which fulfills all of the Contractor's fiduciary responsibilities under UCRP, and which further assumes UCRP liabilities for transferred contract employees, the Contractor agrees to transfer to the trustees of the Spin-off Plan an amount equal to the contract service assets to be transferred as determined above. Such amount shall be transferred as investment holdings of the UCRP, plus any necessary United States Currency, or, by mutual agreement of the Parties, the total amount may be transferred as United States Currency. Agreement by the DOE and Contractor will not be unreasonably withheld.

1. If the asset transfer to the Spin-off Plan is made in the form of investment holdings, such holdings shall include cash, equity, securities, and fixed income securities, but shall exclude any investment holding (and earnings thereon) acquired from the effective date of the spin-off. Such assets shall be allocated on a pro-rated basis, with proration for fixed income assets based on rating and classification. The pro-rata allocation shall be the ratio of (A) and (B) where, (A) is the contract service assets referred to in subparagraph (e)(3)(ii) above; and (B) is the total assets of the Retirement Fund of UCRP at market value as of the effective date of the spin-off. Such assets shall be transferred within 36 months of the creation of the Spin-off Plan and shall include actual investment earnings (gains or losses) of such assets less expenses and benefit disbursements from the effective date of the spin-off to the date of transfer.

2. The Contractor will transfer assets at a rate at least sufficient to meet the cashflow requirement of transferred employees who go into benefit status under the Spin-off Plan.

3. If the transfer is made as United States Currency, the transfer shall be increased to include interest credited at the rate established for a one year Treasury bill as published

by the Federal Reserve. This rate will be in effect from the first day following the effective date of spin-off through the day of payment.

(iv) Subsequent to the spin-off, UCRP shall, subject to obtaining all necessary IRS and other appropriate governmental approvals, terminate the Spin-off Plan, purchase annuities for the Spin-off Members with the assets of the Spin-off Plan, receive the remaining assets of the Spin-off Plan as a reversion and transfer the remaining assets (less any tax or other liabilities imposed upon the Contractor because of the receipt of such assets) to the DOE.

(f) Contract termination and selection of a successor contractor. Should another contractor replace the Contractor, the following become requirements:

(1) Liabilities for present and future benefits of contract employees in the event there is a successor plan. The liabilities as of the effective date of disaffiliation for members to be covered by a successor pension plan shall be calculated by using the UCRP Plan provisions, actuarial assumptions, and actuarial cost methods as then in effect. Active members not retained by the Contractor are the only members to be covered by a successor pension plan.

(2) (i) Contract service assets in the event there is a successor pension plan. Contract service assets shall be determined by a formula to be negotiated between the Parties, subject to an IRS ruling and in compliance with the laws of the State of California as to permitted agreements that may be contained in the aforementioned formula. If permitted, contract service assets for a successor contractor shall be determined generally in accordance with the following formula:

A - B, where

A = Market value of assets assigned to the DOE Laboratories as determined from subparagraph (b)(5), as of the last business day of the calendar quarter which ends coincident with, or next preceding, the effective date of disaffiliation. From the effective date of spin-off to the date of transfer of the assets, interest will be credited at the rate established for a one year Treasury bill as published by the Federal Reserve.

B = Liabilities associated with pensioners, survivors, terminated vested and nonvested inactive members, members receiving disability income under the UCRP and active members (contract employees) who are retained by the Contractor as determined pursuant to subparagraph (f)(1) above

If, for technical, administrative, or regulatory reasons, the preceding formula proves inapplicable, the Contractor and DOE shall bargain in good faith to produce a result which would be as equitable to both parties as the preceding formula and in compliance with applicable law.

(ii) In no event, however, shall the UCRP retain an amount less than the liabilities for benefits of members whose liabilities are retained by the UCRP. Notwithstanding the provisions of this paragraph (f), the Parties further agree to consider the desirability of covering pensioners, survivors, UCRP disability recipients, and terminated vested and nonvested members under a successor plan.

(3) Disposition of contract service assets and liabilities. The Parties agree that any disposition of contract service assets or transfer of liabilities upon contract termination shall be consistent with the then applicable federal and state laws relating to qualified defined benefit pension plans and shall be subject to obtaining such rulings and/or approvals from cognizant Federal and State agencies as may be required by law or deemed prudent by the Contractor or DOE.

(i) Retention of assets and liabilities. When a successor pension plan has been established by a successor contractor; UCRP shall retain the liabilities associated with pensioners, survivors, UCRP disability recipients, and terminated vested and nonvested members and active members who are retained by the Contractor as determined in subparagraph (f)(1) above. In the event that there is no successor plan, UCRP shall retain the liabilities associated with all members (contract employees).

(ii) Transfer of assets and liabilities to successor pension plan. Under a successor pension plan acceptable to the DOE and which fulfills all of the Contractor's fiduciary responsibilities under UCRP, and which further assumes UCRP liabilities for transferred contract employees, the Contractor agrees to transfer to the trustees of such successor plan an amount equal to the contract service assets as determined in subparagraph (f)(2) above. Such amount shall be transferred as investment holdings of the UCRP, plus any necessary United States Currency, or, by mutual agreement of the Parties, the total amount may be transferred as United States Currency. Agreement by the DOE and Contractor will not be unreasonably withheld.

(A) If the asset transfer to the successor contractor's trust is made in the form of investment holdings, such holdings shall include cash, equity securities and fixed income securities, but shall exclude investment holdings (and earnings thereon) acquired after the effective date of disaffiliation. Such assets shall be allocated on a pro-rated basis, with proration for fixed income assets based on rating and classification. The pro-rata allocation shall be the ratio of (A) and (B) where, (A) is the contract service assets referred to in subparagraph (f)(2) above and (B) is the total assets of the Retirement Fund of UCRP at market value as of the effective date of disaffiliation. Such assets shall be transferred within 36 months of the effective date of disaffiliation, and shall include actual investment earnings(gains or losses) of such assets less expenses and benefit disbursements from the effective date of disaffiliation to the date of transfer.

(B) The Contractor will transfer assets at a rate at least sufficient to meet the cashflow requirement of transferred employees who go into benefit status under the successor plan.

(C) If the transfer is made as United States Currency, the transfer shall be increased to include interest on the amount at the rate established for a one year Treasury bill as published by the Federal Reserve, from the first day following the effective date of disaffiliation through the day of payment.

(4) DOE agrees to require that, in the event of termination of work under the contract, a successor contractor shall permanently maintain the benefit accrual terms and conditions of UCRP for the Contractor employees transferred to the successor contractor insofar as UCRP is consistent with the provisions of applicable law.

(5) In the event that there is no successor plan, a reconciliation of funding obligations shall be done. A separate accounting of assets and liabilities for contract employees shall be maintained by the Contractor. The Contractor shall assure that accrued obligations to contract employees are met and that the fund is being prudently managed. If, pursuant to approval by the Regents of the University of California, all UCRP obligations to contract employees are fulfilled through a plan spin-off and termination under the process outlined in subparagraphs (e)(3) above and (g)(2) below, as applicable, the Contractor shall return any net excess assets attributable to contract employees to DOE, if approved by the Internal Revenue Service. If a funding shortfall arises as a result of economic conditions beyond the Contractor's direct control, the DOE agrees to contribute funds necessary to fully fund liabilities to cover obligations to contract employees, not including active employees who continue to be permanently employed by the Contractor.

(g) UCRP plan termination.

(1) In the unlikely event of plan termination, the Contractor shall not terminate any pension plan (commingled or site-specific) without notifying the Department at least 60 days prior to the scheduled date of plan termination, or if earlier, 60 days before plan members are notified of the plan termination.

(2) The Contractor may satisfy plan liabilities to plan members by the purchase of annuities through competitive bidding on the open annuity market or through the payment of lump sums. Any competitive annuity bid process must include at least five bidders, if possible, who satisfy the criteria listed in United States Department of Labor Interpretive Bulletin 95-1. The final selection of insurance company(ies) shall be based upon the bids of the qualifying companies, in conjunction with the assessed quality of the annuity provider(s). Lump sums shall be calculated using the same mortality table and actuarial assumptions which the UCRP uses for purposes of defining actuarially equivalent. Otherwise, the Parties to the contract shall negotiate the assumptions and methods for determining DOE's liability pursuant to paragraph (h) below.

(3) DOE-reimbursed assets which are in excess of the DOE liability shall revert to DOE with interest. Interest shall accrue from the date of the event (defined in paragraph (h) below as the date of pension plan termination) at the rate established for a one year Treasury bill as published by the Federal Reserve.

(h) Financial requirement.

(1) Funds to be paid or transferred to any party as a result of settlements relating to pension plan termination under paragraph (g) above shall accrue interest from the effective date of termination until the date of payment or transfer.

(2) Terminating Operations. The Contractor shall calculate pension liabilities attributable to DOE contract work. For this purpose, DOE and the Contractor shall use the same mortality table as used for funding purposes, and an applicable 30-year Treasury rate of interest as the basis for the frozen liability calculation.

(i) Special programs. The Contractor shall advise DOE in advance of each early-out program, window benefit, disability program, plan-loan feature, employee contribution refund, asset reversion, or incidental benefit. Any UCRP retirement system programs proposal that is Laboratory specific which would increase the cost of the contract beyond that approved by Contractor for Contractor employees shall be approved in advance by the Contracting Officer and the Contractor.

CLAUSE 3.15 - AGREEMENT PERTAINING TO PUBLIC EMPLOYEES RETIREMENT SYSTEM (PERS) (SPECIAL)

(a) The Contractor agrees to cooperate fully with DOE by providing information relative to the California Public Employee's Retirement System (PERS) that it currently possesses, that is provided by PERS in the future, or that it may reasonably acquire as information necessary for prudent administration of the Contractor's interests. In addition, the Contractor will provide to DOE a copy of any relevant written assessment the Contractor may perform regarding PERS.

(b) The Contractor agrees to provide DOE with the annual financial report of PERS as well as actuarial valuation reports of PERS when provided to the Contractor.

(c) The Contractor agrees to provide DOE an annual accounting of DOE participation in PERS based on records the Contractor currently maintains.

(d) The Contractor shall ensure that a pro rata share of any refunds or credits it receives from PERS shall be provided to DOE.

4.0 LITIGATION AND CLAIMS

CLAUSE 4.1 - DEAR 970.5204-31 INSURANCE-LITIGATION AND CLAIMS (JUN 1997) (MODIFIED)

(a) The Contractor may, with the prior written authorization of the Contracting Officer, and may, upon the request of the Government, initiate litigation against third parties, including proceedings before administrative agencies, in connection with this contract. The Contractor shall proceed with such litigation in good faith and as directed from time to time by the Contracting Officer. If the Contractor declines a Government request to initiate litigation, it shall assign its rights and interest in the matter to permit the Government to undertake the action.

(b) The Contractor shall give the Contracting Officer immediate notice, in writing, of any legal proceeding, including any proceeding before an administrative agency, filed against the Contractor arising out of the performance of this contract. Except as otherwise directed by the Contracting Officer, in writing, the Contractor shall furnish immediately to the Contracting Officer copies of all pertinent papers received by the Contractor with respect to such action. The Contractor, with the prior written authorization of the Contracting Officer, shall proceed with such litigation in good faith and as directed from time to time by the Contracting Officer.

(c) (1) Except as provided in subparagraph (c)(2) below, the Contractor shall procure and maintain such bonds and insurance as required by law or approved, in writing, by the Contracting Officer.

(2) The Contractor may, with the approval of the Contracting Officer, maintain a self-insurance program; provided that, with respect to workers' compensation, the Contractor is qualified pursuant to statutory authority.

(3) All bonds and insurance required by this clause shall be in a form and amount and for those periods as the Contracting Officer may require or approve and with sureties and insurers approved by the Contracting Officer.

(d) The Contractor agrees to submit for the Contracting Officer's approval, to the extent and in the manner required by the Contracting Officer, any other bonds and insurance that are maintained by the Contractor in connection with the performance of this contract and for which the Contractor seeks reimbursement. If an insurance cost (whether a premium for commercial insurance or related to self-insurance) includes a portion covering costs made unallowable elsewhere in the contract, and the share of the cost for coverage for the unallowable cost is determinable, the portion of the cost that is otherwise an allowable cost under this contract is reimbursable at the discretion of the Contracting Officer.

(e) Except as provided in paragraphs (g) and (h) below, or specifically disallowed elsewhere in this contract, the Contractor shall be reimbursed—

(1) For that portion of the reasonable cost of bonds and insurance allocable to this contract required in accordance with contract terms or approved under this clause, and

(2) For liabilities (and reasonable expenses incidental to such liabilities, including litigation costs) to third persons not compensated by insurance or otherwise without regard to and as an exception to Clause 3.4, Obligation of Funds.

(f) The Government's liability under paragraph (e) above is subject to the availability of appropriated funds, provided, however that DOE will use its best efforts to obtain the appropriation of funds for this purpose if not otherwise available. Nothing in this contract shall be construed as implying that the Congress will, at a later date, appropriate funds sufficient to meet deficiencies. Except to the extent released under Clause 3.5, Payment and Advances, the obligations of the Government under paragraph (e) above shall survive completion or termination of the contract.

(g) Notwithstanding any other provision of this contract, the Contractor shall not be reimbursed for liabilities (and expenses incidental to such liabilities, including litigation costs, counsel fees, judgment and settlements)–

(1) Which are otherwise unallowable by law or the provisions of this contract.

(2) For which the Contractor has failed to insure or to maintain insurance as required by law, this contract, or by the written direction of the Contracting Officer.

(h) In addition to the cost reimbursement limitations contained in DEAR 970.3101-3, and notwithstanding any other provision of this contract, the Contractor's liabilities to third persons, including employees, but excluding costs incidental to worker's compensation actions, (and any expenses incidental to such liabilities, including litigation costs, counsel fees, judgments and settlements) shall not be reimbursed if such liabilities were directly caused by the willful misconduct or bad faith of the Contractor's managerial personnel.

(i) The burden of proof shall be upon the Contractor to establish that costs covered by paragraph (h) above are allowable and reasonable if, after an initial review of the facts, the Contracting Officer challenges a specific cost.

(j) (1) All litigation costs, including counsel fees, judgments and settlements shall be differentiated and accounted for by the Contractor so as to be separately identifiable. If the Contracting Officer provisionally disallows such costs, then the Contractor may not use funds advanced by DOE under the contract to finance the litigation without the written approval of the Contracting Officer.

(2) The portion of the cost of insurance obtained by the Contractor that is allocable to coverage of liabilities referenced in subparagraph (g)(1) above is not allowable.

(k) The Contractor may at its own expense and not as an allowable cost procure for its own protection insurance to compensate the Contractor for any unallowable or unreimbursable costs incurred in connection with contract performance.

(l) If any suit or action is filed or any claim is made against the Contractor, the cost and expense of which may be reimbursable to the Contractor under this contract, and the risk of which is then uninsured or is insured for less than the amount claimed, the Contractor shall–

(1) Immediately notify the Contracting Officer and promptly furnish copies of all pertinent papers received;

(2) Authorize DOE representatives to collaborate with in-house or DOE-approved outside counsel in settling or defending the claim or counsel for the insurance carrier in settling or defending the claim when the amount of the liability claimed exceeds the amount of coverage, unless precluded by the terms of the insurance contract; and

(3) Authorize the Government to settle the claim or to defend or represent the Contractor in or to take charge of any litigation, if required by DOE, if the liability is not insured or covered by bond. Where the Government undertakes the settlement or defense of such claim or litigation, any judgments, settlements, costs and expenses arising from such claim or litigation shall be allowable under the contract or shall be paid directly by the Government.

(4) In any action against more than one DOE contractor, DOE may require the Contractor to be represented by common counsel. Counsel for the Contractor may, at the Contractor's own expense, be associated with the DOE representatives in any such claim or litigation.

(m) The government warrants that in any settlement entered into on behalf of the Contractor pursuant to paragraph (l) of this clause, it shall obtain terms and conditions of settlement for the Contractor that are no less favorable than those applicable to the government under the settlement.

CLAUSE 4.2 - DEFENSE AND INDEMNIFICATION OF EMPLOYEES (SPECIAL)

(a) The Parties recognize that, under California law, the Contractor could be required to defend and indemnify its officers and employees from and against civil actions and other claims which arise out of the performance of work under this contract. Except for defense costs made unallowable by Clause 3.2, Allowable Costs (Management and Operating) subparagraph (e)(27) or the Major Fraud Act (41 U.S.C. §256(k)), the costs and expenses, including judgments, resulting from the defense and indemnification of employees from and against such civil actions and claims shall be allowable costs under this contract if incurred pursuant to the terms of Clause 4.1, Insurance-Litigation and Claims.

(b) Costs and expenses, including judgments, resulting from the defense and indemnification of employees from civil fraud actions filed in federal court by the Government will be unallowable where the employee pleads *nolo contendere* or the action results in a judgment or a conviction.

(c) Where in accordance with California law, the Contractor determines to defend an employee in a criminal action, DOE will consider in good faith, on a case-by-case basis, making the costs and expenses, including judgments, resulting from the defense and indemnification of employees allowable.

(d) The Contractor shall immediately furnish the Contracting Officer written notice of any such claim or civil action filed against any employee of the Contractor arising out of the work under this contract together with copies of all pleadings filed. The Contractor shall furnish to the Contracting Officer a written determination by the Contractor's counsel that the defense or indemnity of the employee is required by the provisions of the California Government Code, that the employee was acting within the course and scope of employment at the time of the acts or omissions which gave rise to the claim or civil action, and that the exclusion set forth under California law for fraud, corruption, or malice on the part of the employee does not apply. A copy of any letter asserting a reservation of rights under California law with respect to the defense or indemnification of such employee shall also be provided to the Contracting Officer. The costs associated with the settlement of any such claim or civil action shall not be treated as an allowable cost unless approved in writing by the Contracting Officer.

CLAUSE 4.3 - DEAR 952.250-70 NUCLEAR HAZARDS INDEMNITY AGREEMENT
(JUN 1996)

(a) Authority. This clause is incorporated into this contract pursuant to the authority contained in Subsection 170d. of the Atomic Energy Act of 1954, as amended, (hereinafter called the Act.)

(b) Definitions. The definitions set out in the Act shall apply to this clause.

(c) Financial protection. Except as hereafter permitted or required, in writing, by DOE, the Contractor will not be required to provide or maintain, and will not provide or maintain at Government expense, any form of financial protection to cover public liability, as described in subparagraph (d)(2) below. DOE may, however, at any time require, in writing, that the Contractor provide and maintain financial protection of such a type and in such amount as DOE shall determine to be appropriate to cover such public liability, provided that the costs of such financial protection are reimbursed to the Contractor by DOE.

(d) Indemnification.

(1) To the extent that the Contractor and other persons indemnified are not compensated by any financial protection permitted or required by DOE, DOE will indemnify the Contractor and other persons indemnified against (i) claims for public liability as described in subparagraph (d)(2) below; and (ii) such legal costs of the Contractor and other persons indemnified as are approved by DOE, provided that DOE's liability, including such legal costs, shall not exceed the amount set forth in Section 170e.(1)(B) of the Act in the aggregate for each nuclear incident or precautionary evacuation occurring within the United States or \$100 million in the aggregate for each nuclear incident occurring outside the United States, irrespective of the number of persons indemnified in connection with this contract.

(2) The public liability referred to in (d)(1) above is public liability as defined in the Act which (i) arises out of or in connection with the activities under this contract, including transportation; and (ii) arises out of or results from a nuclear incident or precautionary evacuation, as those terms are defined in the Act.

(e) Waiver of defenses.

(1) In the event of a nuclear incident, as defined in the Act, arising out of nuclear waste activities, as defined in the Act, the Contractor, on behalf of itself and other persons indemnified, agrees to waive any issue or defense as to charitable or governmental immunity.

(2) In the event of an extraordinary nuclear occurrence which:

(i) Arises out of, results from, or occurs in the course of the construction, possession, or operation of a production or utilization facility; or

(ii) Arises out of, results from, or occurs in the course of transportation of source material, by-product material, or special nuclear material to or from a production or utilization facility; or

(iii) Arises out of or results from the possession, operation, or use by the Contractor or a subcontractor of a device utilizing special nuclear material or by-product material, during the course of the contract activity; or

(iv) Arises out of, results from, or occurs in the course of nuclear waste activities, the Contractor, on behalf of itself and other persons indemnified, agrees to waive:

(A) Any issue or defense as to the conduct of the claimant (including the conduct of persons through whom the claimant derives its cause of action) or fault of persons indemnified, including but not limited to:

1. Negligence;
2. Contributory negligence;
3. Assumption of risk; or
4. Unforeseeable intervening causes, whether involving the conduct of a third person or an act of God;

(B) Any issue or defense as to charitable or governmental immunity; and

(C) Any issue or defense based on any statute of limitations, if suit is instituted within three years from the date on which the claimant first knew, or reasonably could have known, of his injury or change and the cause thereof.

The waiver of any such issue or defense shall be effective regardless of whether such issue or defense may otherwise be deemed jurisdictional or relating to an element in the cause of action. The waiver shall be judicially enforceable in accordance with its terms by the claimant against the person indemnified.

(3) The term extraordinary nuclear occurrence means an event which DOE has determined to be an extraordinary nuclear occurrence as defined in the Act. A determination of whether or not there has been an extraordinary nuclear occurrence will be made in accordance with the procedures in 10 CFR Part 840.

(4) For the purposes of that determination, "offsite" as that term is used in 10 CFR Part 840 means away from "the contract location" which phrase means any DOE facility, installation, or site at which work under this contract is being carried on, and any Contractor-owned or controlled facility, installation, or site at which the Contractor is engaged in the performance of work under this contract.

(5) The waivers set forth above:

(i) Shall be effective regardless of whether such issue or defense may otherwise be deemed jurisdictional or relating to an element in the cause of action;

(ii) Shall be judicially enforceable in accordance with its terms by the claimant against the person indemnified;

(iii) Shall not preclude a defense based upon failure to take reasonable steps to mitigate damages;

(iv) Shall not apply to injury or damage to a claimant or to a claimant's property which is intentionally sustained by the claimant or which results from a nuclear incident intentionally and wrongfully caused by the claimant;

(v) Shall not apply to injury to a claimant who is employed at the site of and in connection with the activity where the extraordinary nuclear occurrence takes place, if benefits therefor are either payable or required to be provided under any workmen's compensation or occupational disease law;

(vi) Shall not apply to any claim resulting from a nuclear incident occurring outside the United States;

(vii) Shall be effective only with respect to those obligations set forth in this clause and in insurance policies, contracts or other proof of financial protection; and

(viii) Shall not apply to, or prejudice the prosecution or defense of, any claim or portion of claim which is not within the protection afforded under (A) the limit of liability provisions under Subsection 170e. of the Act, and (B) the terms of this agreement and the terms of insurance policies, contracts, or other proof of financial protection.

(f) Notification and litigation of claim. The Contractor shall give immediate written notice to DOE of any known action or claim filed or made against the Contractor or other person indemnified for public liability as defined in subparagraph (d)(2). Except as otherwise directed by DOE, the Contractor shall furnish promptly to DOE, copies of all pertinent papers received by the Contractor or filed with respect to such actions or claims. DOE shall have the right to, and may collaborate with, the Contractor and any other person indemnified in the settlement or defense of any action or claim and shall have the right to (1) require the prior approval of DOE for the payment of any claim that DOE may be required to indemnify hereunder; and (2) appear through the Attorney General on behalf of the Contractor or other person indemnified in any action brought upon any claim that DOE may be required to indemnify hereunder, take charge of such action, and settle or defend any such action. If the settlement or defense of any such action or claim is undertaken by DOE, the Contractor or other person indemnified shall furnish all reasonable assistance in effecting a settlement or asserting a defense.

(g) Continuity of DOE obligations. The obligations of DOE under this clause shall not be affected by any failure on the part of the Contractor to fulfill its obligation under this contract and shall be unaffected by the death, disability, or termination of existence of the Contractor, or by the completion, termination or expiration of this contract.

(h) Effect of other clauses. The provisions of this clause shall not be limited in any way by, and shall be interpreted without reference to, any other clause of this contract, including Clause 5.10, Disputes, provided, however, that this clause shall be subject to Clause 1.6, Covenant Against Contingent Fees, and Clause 3.1, Accounts, Records, and Inspection, and any provisions that are later added to this contract as required by applicable federal law (including statutes, executive orders and regulations) to be included in Nuclear Hazards Indemnity Agreements.

(i) Reserved. (Note: The Contractor is specifically exempt from civil penalties pursuant to Section 234 of the Price-Anderson Amendments Act of 1988.)

(j) Criminal penalties. Any individual director, officer, or employee of the Contractor or its subcontractors and suppliers who are indemnified under the provisions of this clause are subject to criminal penalties, pursuant to Section 223(c) of the Act for knowing and willful violation of the Atomic Energy Act of 1954, as amended, and applicable DOE nuclear safety-related rules, regulations or orders which violation results in, or, if undetected, would have resulted in a nuclear incident.

(k) Inclusion in subcontracts. The Contractor shall insert this clause in any subcontract which may involve the risk of public liability, as that term is defined in the Act and further described in subparagraph (d)(2) above. However, this clause shall not be included in subcontracts in which the subcontractor is subject to Nuclear Regulatory Commission (NRC) financial protection requirements under Section 170b. of the Act or NRC agreements of indemnification under Section 170c. or k. of the Act for the activities under the subcontract.

(l) Indemnity agreement. This indemnity agreement shall be applicable with respect to nuclear incidents occurring on or after October 26, 1988.

(m) Effect on other contract provisions. To the extent that the Contractor is compensated by any financial protection, or is indemnified pursuant to this clause, or is effectively relieved of public liability by an order or orders limiting same, pursuant to Section 170e. of the Act, the provisions of any clause providing general authority indemnity shall not apply.

CLAUSE 4.4 - DEAR 970.5204-61 COST PROHIBITIONS RELATED TO LEGAL AND OTHER PROCEEDINGS (JUN 1997)

(a) (1) "Conviction," as used in this clause, means a judgment or conviction of a criminal offense by any court of competent jurisdiction, whether entered upon a verdict or a plea, including a conviction due to a plea of *nolo contendere*.

(2) "Costs" include, but are not limited to, administrative and clerical expenses; the cost of legal services, whether performed by in-house or private counsel; the costs of the services of accountants, consultants, or others retained by the Contractor to assist it; all elements of compensation, related costs, and expenses of employees, officers, and directors; and any similar costs incurred before, during, and after commencement of a proceeding which bears a direct relationship to the proceeding.

(3) "Fraud," as used herein, means—

(i) Acts of fraud or corruption or attempts to defraud the Government or to corrupt its agents,

(ii) Acts which constitute a cause for debarment or suspension under FAR 9.406-(2)(a) and FAR 9.407-(2)(a), and

(iii) Acts which violate the False Claims Act, 31 U.S.C. §§3729-3731, or the Anti-kickback Act, 41 U.S.C. §51 and §54.

(4) "Penalty" does not include restitution, reimbursement, or compensatory damages.

(5) "Proceeding" includes an investigation.

(b) Except as otherwise described in this clause, costs incurred in connection with any proceeding brought by a third party in the name of the United States under the False Claims Act, 31 U.S.C. §3730, or costs incurred in connection with any criminal, civil or administrative proceeding commenced by the federal Government, or a state, local or foreign government, are not allowable if the proceeding relates to a violation of, or failure to comply with, a federal, state, local or foreign statute or regulation by the Contractor, and results in any of the following dispositions:

(1) In a criminal proceeding, a conviction.

(2) In a civil or administrative proceeding involving an allegation of fraud or similar misconduct, a determination of Contractor liability.

(3) In the case of any civil or administrative proceeding, the imposition of a monetary penalty.

(4) A final decision by an appropriate federal official to debar or suspend the Contractor, to rescind or void a contract, or to terminate a contract for default by reason of a violation of or failure to comply with a law or regulation.

(5) A disposition by consent or compromise, if the action could have resulted in any of the dispositions described in subparagraphs (b)(1), (2), (3) or (4) above.

(6) Not covered by subparagraphs (b)(1) through (5) above, but where the underlying alleged Contractor misconduct was the same as that which led to a different proceeding whose costs are unallowable by reason of subparagraphs (b)(1) through (5) above.

(c) (1) If a proceeding referred to in paragraph (b) above is commenced by the federal Government and is resolved by consent or compromise pursuant to an agreement entered into by the Contractor and the federal Government, then the costs incurred by the Contractor in connection with such proceeding that are otherwise unallowable under paragraph (b) above may be allowed to the extent specifically provided in such agreement.

(2) In the event of a settlement of any proceeding brought by a third party under the False Claims Act in which the United States did not intervene, reasonable costs incurred by the Contractor in conjunction with such a proceeding that are not otherwise unallowable by regulation or by separate agreement with the United States, may be allowed if the Contracting Officer, in consultation with his or her legal advisor, determines that there was very little likelihood that the third party would have been successful on the merits.

(d) If a proceeding referred to in paragraph (b) above is commenced by a state, local or foreign government, the Contracting Officer may allow the costs incurred in such proceeding, provided the Procurement Executive determines that the costs were incurred as a result of compliance with a specific term or condition of the contract, or specific written direction of the Contracting Officer.

(e) Costs incurred in connection with a proceeding described in paragraph (b) above commenced by the federal government or a state, local, or foreign government and which are not made unallowable by that paragraph, may be allowed by the Contracting Officer only to the extent that:

(1) The total costs incurred are reasonable in relation to the activities required to deal with the proceeding and the underlying cause of action;

(2) Payment of the costs incurred, as allowable and allocable contract costs, is not prohibited by any other provision(s) of this contract;

(3) The costs are not otherwise recovered from the federal Government or a third party, either directly as a result of the proceeding or otherwise; and

(4) The amount of costs allowed does not exceed 80 percent of the total costs incurred and otherwise allowable under the contract. Such amount that may be allowed (up to 80 percent limit) shall not exceed the percentage determined by the Contracting Officer to be appropriate, considering the complexity of procurement litigation, generally accepted principles governing the

award of legal fees in civil actions involving the United States as a party, and such other factors as may be appropriate. The amount of reimbursement allowed for legal costs in connection with any proceeding described in subparagraph (c)(2) above shall be the amount determined to be reasonable by the Contracting Officer but shall not exceed 80 percent of otherwise allowable costs incurred. Agreements reached under paragraph (c) above shall be subject to this limitation. If, however, an agreement explicitly states the amount of otherwise allowable incurred legal fees and limits the allowable recovery to 80 percent or less of the stated legal fees, no additional limitation need be applied.

(f) Contractor costs incurred in connection with the defense of suits brought by employees or former employees of the Contractor under 18 U.S.C. §1031(k), including the cost of all relief necessary to make such employee whole, where the Contractor was found liable or settled, are unallowable.

(g) Costs which may be unallowable under this clause, including directly associated costs, shall be differentiated and accounted for by the Contractor so as to be separately identifiable. During the pendency of any proceeding covered by paragraphs (b) and (f) above, the Contracting Officer shall generally withhold payment and not authorize the use of funds advanced under the contract for the payment of such costs. However, the Contracting Officer may, in appropriate circumstances, provide for conditional payment upon provision of adequate security, or other adequate assurance, and agreements by the Contractor to repay all unallowable costs, plus interest, if the costs are subsequently determined to be unallowable.

CLAUSE 4.5 - COSTS ASSOCIATED WITH DISCRIMINATORY EMPLOYEE ACTIONS (SPECIAL)

(a) Definitions.

(1) "Adverse determination" means:

(i) A recommended decision under 29 CFR Section 24.6 by an Administrative Law Judge that the Contractor has violated the employee protection provisions of the statutes for which the Secretary of Labor has been assigned responsibility;

(ii) An initial agency decision, under 10 CFR Section 708.10 that the Contractor has engaged in conduct prohibited by 10 CFR Section 708.5; or

(iii) A decision against the Contractor by the Secretary under Section 6006 of Public Law 103-355 of the Federal Acquisition Streamlining Act (41 U.S.C. §265).

(2) "Retaliatory or discriminatory act" means discrimination which will support a claim for relief under 29 CFR Part 24, 10 CFR Part 708, or 41 U.S.C. §265.

(3) "Employee action" means an administrative action brought by an employee of the Contractor under 29 CFR Part 24, 10 CFR Part 708, or 41 CFR Section 265.

(4) "Litigation costs" means attorney, consultant, and expert witness fees, support costs, and related expenses incurred in connection with the defense of an employee action as well as the use of Contractor employees and others to investigate the facts and circumstances of and to defend an employee action subject to this clause, but exclude the costs of settlement, judgment, or Secretarial Order.

(b) Segregation of costs. All litigation costs incurred in the investigation and defense of an employee action under this clause shall be differentiated and accounted for by the Contractor so as to be separately identifiable.

(c) Allowability of litigation and other costs.

(1) Litigation costs, including the use of alternative dispute resolution, and settlement costs incurred in connection with an employee action under this clause are allowable if the employee action is resolved prior to an adverse determination provided such costs are otherwise allowable under Clause 4.1, Insurance-Litigation and Claims, and other relevant provisions of this contract.

(2) In actions in which an adverse determination is issued, litigation, settlement, and judgment costs, as well as the cost of complying with any Secretarial Order, are not allowable unless:

(i) The Contractor prevails in a proceeding subsequent to the adverse determination at which a final decision is rendered in the action; or

(ii) The Contracting Officer has, on the basis that it is in the best interest of the Government, approved the Contractor's request to proceed with defense of the action rather than entering into a settlement with the employee or accepting an adverse determination or other interim decision prior to a final decision.

(3) Subsequent to an adverse determination, litigation costs, as well as costs associated with any interim relief granted, may not be paid from contract funds; provided, however, the Contracting Officer may, in appropriate circumstances, provide for conditional payment from contract funds upon provision of adequate security, or other adequate assurance, and agreement by the Contractor to repay all litigation costs if they are subsequently determined to be unallowable.

(4) Litigation costs incurred to defend an appeal by the employee from an interim or final decision in the Contractor's favor are allowable provided they are otherwise allowable under Clause 4.1, Insurance-Litigation and Claims, and other relevant provisions of the contract.

CLAUSE 4.6 - DEAR 970.5204-23 STATE AND LOCAL TAXES (APR 1984) (DEVIATION)

(a) The Contractor agrees to notify the Contracting Officer of any state or local tax, fee, or charge levied or purported to be levied on or collected from the Contractor with respect to the contract work, any transaction thereunder, or property in the custody or control of the Contractor and constituting an allowable item of cost if due and payable, but which the Contractor has reason to believe, or the Contracting Officer has advised the Contractor, is or may be inapplicable or invalid; and the Contractor further agrees to refrain from paying any such tax, fee, or charge unless authorized, in writing, by the Contracting Officer. Any state or local tax, fee, or charge paid with the approval of the Contracting Officer or on the basis of advice from the Contracting Officer that such tax, fee, or charge is applicable and valid, and which would otherwise be an allowable item of cost, shall not be disallowed as an item of cost by reason of any subsequent ruling or determination that such tax, fee, or charge was, in fact, inapplicable or invalid.

(b) The Contractor may take such action as may be requested or approved by the Contracting Officer to cause any state or local tax, fee, or charge which would be an allowable cost to be paid under protest, and may take such action as may be requested or approved by the Contracting Officer to seek recovery of any payments made, including assignment to the Government or its designee of all rights to an abatement or refund thereof, and granting permission for the

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Supplemental Agreement to
Contract No.: DE-AC03-76SF00098

Government to join with the Contractor in any Contractor-initiated proceedings for the recovery thereof or to sue for recovery in the name of the Contractor. If the Contracting Officer requests, the Contractor may institute litigation to enjoin the collection of or to recover payment of any such tax, fee, or charge referred to above, or if a claim or suit is filed against the Contractor for a tax, fee, or charge it has refrained from paying in accordance with this clause, the procedures and requirements of Clause 4.1, Insurance-Litigation and Claims, shall apply and the costs and expenses incurred by the Contractor shall be allowable items of costs, as provided in this contract, together with the amount of any judgment rendered against the Contractor. If the Contractor declines a Government request to initiate litigation, it shall assign its rights and interest in the matter to permit the Government to undertake the action.

(c) The Government shall hold the Contractor harmless from penalties and interest incurred through compliance with this clause. All recoveries or credits in respect of the foregoing taxes, fees, and charges (including interest) shall inure to and be for the sole benefit of the Government.

5.0 CONTRACT ADMINISTRATION

CLAUSE 5.1 - CONTRACT MODIFICATIONS (SPECIAL)

- (a) Contract clauses. Modifications to the terms and conditions of this contract shall be by formal modification in writing and signed by the Parties hereto, except as otherwise provided in paragraphs (b) and (c) below.
- (b) Appendices. Appendices to this contract may be modified from time to time by agreement of the Contracting Officer and the President of the University, or his or her authorized representative, as designated by the President in writing; provided, however, that Appendix C may be modified unilaterally by DOE as provided in subparagraph (e)(1)(i)(B) of Clause 7.2, Rights In Data-Technology Transfer Activities and subparagraph (b)(3) of Clause 7.7, Patent Rights-Nonprofit Management and Operating Contractors.
- (c) Funding. Modifications to deobligate funds from this contract shall be by formal modification in writing and signed by the Contracting Officer and the President of the University, or his or her authorized representative, as designated by the President in writing.
- (d) Incorporating revised DOE clauses, policies, and regulations. The Parties acknowledge that DOE has undertaken a review of DOE policies and regulations applicable to contracts for management and operation of Government-owned facilities. This review may result in revisions to DOE's standard clauses, policies, and regulations which may take effect after the effective date of this Supplemental Agreement. The Parties agree to negotiate in good faith to reach agreement to incorporate such revised clauses, policies, and regulations, as appropriate.

CLAUSE 5.2 - UC/DOE LEADERSHIP COUNCIL AND GROUP (SPECIAL)

- (a) The Parties will establish a Leadership Council for the purpose of:
- (1) Sharing information regarding plans, objectives, problems, and achievements relating to the operation of the Laboratory;
 - (2) Addressing issues arising under this contract; and
 - (3) Providing an alternative forum for the resolution of disputes in accordance with Clause 5.10, Disputes, paragraph (g), when agreed to by the Parties with respect to a particular dispute.
- (b) Each Party shall appoint no fewer than five senior level executives to the Council, such representation to include DOE program management, DOE contract policy management, DOE field management, University corporate management, and Laboratory management. Responsibility for chairing the Council will rotate between the Parties each fiscal year.
- (c) The Contractor's Special Assistant for Laboratory Administration and the Managers of the Albuquerque and Oakland Operations Offices will be *ex officio* members and will rotate as Executive Officer for the Council. The Executive Officer will be responsible for documenting the activities of the Council and such other duties as the Council may assign.
- (d) The Council may establish such subgroups composed of Council members as it deems necessary to accomplish the purposes of the Council.

(e) The Parties will establish a Leadership Group to further the purposes set forth in subparagraph (a) (1) and (2), and to provide an alternate forum to assist in resolving issues involving DOE Directives made applicable to this contract pursuant to Clause 5.5, Laws, Regulations and DOE Directives. The Leadership Group will be composed of the DOE Operations Office Deputy Managers, the Laboratory Deputy Directors, and the Contractor's Special Assistant for Laboratory Administration. Responsibility for chairing the Leadership Group will rotate on a fiscal year basis between the DOE and Contractor.

CLAUSE 5.3 - PROGRAM PERFORMANCE FEE (SPECIAL)

(a) Fee. The Contractor shall receive an annual program performance fee of \$1,400,000 subject to the provisions below. Of the program performance fee \$980,000 shall be at risk in accordance with paragraph (b) below. The Contractor, for exceptional performance, may earn up to \$200,000 in additional fee as described in paragraph (c) below.

(b) Fee at risk. If, during any annual evaluation period, the Contractor's performance in science and technology fails to achieve the "good" rating as determined by DOE, the Contractor's program performance fee will be reduced by \$490,000. If the Contractor's performance in any administration and operations functional area fails to achieve the "good" rating the Contractor's program performance fee shall be reduced by \$54,000 for each administration and operations functional area in which the "good" rating is not achieved. The Contracting Officer shall reduce the Contractor's authorization to draw down program performance fee from the payments cleared financing arrangement by the amount of any fee reduction due pursuant to this provision. In the event that a fee reduction under this provision is greater than the program performance fee due the Contractor, the Contractor agrees to remit the excess amount within 30 days of demand by the Contracting Officer.

(c) Exceptional performance.

(1) If, during any annual evaluation period, the Contractor's performance in science and technology achieves the "outstanding" rating the Contractor shall earn additional fee in the amount of \$60,000 for such an achievement. If during any annual evaluation period, the Contractor's performance in any administration and operations functional area achieves the "outstanding" rating the Contractor shall earn additional fee in the amount of \$15,556 for each such achievement. If the Contractor's performance in any administration and operations functional area achieves the "excellent" rating, the Contractor shall earn additional fee in an amount equal to 25% of the additional fee available for achieving the "outstanding" rating in that functional area. The Contracting Officer will authorize the Contractor to withdraw from the payments cleared financing arrangement the amount of additional fee earned pursuant to this provision within 60 days of DOE's determination of the final evaluation rating. The maximum amount of additional fee earnable under this provision shall be \$200,000.

(2) The allocation of additional fee is premised on the existence of 9 administration and operations functional areas at the Laboratory. In the event that the development of the performance-based management system results in a greater or lesser number of non-science and technology functional areas, the Parties agree to allocate the \$140,000 over the number of administration and operations functional areas actually being used for the evaluation.

(d) Payment of fees. The following terms shall apply in addition to the provisions of paragraph (a) of Clause 3.5, Payments and Advances:

(1) The program performance fee shall be paid to the Contractor from the funds obligated under the contract in monthly installments representing one-twelfth (1/12) of the annual fee.

(2) Fees once paid become the property of the Contractor and are not subject to audit or reduction except as otherwise provided for in this contract.

(e) Proration in the event of termination. In the event the contract is terminated in whole prior to the expiration date, the program performance fee payable under this contract shall be prorated to the date on which performance of work ceases. No proration shall be made for a partial contract termination; however, the Parties agree that if a partial termination substantially modifies the Contractor's performance and financial risk or reduces the magnitude of the work under the contract, an equitable adjustment to the program performance fee payable under this clause shall be made.

(f) Limitation on expenditure of fees. The Contractor, consistent with its nonprofit status, shall apply program performance fee paid under this contract only to the payment of costs arising from, or otherwise reasonably related to, the Contractor's management and oversight of Laboratory operations performed under this contract or under Contracts No. W-7405-ENG-36 and W-7405-ENG-48, including the payment of liability claims and the establishment of necessary and prudent risk pools for future claims incurred either during the performance of the contract or as a consequence of termination of the contract, and the conduct of University-Directed Research and Development of this contract in accordance Clause 1.7, University-Directed Research And Development. At the completion of the contract term or termination of the contract pursuant to Clause 13.2, Termination, such fee amounts as shall remain unexpended for the foregoing purposes, including such amounts as remain in any Contractor established risk pools or reserves, shall be promptly paid or otherwise credited to the Government; nothing, however, herein shall preclude the Contractor from retaining that portion of funds it deems necessary and prudent for the payment of future claims until such time as a final settlement and release shall be agreed upon by the Parties.

CLAUSE 5.4 - LIABILITY LIMITATION (SPECIAL)

(a) Costs subject to limitations. The Parties have agreed that the Contractor's liability for certain obligations it has assumed under this contract shall be limited as set forth in paragraph (b) below. These limitations or caps shall only apply to obligations the Contractor has assumed pursuant to the following clauses (including any related provision in Clause 3.2, Allowable Costs (Management and Operating)):

(1) Clause 3.10, Liability With Respect To Cost Accounting Standards;

(2) Clause 4.4, Cost Prohibitions Related To Legal And Other Proceedings, with respect to defense costs only in those circumstances where the terms of the Major Fraud Act (41 U.S.C. §256(k)) do not expressly prohibit the reimbursement of costs under any circumstance;

(3) Clause 4.5, Costs Associated With Discriminatory Employee Actions;

(4) Clause 6.5, Workmanship and Materials; and

(5) Clause 6.12, Property, subparagraph (g) (1) (iii).

(b) Accounting of costs. These obligations shall apply on a cumulative, per fiscal year basis. The annual cap which will apply shall be based on the year in which the Contractor's act or failure to

act was the proximate cause of the liability assumed by the Contractor pursuant to the provisions of the clauses identified above. Provided, further, that in the event the Contractor's act or failure to act overlaps more than one period, then the applicable cap will be the cap for the last period in which the Contractor's act or failure to act occurred.

(c) Schedule of liability. During each fiscal year of this contract, the Contractor shall be liable for the costs referenced in paragraph (a) above as follows:

Amount of Loss	Contractor Liability
\$1 to 40,000	100%
\$40,001 to 1,000,000	50%
above \$1,000,000	0%

(d) Allowability of costs in excess of cap. Notwithstanding any other provisions of this contract to the contrary, if the cap is reached in any fiscal year, the Contractor shall have no further responsibility for the costs or the liabilities it has assumed pursuant to the provisions enumerated and under the conditions enumerated in paragraph (a) above and costs in excess of the cap for the fiscal year for said liabilities shall be reimbursed or paid by the Government.

(e) Survivability. This provision shall survive termination of the contract, and for claims made thereafter against the Contractor as described in the clauses enumerated in paragraph (a), and the appropriate cap shall be determined in accordance with paragraph (c) above.

CLAUSE 5.5 - DEAR 970.5204-78 LAWS, REGULATIONS, AND DOE DIRECTIVES (JUN 1997) (MODIFIED)

(a) In performing work under this contract, the Contractor shall comply with the requirements of applicable federal, state, and local laws and regulations, unless relief has been granted in writing by the appropriate regulatory agency.

(b) In performing work under this contract, the Contractor shall comply with the requirements of those DOE Directives, or parts thereof, identified in the List of Applicable Directives (List) referred to in Appendix G, DOE Directives. The Contracting Officer may, from time to time and at any time, revise the List by unilateral modification to the contract to add, modify, or delete specific requirements; provided, however, that no directive added to the List shall in any manner modify the rights and obligations of the Parties except as set forth elsewhere in this contract.

(c) Prior to revising the List, the Contracting Officer shall notify the Contractor, in writing, of DOE's intent to revise the List and provide the Contractor with the opportunity to:

(1) Assess the effect of the Contractor's compliance with the revised List on contract cost and funding, technical performance, and implementation schedule for directives on the List; and

(2) Identify any potential inconsistencies between the revised List and the other terms and conditions of the contract, including an alternative set of requirements incorporated by reference in accordance with paragraph (f) below.

(d) Within 30 days after receipt of the Contracting Officer's notice, the Contractor shall advise the Contracting Officer, in writing, of the potential impact of the Contractor's compliance with the revised List, including the matters identified in paragraph (c) above.

(e) Based on the information provided by the Contractor and any other information available, the Contracting Officer shall decide whether to revise the List, and so advise the Contractor not later than 30 days prior to the effective date of the revision of the List. The Contractor and the Contracting Officer shall identify and, if appropriate, agree to any changes to other contract terms and conditions, including cost and schedule, associated with the revision of the List pursuant to Clause 5.6, Changes. No DOE directive shall be considered a requirement of this contract unless it has been included in the List in accordance with the procedures set out in this clause.

(f) Environmental, safety, and health (ES&H) requirements applicable to this contract may be determined by a DOE approved process to evaluate the work and the associated hazards and identify an appropriately tailored set of standards, practices, and controls, such as a tailoring process included in a DOE approved Safety Management System implemented under Clause 6.7, Integration of Environment, Safety, and Health into Work Planning and Execution. When such a process is used, the set of tailored ES&H requirements, as approved by DOE pursuant to the process, shall be incorporated into the List as contract requirements with full force and effect. These requirements shall supersede, in whole or in part, the contractual environmental, safety, and health requirements previously made applicable to the contract by the List.

(g) The Contractor shall be responsible for compliance with the requirements made applicable to this contract, for work performed at the Laboratory regardless of the performer of the work. Consequently, the Contractor shall be responsible for flowing down the necessary provisions to subcontracts at any tier to which the Contractor determines such requirements apply.

CLAUSE 5.6 - DEAR 970.5204-11 CHANGES (APR 1984) (DEVIATION)

(a) Changes and adjustment. If DOE desires to require additional work or direct the omission or variation in the work covered by the contract, the Contracting Officer shall notify the Contractor, in writing, and the Contracting Officer and the Contractor shall endeavor to agree on any modifications of the Statement of Work. If the Parties are unable to agree upon such modifications of the Statement of Work, the Contracting Officer may direct, in writing, any such change which is within the general scope of the contract. If any such agreed or directed change results in a material change in the scope of the work to be performed under the Statement of Work or substantially affects the rights or liabilities of the Parties to this contract, an adjustment to the terms and conditions of this contract shall be made in accordance with the agreement of the Parties and the contract shall be modified, in writing, accordingly.

(b) Work to continue. Nothing contained in this clause shall excuse the Contractor from proceeding with the prosecution of the work in accordance with the requirements of any direction hereunder.

CLAUSE 5.7 - DEAR 970.5204-28 ASSIGNMENT (APR 1984)

Neither this contract nor any interest therein nor claim thereunder shall be assigned or transferred by the Contractor except as expressly authorized, in writing, by the Contracting Officer.

CLAUSE 5.8 - DEAR 970.5204-42 KEY PERSONNEL (APR 1984) (DEVIATION)

It having been determined that the incumbent Laboratory Director and the incumbent Laboratory Deputy Directors, or persons approved by the Contracting Officer as persons of substantially equal abilities and qualifications, are necessary for the successful performance of this contract, the Contractor agrees to assign such employees or persons to the performance of the work under this contract and shall not reassign or remove them, except for disciplinary reasons, without prior consultation with the Contracting Officer. Whenever, for any reason, one of the aforementioned employees is unavailable for assignment for work under the contract, the Contractor shall, with the approval of the Contracting Officer, replace such employee with an employee of substantially equal abilities and qualifications.

CLAUSE 5.9 - DEAR 970.5204-52 FOREIGN TRAVEL (APR 1984) (MODIFIED)

(a) Unless delegated to the Contractor by the Contracting Officer, foreign travel, when charged directly, shall be subject to the prior approval of the Contracting Officer regardless of whether funds for such travel are contained in an approved budget. Foreign travel is defined in applicable DOE Directives.

(b) Request for approval, if required, shall be submitted in accordance with DOE procedures prior to the planned departure date, be on a Request for Approval of Foreign Travel form, and when applicable, include a notification of proposed sensitive foreign nations travel.

CLAUSE 5.10 - FAR 52.233-1 DISPUTES (OCT 1995) ALTERNATE I (DEC 1991)

(a) This contract is subject to the Contract Disputes Act of 1978, as amended (41 U.S.C. §§601-613).

(b) Except as provided in the Act, all disputes arising under or relating to this contract shall be resolved under this clause.

(c) "Claim", as used in this clause, means a written demand or written assertion by one of the contracting Parties seeking, as a matter of right, the payment of money in a sum certain, the adjustment or interpretation of contract terms, or other relief arising under or relating to this contract. A claim arising under a contract, unlike a claim relating to that contract, is a claim that can be resolved under a contract clause that provides for the relief sought by the claimant. However, a written demand or written assertion by the Contractor seeking the payment of money exceeding \$100,000 is not a claim under the Act until certified as required by subparagraph (d)(2) below. A voucher, invoice, or other routine request for payment that is not in dispute when submitted is not a claim under the Act. The submission may be converted to a claim under the Act, by complying with the submission and certification requirements of this clause, if it is disputed either as to liability or amount or is not acted upon in a reasonable time.

(d) (1) A claim by the Contractor shall be made, in writing, and unless otherwise stated in the contract, submitted within six years after accrual of the claim to the Contracting Officer for a written decision. A claim by the Government against the Contractor shall be subject to a written decision by the Contracting Officer.

(2) (i) The Contractor shall provide the certification specified in subparagraph (d)(2)(iii) below when submitting any claim-

(A) Exceeding \$100,000; or

(B) Regardless of the amount claimed, when using--

1. Arbitrations conducted pursuant to 5 U.S.C. §§575-580; or

2. Any other alternative means of dispute resolution (ADR) technique that the agency elects to handle in accordance with the Administrative Dispute Resolution Act (ADRA).

(ii) The certification requirement does not apply to issues in controversy that have not been submitted as all or part of a claim.

(iii) The certification shall state as follows: "I certify that the claim is made in good faith; that the supporting data are accurate and complete to the best of my knowledge and belief; that the amount requested accurately reflects the contract adjustment for which the Contractor believes the Government is liable; and that I am duly authorized to certify the claim on behalf of the Contractor".

(3) The certification may be executed by any person duly authorized to bind the Contractor with respect to the claim.

(e) For Contractor claims of \$100,000 or less, the Contracting Officer must, if requested in writing by the Contractor, render a decision within 60 days of the request. For Contractor-certified claims over \$100,000, the Contracting Officer must, within 60 days, decide the claim or notify the Contractor of the date by which the decision will be made.

(f) The Contracting Officer's decision shall be final unless the Contractor appeals or files a suit as provided in the Act.

(g) If the claim by the Contractor is submitted to the Contracting Officer or a claim by the Government is presented to the Contractor, the Parties, by mutual consent, may agree to use ADR. If the Contractor refuses an offer for alternative dispute resolution, the Contractor shall inform the Contracting Officer, in writing, of the Contractor's specific reasons for rejecting the request. When using arbitration conducted pursuant to 5 U.S.C. §§575-580, or when using any other ADR technique that the agency elects to handle in accordance with the ADRA, any claim, regardless of amount, shall be accompanied by the certification described in subparagraph (d)(2)(iii) above, and executed in accordance with subparagraph (d)(3) above.

(h) The Government shall pay interest on the amount found due and unpaid from (1) the date the Contracting Officer receives the claim (certified, if required), or (2) the date payment otherwise would be due, if that date is later, until the date of payment. With regard to claims having defective certifications, as defined in FAR 33.201, interest shall be paid from the date that the Contracting Officer initially receives the claim. Simple interest on claims shall be paid at the rate, fixed by the Secretary of the Treasury as provided in the Act, which is applicable to the period during which the Contracting Officer receives the claim and then at the rate applicable for each six-month period as fixed by the Treasury Secretary during the pendency of the claim.

(i) The Contractor shall proceed diligently with performance of this contract, pending final resolution of any request for relief, claim, appeal, or action arising under or relating to the contract, and comply with any decision of the Contracting Officer.

CLAUSE 5.11 - FAR 52.242-1 NOTICE OF INTENT TO DISALLOW COSTS (APR 1984)

(a) Notwithstanding any other clause of this contract-

(1) The Contracting Officer may, at any time, issue to the Contractor a written notice of intent to disallow specified costs incurred or planned for incurrence under this contract that have been determined not to be allowable under the contract terms; and

(2) The Contractor may, after receiving a notice under subparagraph (1) above, submit a written response to the Contracting Officer, with justification for allowance of the costs. If the Contractor does respond within 60 days, the Contracting Officer shall, within 60 days of receiving the response, either make a written withdrawal of the notice or issue a written decision.

(b) Failure to issue a notice under this Notice of Intent to Disallow Costs clause shall not affect the Government's rights to take exception to incurred costs.

CLAUSE 5.12 - FAR 52.242-15 STOP-WORK ORDER (AUG 1989) ALTERNATE I (APR 1984) (DEVIATION)

(a) The Contracting Officer may, at any time, by written order to the Contractor, require the Contractor to stop all, or any part, of the work called for by this contract for a period of 90 days after the order is delivered to the Contractor, and for any further period to which the Parties may agree. The order shall be specifically identified as a stop-work order issued under this clause. Upon receipt of the order, the Contractor shall immediately comply with its terms and take all reasonable steps to minimize the incurrence of costs allocable to the work covered by the order during the period of work stoppage. Within a period of 90 days after a stop-work is delivered to the Contractor, or within any extension of that period to which the Parties shall have agreed, the Contracting Officer shall either-

(1) Cancel the stop-work order; or

(2) Terminate the work covered by the order as provided in Clause 13.2, Termination.

(b) If a stop-work order issued under this clause is canceled or the period of the order or any extension thereof expires, the Contractor shall resume work. The Contracting Officer shall make an adjustment in any of the terms of the contract that may be affected, and the contract shall be modified, in writing, accordingly.

(c) If a stop-work order is not canceled and the work covered by the order is terminated by the Government in accordance with Clause 13.2, Termination, the Contracting Officer shall allow reasonable costs resulting from the stop-work order in arriving at the termination settlement.

CLAUSE 5.13 - FAR 52.246-9 INSPECTION OF RESEARCH AND DEVELOPMENT (SHORT FORM) (APR 1984)

The Government has the right to inspect and evaluate the work performed or being performed under the contract, and the premises where the work is being performed, at all reasonable times and in a manner that will not unduly delay the work. If the Government performs inspection or evaluation on the premises of the Contractor or a subcontractor, the Contractor shall furnish and shall require subcontractors to furnish all reasonable facilities and assistance for the safe and convenient performance of these duties.

6.0 SITE MANAGEMENT

CLAUSE 6.1 - LABORATORY FACILITIES (SPECIAL)

(a) DOE agrees to continue to furnish and make available to the Contractor, for its possession and use in performing the work under this contract, the Laboratory facilities designated as follows:

(1) The Government-owned or leased land, buildings, utilities, equipment, and other facilities situated at the Lawrence Berkeley National Laboratory in the State of California.

(2) Government-owned or leased facilities at such other locations as may be approved by DOE for use under this contract.

(b) DOE reserves the right to make part of the above-mentioned land or facilities available to other Government agencies or other users on the basis that the responsibilities and undertakings of the Contractor will not be unreasonably interfered with. Before exercising its right to make any part of the land or facilities available to another agency or user, DOE will confer with the Contractor.

(c) Subject to mutual agreement, other facilities may be used in the performance of the work under this contract.

CLAUSE 6.2 - PUBLIC AFFAIRS AND OUTREACH (SPECIAL)

(a) Public affairs and news releases.

(1) In the conduct of its public affairs program the Contractor shall adhere to the DOE policy of openness in public information, inquiry, and involvement and will coordinate with DOE regarding activities covered in this clause to achieve public policy objectives and ensure that information provided to the public related to the operation of the Laboratory is accurate and provided on a timely basis. The Parties will exercise diligence to inform each other, in advance, of significant public affairs activities and newsworthy events, including major news media activities, news releases, major announcements, and significant interactions with national and local news media. When such advance exchange is not possible operationally, each Party shall promptly furnish the released information to the other Party concurrent with its release.

(2) The Contractor shall not release information attributed directly to DOE, or which purports to represent DOE policy without advance concurrence of DOE.

(3) In all public releases of information related to the Laboratory, identification of the facility as a DOE facility shall be made prominently.

(4) Nothing in this clause is intended to limit the right of the Contractor to publicize results of its scientific research.

(b) Stakeholder participation.

(1) The Contractor shall provide a process by which citizens, planners, elected officials, regulators, and others are able to share with the Contractor their experience, knowledge, and recommendations about Laboratory programs. Such process should include a variety of public

forums including small group briefings, electronic communications, and focused public meetings to discuss the values and needs of the local community and surrounding communities.

(2) In soliciting stakeholder participation as provided for in subparagraph (b)(1), the Contractor agrees that it will make no statements of DOE policy or enter into any commitments with external parties regarding DOE actions without DOE concurrence.

CLAUSE 6.3 - ACCESS OF FOREIGN SCIENTISTS, GRADUATES AND POST DOCTORAL STUDENTS TO LABORATORY FACILITIES (SPECIAL)

(a) The Contractor and DOE recognize that the Contractor in its performance of the work under this contract brings a Contractor culture of freedom of inquiry and a quest for new knowledge of the highest order which has resulted in significant advances in science. An important facet of this culture is the role of the graduate student, post-doctoral student, faculty member, and visiting scientist.

(b) The Contractor promotes the advancement of science and technology in the United States by utilizing, among other things, the talents, capabilities and ideas of foreign graduate and post-doctoral students, faculty, and visiting scientists. The Contractor, in furtherance of the contract work, involves these individuals in unclassified research activities of the Laboratory. DOE acknowledges the importance of these assignments to promote intellectual freedom, to provide access to the talent of foreign scientists to further Laboratory programmatic objectives, and to enhance United States' scientific and technical capabilities to compete internationally. Therefore, for purposes of engaging in collaborative research and education, the Contractor may assign foreign faculty, graduate and post-doctoral students and visiting scientists to the Laboratory and give access to Laboratory locations freely, subject to certain security and export control laws and applicable DOE Directives.

CLAUSE 6.4 - DEAR 970.5204-12 CONTRACTOR'S ORGANIZATION (JUL 1994) (MODIFIED)

(a) Organization chart. As promptly as possible after the execution of this contract, the Contractor shall furnish to the Contracting Officer a chart showing the names, duties, and organization of managerial personnel, as defined in Clause 1.1, Definitions, to be employed in connection with the work, and shall furnish from time to time supplementary information reflecting changes therein.

(b) Supervisory representative of Contractor. Unless otherwise directed by the Contracting Officer, a competent full-time resident supervisory representative of the Contractor satisfactory to the Contracting Officer, *i.e.*, the Laboratory Director, shall be in charge of all work under this contract

(c) Employee standards. The Contractor shall be responsible for maintaining satisfactory standards of employee competency, conduct, and integrity and shall be responsible for taking such disciplinary action with respect to its employees as may be necessary. The Contractor shall establish such standards and procedures as are necessary to implement effectively the provisions set forth in DEAR 970.2272, and such standards and procedures shall be subject to the approval of the Contracting Officer.

(d) Contractor access to the Laboratory. Subject to the security requirements of DOE, individual Regents of the University, the Officers of the University, and other administrators of the University, and various members of the University faculty engaged in scientific and technical

studies may visit the Laboratory site(s) and advise and assist in the performance of work under this contract. Members of the Laboratory staff may visit the University's several academic institutions and participate in studies and discussions.

CLAUSE 6.5 - DEAR 970.5204-25 WORKMANSHIP AND MATERIALS (APR 1984)
(DEVIATION)

The following provisions shall apply to all facilities maintenance and construction work under this contract.

(a) Grade of workmanship and materials. Unless otherwise directed by the Contracting Officer or expressly provided for by specifications issued under this contract:

- (1) All workmanship shall be first class; and
- (2) All articles, equipment and materials incorporated in the work are to be:
 - (i) Suitable for the purpose;
 - (ii) In accordance with any applicable drawings and specifications; and

(iii) Installed to the satisfaction and with the approval of the Contracting Officer if such right of approval is specifically required by the Contracting Officer. Where equipment, materials, or articles are referred to in the specifications as "equal to" any particular standard, the Contracting Officer shall decide the question of equality.

(b) Samples and tests results. If the Contracting Officer so requires, the Contractor shall submit for approval samples of, or test results on, any materials proposed to be incorporated in the work before making any commitment for the purchase of such materials.

(c) Flowdown provision. Except as otherwise directed by the Contracting Officer, the Contractor shall insert this clause in all facilities maintenance and construction subcontracts.

CLAUSE 6.6 - DEAR 970.5204-43 OTHER GOVERNMENT CONTRACTORS (APR 1994)
(MODIFIED)

The Government may undertake or award other contracts for additional work and the Contractor agrees to fully cooperate with such other contractors and Government employees. The Contractor shall not commit or permit any act which will interfere with the performance of work by any other contractor or by Government employees.

CLAUSE 6.7 - DEAR 970.5204-2 INTEGRATION OF ENVIRONMENT, SAFETY, AND
HEALTH INTO PLANNING AND EXECUTION (JUN 1997)

(a) For the purposes of this clause, safety encompasses environment, safety and health, including pollution prevention and waste minimization; and employees include subcontractor employees.

(b) In performing work under this contract, the Contractor shall perform work safely, in a manner that ensures adequate protection for employees, the public, and the environment and shall be accountable for the safe performance of work. The contractor shall exercise a degree of care

commensurate with the work and the associated hazards. The Contractor shall ensure that management of environment, safety, and health (ES&H) functions and activities becomes an integral but visible part of the Contractor's work planning and execution processes. The Contractor shall, in the performance of work, ensure that:

(1) Line management is responsible for the protection of employees, the public, and the environment. Line management includes those Contractor and subcontractor employees managing or supervising employees performing work.

(2) Clear and unambiguous lines of authority and responsibility for ES&H are established and maintained at all organizational levels.

(3) Personnel possess the experience, knowledge, skills and abilities that are necessary to discharge their responsibilities.

(4) Resources are effectively allocated to address ES&H, programmatic, and operational considerations. Protecting employees, the public, and the environment is a priority whenever activities are planned and performed.

(5) Before work is performed, the associated hazards are evaluated and an agreed-upon set of ES&H standards and requirements are established which, if properly implemented, provide adequate assurance that the employees, the public, and the environment are protected from adverse consequences.

(6) Administrative and engineering controls to prevent and mitigate hazards are tailored to the work being performed and associated hazards. Emphasis should be on designing the work and/or controls to reduce or eliminate the hazards and to prevent accidents and unplanned releases and exposures.

(7) The conditions and requirements to be satisfied for operations to be initiated and conducted are established and agreed-upon by DOE and the Contractor. These agreed upon conditions and requirements are requirements of the contract and binding upon the Contractor. The extent of documentation and level of authority for agreement shall be tailored to the complexity and hazards associated with the work and shall be established in a Safety Management System.

(c) The Contractor shall manage and perform work in accordance with a documented Safety Management System (System), that fulfills all conditions in paragraph (b) above at a minimum. Documentation of the System shall describe how the Contractor will:

- (1) Define the scope of work;
- (2) Identify and analyze hazards associated with the work;
- (3) Develop and implement hazard controls;
- (4) Perform work within controls; and
- (5) Provide feedback on adequacy of controls and continue to improve safety management.

(d) The System shall describe how the Contractor will establish, document, and implement safety performance objectives, performance measures, and commitments in response to DOE program and budget execution guidance while maintaining the integrity of the System. The System shall also describe how the Contractor will measure system effectiveness.

(e) The Contractor shall submit to the Contracting Officer documentation of its System for review and approval. Dates for submittal, discussions, and revisions to the System will be established by the Contracting Officer. Guidance on the preparation, content, and review and approval of the System will be provided by the Contracting Officer. On an annual basis, the Contractor shall review and update, for DOE approval, its internal safety performance objectives, performance measures, and commitments consistent with and in response to DOE's program and budget execution guidance and direction. Resources shall be identified and allocated to meet the safety objectives and performance commitments as well as to maintain the integrity of the entire System. Accordingly, the System shall be integrated with the Contractor's business processes for work planning, budgeting, authorization, execution, and change control.

(f) The Contractor shall comply with, and assist DOE in complying with, all applicable laws, regulations, and DOE Directives. The Contractor shall cooperate with regulatory authorities having jurisdiction over ES&H matters under this contract.

(g) The Contractor shall promptly evaluate and resolve any noncompliance with applicable ES&H requirements and the System. If the Contractor fails to provide resolution or if, at any time, the Contractor's acts or failure to act cause substantial harm or an imminent danger to the environment or health and safety of employees or the public, the Contracting Officer may issue an order stopping work in whole or in part. Any stop work order issued by a Contracting Officer under this clause (or issued by the Contractor to a subcontractor) shall be without prejudice to any other legal or contractual rights of the Government. In the event that the Contracting Officer issues a stop work order an order authorizing the resumption of the work may be issued at the discretion of the Contracting Officer. The Contractor shall not be entitled to an extension of time or additional fee or damages by reason of, or in connection with, any work stoppage ordered in accordance with this clause.

(h) The Contractor is responsible for ensuring compliance with the ES&H requirements applicable to this contract at the facilities identified in Clause 6.1, Laboratory Facilities, regardless of the performer of the work. To the extent permitted by law, this paragraph is not intended to attribute any liability to the Contractor in the absence of a specific finding of fault on the part of the Contractor.

(i) The Contractor shall include a clause substantially the same as this clause in subcontracts involving complex or hazardous work on-site at a DOE-owned or DOE -leased facility. Such subcontracts shall provide for the right to stop work under the conditions described in paragraph (g) above. Depending on the complexity and hazards associated with the work, the Contractor may require that the subcontractor submit a Safety Management System for Contractor's review and approval.

CLAUSE 6.8 - DEAR 970.5204-29 PERMITS OR LICENSES (APR 1984) (DEVIATION)

(a) As part of the Contractor's obligation to comply with all applicable laws and regulations under Clause 5.5, Laws, Regulations and DOE Directives, and Clause 6.7, Integration of Environment, Safety and Health into Work Planning and Execution, the Contractor's obligations include, but are not limited to, the identification of required permits and licenses, the compilation of information and data required for applications for permits and licenses, and the provision of any supplemental information required by law or regulation as requested by the regulatory authority having jurisdiction. The Contracting Officer shall promptly inform the Contractor of any required permit or license of which DOE is aware or becomes aware.

(b) The Parties commit to full cooperation with regard to acquiring any necessary permits or licenses. It is recognized that certain permits will be obtained jointly and others will be obtained by either Party individually.

CLAUSE 6.9 - FAR 52.223-2 CLEAN AIR AND WATER (APR 1984)

(a) Definitions.

- (1) "Air Act," as used in this clause, means the Clean Air Act (42 U.S.C. §§7401 *et seq.*).
- (2) "Clean air standards," as used in this clause, means:
 - (i) Any enforceable rules, regulations, guidelines, standards, limitations, orders, controls, prohibitions, work practices, or other requirements contained in, issued under, or otherwise adopted under the Air Act or Executive Order 11738;
 - (ii) An applicable implementation plan as described in Section 110(d) of the Air Act (42 U.S.C. §7410(d));
 - (iii) An approved implementation procedure or plan under Section 111(c) or Section 111(d) of the Air Act (42 U.S.C. §7411(c) or (d)); or
 - (iv) An approved implementation procedure under Section 112(d) of the Air Act (42 U.S.C. §7412(d)).
- (3) "Clean water standards," as used in this clause, means any enforceable limitation, control, condition, prohibition, standard, or other requirement promulgated under the Water Act or contained in a permit issued to a discharge by the Environmental Protection Agency (EPA) or by a state under an approved program, as authorized by Section 402 of the Water Act (33 U.S.C. §1342), or by local government to ensure compliance with pretreatment regulations as required by Section 307 of the Water Act (33 U.S.C. §1317).
- (4) "Compliance," as used in this clause, means compliance with:
 - (i) Clean air or water standards; or
 - (ii) A schedule or plan ordered or approved by a court of competent jurisdiction, the Environmental Protection Agency, or an air or water pollution control agency under the requirements of the Air Act or Water Act and related regulations.
- (5) "Facility," as used in this clause, means any building, plant, installation, structure, mine, vessel or other floating craft, location, or site of operations, owned, leased, or supervised by a contractor or subcontractor, used in the performance of a contract or subcontract. When a location or site of operations includes more than one building, plant, installation, or structure, the entire location or site shall be deemed a facility except when the Administrator, or a designee, of the Environmental Protection Agency, determines the independent facilities are collocated in one geographical area.
- (6) "Water Act," as used in this clause, means Clean Water Act (33 U.S.C. §§1251, *et seq.*).

(b) The Contractor agrees:

(1) To comply with the requirements of Section 114 of the Clean Air Act (42 U.S.C. §7414) and Section 308 of the Clean Water Act (33 U.S.C. §1318), and all regulations and guidelines issued to implement those acts;

(2) That no portion of the work required by this contract will be performed in a facility listed on the Environmental Protection Agency List of Violating Facilities unless and until the EPA eliminates the name of the facility from the listing;

(3) To use best efforts to comply with clean air standards and clean water standards at the facility in which the contract is being performed; and

(4) To insert the substance of this clause into any nonexempt subcontract, including this subparagraph (b)(4).

CLAUSE 6.10 - FAR 52.223-3 HAZARDOUS MATERIAL IDENTIFICATION AND MATERIAL SAFETY DATA (JAN 1997) (MODIFIED)

(a) The Contractor shall submit a Material Safety Data Sheet (Department of Labor Form OSHA-20), as prescribed in Federal Standard No. 313B, for all hazardous material, whether or not listed in Appendix A to that Standard. This obligation applies to all materials delivered under this contract which will involve exposure to hazardous materials or items containing these materials.

(b) "Hazardous material," as used in this clause, is as defined in Federal Standard No. 313B, in effect on the date of Supplemental Agreement.

(c) Neither the requirements of this clause nor any act or failure to act by the Government shall relieve the Contractor of any responsibility or liability for the safety of Government, Contractor, or subcontractor personnel or property.

(d) Nothing contained in this clause shall relieve the Contractor from complying with applicable federal, state, and local laws, codes, ordinances, and regulations (including the obtaining of licenses and permits) in connection with hazardous material.

(e) The Government's rights in data furnished under this contract with respect to hazardous material are as follows:

(1) To use, duplicate, and disclose any data to which this clause is applicable. The purposes of this right are to (i) apprise personnel of the hazards to which they may be exposed in using, handling, packaging, transporting, or disposing of hazardous material; (ii) obtain medical treatment for those affected by the material; and (iii) have others use, duplicate, and disclose the data for the Government for these purposes.

(2) To use, duplicate, and disclose data furnished under this clause, in accordance with subparagraph (e)(1) above, notwithstanding any other clause of this contract providing for rights in data.

(3) To use similar or identical data acquired from other sources.

(f) (1) The data to which the Government has the rights described in paragraph (e) above, shall not be duplicated, disclosed, or released outside the Government, in whole or in part for any acquisition or manufacturing purpose, if the following legend is marked on each piece of data to which this clause applies:

This is furnished under United States Government Contract No. _____ and shall not be used, duplicated, or disclosed for any acquisition or manufacturing purpose without the permission of _____. This legend shall be marked on any reproduction of this data.

(End of legend)

(2) The Contractor shall not place the legend or any other restrictive legend on any data which (i) the Contractor or any subcontractor previously delivered to the Government without limitations or (ii) should be delivered without limitations under the conditions specified in the clause at FAR 52.227-14, Rights in Data - General.

(g) The Contractor shall insert this clause, including this paragraph (g), with appropriate changes in the designation of the parties, in subcontracts at any tier under this contract involving hazardous material.

CLAUSE 6.11 - FAR 52.223-10 WASTE REDUCTION PROGRAM (MAY 1995)

(a) "Waste reduction," as used in this clause, means decreasing the amount of waste being generated through waste prevention, recycling, or purchasing recycled and environmentally preferable products.

(b) Consistent with the requirements of Section 701 of Executive Order 12873, the Contractor shall establish a program to promote cost-effective waste reduction in all operations and facilities covered by this contract. Any such program shall comply with applicable federal, state, and local requirements.

CLAUSE 6.12 - DEAR 970.5204-21 PROPERTY (JUN 1997) (MODIFIED)

(a) Furnishing of Government property. The Government reserves the right to furnish any property or services required for the performance of the work under this contract.

(b) Title to property. Except as otherwise provided by the Contracting Officer, title to all materials, equipment, supplies, and tangible personal property of every kind and description purchased by the Contractor, for which the Contractor is reimbursed as a direct cost under this contract, shall pass directly from the vendor to the Government. The Government reserves the right to inspect, and to accept or reject, any item of such property. The Contractor shall make such disposition of rejected items as the Contracting Officer shall direct. Title to other property, the cost of which is reimbursable to the Contractor under this contract, shall pass to and vest in the Government upon (1) issuance for use of such property in the performance of this contract, or (2) commencement of processing or use of such property in the performance of this contract, or (3) reimbursement of the cost thereof by the Government, whichever first occurs. Property furnished by the Government and property purchased or furnished by the Contractor, title to which vests in the Government, under this paragraph are hereinafter referred to as Government property. Title to Government property shall not be affected by the incorporation of the property into or the attachment of it to any property not owned by the Government, nor shall such Government

property or any part thereof, be or become a fixture or lose its identity as personality by reason of affixation to any realty.

(c) Identification. To the extent directed by the Contracting Officer, the Contractor shall identify Government property coming into the Contractor's possession or custody, by marking and segregating in such a way, satisfactory to the Contracting Officer, as shall indicate its ownership by the Government.

(d) Disposition. The Contractor shall make such disposition of Government property which has come into the possession or custody of the Contractor under this contract as the Contracting Officer may direct during the progress of the work or upon completion or termination of this contract. The Contractor may, upon such terms and conditions as the Contracting Officer may approve, sell, or exchange such property, or acquire such property at a price agreed upon by the Contracting Officer and the Contractor as the fair value thereof. The amount received by the Contractor as the result of any disposition, or the agreed fair value of any such property acquired by the Contractor, shall be applied in reduction of costs allowable under this contract or shall be otherwise credited to the account of the Government, as the Contracting Officer may direct. Upon completion of the work or termination of this contract, the Contractor shall render an accounting, as prescribed by the Contracting Officer, of all Government property which had come into the possession or custody of the Contractor under this contract.

(e) Protection of Government property. The Contractor shall take all reasonable precautions, and such other actions as may be directed by the Contracting Officer, or in the absence of such direction, in accordance with sound business practice, to safeguard and protect Government property in the Contractor's possession or custody.

(f) Management of high-risk property.

(1) The Contractor shall ensure that adequate safeguards are in place, and adhered to, for the handling, control, and disposition of high risk property consistent with the policies, practices, and procedures for property management approved by the Contracting Officer.

(2) High-risk property is property the loss, or the unintended or premature transfer, of which could pose risks to the public, the environment, or national security interests. High-risk property includes proliferation-sensitive, nuclear-related, dual-use, export-controlled, chemically or radioactively contaminated, hazardous, and specially designed and prepared property, including property on the militarily critical technologies list.

(g) Risk of loss of Government property.

(1) The Contractor shall not be liable for the loss or destruction of, or damage to, Government property unless such loss, destruction, or damage was caused by any of the following:

- (i) Willful misconduct or bad faith on the part of the Contractor's managerial personnel;
- (ii) Failure of Contractor managerial personnel to comply with any appropriate written direction of the Contracting Officer to safeguard such property under paragraph (e) and (f) above; or
- (iii) Failure of Contractor managerial personnel to establish, administer or properly maintain an approved property management system in accordance with paragraph (j)(1) below.

(2) If, after an initial review of the facts the Contracting Officer informs the Contractor that there is reason to believe that the loss, destruction of, or damage to the government property results from conduct falling within one of the categories set forth above, the burden of proof shall be upon the Contractor to show that the Contractor should not be required to compensate the government for the loss, destruction, or damage.

(3) In the event that the contractor is determined liable for the loss, destruction, or damage to government property in accordance with subparagraph (g)(1) above, the Contractor's compensation to the Government shall be determined as follows:

(i) For damaged property, the compensation shall be the cost of repairing such damaged property, plus any costs incurred for temporary replacement of the damaged property. However, the value of repair costs shall not exceed the fair market value of the damaged property. If a fair market value of the property does not exist, the Contracting Officer shall determine the value of such property, consistent with all relevant facts and circumstances.

(ii) For destroyed or lost property, the compensation shall be the fair market value of such property at the time of such loss or destruction, plus any costs incurred for temporary replacement and costs associated with the disposition of destroyed property. If a fair market value of the property does not exist, the Contracting Officer shall determine the value of such property, consistent with all relevant facts and circumstances.

(4) The portion of the cost of insurance obtained by the Contractor that is allocable to coverage of risks of loss referred to in subparagraph (g)(1) above is not allowable.

(h) Steps to be taken in event of loss. In the event of any damage, destruction, or loss to Government property in the possession or custody of the Contractor, with a value above the threshold set out in the Contractor's approved property management system, the Contractor:

(1) Shall immediately inform the Contracting Officer of the occasion and extent thereof,

(2) Shall take all reasonable steps to protect the property remaining, and

(3) Shall repair or replace the damaged, destroyed, or lost property in accordance with the written direction of the Contracting Officer. The Contractor shall take no action prejudicial to the right of the Government to recover therefore, and shall furnish to the Government, on request, all reasonable assistance in obtaining recovery.

(i) Government property for Government use only. Government property shall be used only for the performance of this contract.

(j) Property management.

(1) Property management system.

(i) The Contractor shall maintain and administer an approved property management system of accounting for and control, utilization, maintenance, repair, protection, preservation, and disposition of Government property in its possession under the contract. The Contractor's property management system shall be approved by the Contracting Officer and maintained and administered in accordance with sound business practice, applicable Federal Property Management Regulations, Department of Energy Property Management Regulations, and DOE Directives.

(ii) In order for a property management system to be approved, it must provide for:

(A) Comprehensive coverage of property from requirement identification through its life cycle, to its final disposition;

(B) Employee personal responsibility and accountability for Government-owned property;

(C) Full integration with the Contractor's other administrative and financial systems;
and

(D) A method for continuously improving property management practices through the identification of best practices established by "best in class" performers.

(iii) Approval of the Contractor's property management system shall be contingent upon the completion of the baseline inventory as provided in subparagraph (j)(2) below.

(2) Property inventory.

(i) The Contractor has provided a baseline inventory covering all items of Government property which is satisfactory to DOE.

(ii) The Contractor agrees to participate in a joint reconciliation of the property inventory at the completion of this contract. This information will be used to provide a baseline for the succeeding contract as well as information for closeout of this contract.

(k) Disposition of excess research equipment. The Laboratory Director may dispose of research equipment that is excess to the needs of the Laboratory and DOE by gift to an educational institution or a nonprofit organization for the conduct of scientific education or research activities. Title to the excess research equipment shall pass to the recipient. Gifts to the University under this paragraph require advance notice to the Contracting Officer.

(l) The Contractor shall include this clause in cost-reimbursable subcontracts.

CLAUSE 6.13 - DEAR 952.208-7 TAGGING OF LEASED VEHICLES (APR 1984)

(a) DOE intends to use United States Government license tags.

(b) While it is the intention that vehicles leased hereunder shall operate on federal tags, DOE reserves the right to utilize state tags, if necessary, to accomplish its mission. Should state tags be required, the Contractor shall furnish DOE the documentation required by the state to acquire such tags.

CLAUSE 6.14 - FAR 52.247-1 COMMERCIAL BILL OF LADING NOTATIONS (APR 1984)

If the Contracting Officer authorizes supplies to be shipped on a commercial bill of lading and the Contractor will be reimbursed these transportation costs as direct allowable costs, the Contractor shall ensure before shipment is made that the commercial shipping documents are annotated with either of the following notations, as appropriate:

(a) If the Government is shown as the consignor or the consignee, the annotation shall be:
"Transportation is for the United States Department of Energy and the actual total transportation

charges paid to the carrier(s) by the consignor or consignee are assignable to, and shall be reimbursed by, the Government."

(b) If the Government is not shown as the consignor or the consignee, the annotation shall be: "Transportation is for the United States Department of Energy and the actual total transportation charges paid to the carrier(s) by the consignor or consignee shall be reimbursed by the Government, pursuant to cost-reimbursement Contract No.: _____ . This may be confirmed by contacting the _____."

CLAUSE 6.15 - FAR 52.251-2 INTERAGENCY FLEET MANAGEMENT SYSTEM (IFMS) VEHICLES AND RELATED SERVICES (JAN 1991)

The Contracting Officer may issue the Contractor an authorization to obtain interagency fleet management system (IFMS) vehicles and related services for use in the performance of this contract. The use, service, and maintenance of interagency fleet management system vehicles and the use of related services by the Contractor shall be in accordance with 41 CFR 101-39 and 41 CFR 101-38.301-1.

CLAUSE 6.16 - DEAR 952.217-70 ACQUISITION OF REAL PROPERTY (APR 1984) (MODIFIED)

(a) Notwithstanding any other provision of the contract, the prior approval of the Contracting Officer shall be obtained when, in performance of this contract, the Contractor acquires or proposes to acquire use of real property by:

(1) Purchase, on the Government's behalf or in the Contractor's own name, with title eventually vesting in the Government.

(2) Lease, and the Government assumes liability for, or will otherwise pay for the obligation under the lease as a reimbursable contract cost.

(3) Acquisition of temporary interest through easement, license or permit, and the Government funds the entire cost of the temporary interest.

(b) Disposal of any permanent or temporary interest in real property shall require the prior approval of the Contracting Officer.

(c) Justification of any real property acquisition or disposal shall be in accordance with Federal Property Management Regulations and directions provided by the Contracting Officer.

(d) The substance of this clause, including this paragraph (d), shall be included in any subcontract under this contract where property described in paragraph (a) above shall be acquired.

CLAUSE 6.17 - FACILITIES MANAGEMENT (SPECIAL)

(a) For the purpose of this clause, facilities management includes, but is not limited to comprehensive land and facility use planning, real property management, facility design and construction, project management, maintenance management, utilities management, and energy management. These activities shall be performed in accordance with applicable laws, regulations,

and DOE directives, and the Contractor shall employ life-cycle asset management principles using a value-added, quality-driven, graded approach.

(b) The Contractor shall perform periodic condition assessments of the government real property under its management and control to determine deterioration or technical obsolescence which may threaten performance or safety.

(c) In the management of the DOE facilities, the Contractor shall establish and execute maintenance management systems in accordance with DOE directives that address the character of the applicable property under the Contractor's control.

(d) Where the cost of real property construction, alteration, and repair cost is allowable, the Contractor shall obtain written approval of the Contracting Officer for the following actions:

- (1) In buildings owned or leased by the Contractor:
 - (i) Building repairs;
 - (ii) Building construction or alterations; and
 - (iii) Installation of equipment involving building modification.
- (2) In buildings owned by the Government:
 - (i) Building repairs costing more than \$500,000;
 - (ii) Building construction or alterations costing more than \$500,000; and
 - (iii) Installation of equipment where the installation costs exceed \$500,000.
- (3) New construction:
 - (i) Buildings costing more than \$500,000 on DOE-owned land;
 - (ii) Buildings other than those within (3)(i) above;
 - (iii) Roads costing more than \$500,000; and
 - (iv) Utilities and appurtenances costing more than \$500,000.

CLAUSE 6.18 - DEAR 970.5204-76 MAKE-OR-BUY PLAN (JUN 1997) (MODIFIED)

(a) Definitions.

(1) "Buy item" means a work activity, supply, or service to be produced or performed by an outside source, including a subcontractor or an affiliate, subsidiary, or division of the Contractor.

(2) "Make item" means a work activity, supply, or service to be produced or performed by the Contractor using its personnel and other resources at the Laboratory.

(3) "Make-or-buy plan" means a Contractor's written program for the contract that identifies work efforts or requirements that either are "make items" or "buy items."

(b) Make-or-buy plan. The Contractor shall develop and implement a make-or-buy plan that establishes a preference for providing supply and services on a least-cost basis, subject to any specific DOE make-or-buy criteria identified in the contract or otherwise provided by the Contracting Officer, including but not limited to best-value acquisition practices and other special acquisition practices authorized by the Contracting Officer, in addition, or as part of the Contractor's approved purchasing system under Clause 8.1, Contractor Purchasing System. In developing and implementing its make-or-buy plan, the Contractor agrees to assess outsourcing opportunities and implement outsourcing decisions in accordance with the following:

(1) The Contractor shall conduct internal productivity improvement and cost-reduction programs so that in-house performance options can be made more efficient and cost-effective.

(2) The Contractor shall consider subcontracting opportunities with the maximum practicable regard for open communications with potentially affected employees and their representatives. Similarly, the Contractor shall communicate its plans, activities, cost-benefit analyses, and decisions with the stakeholders, including representatives of the community and local businesses likely to be affected by such actions.

(c) Submission and approval. The Contractor shall submit a make-or-buy plan for approval in accordance with the schedule and other instructions provided by the Contracting Officer. The following documentation shall be prepared and submitted:

(1) A description of the each work item, and if appropriate, the identification of the associated Work Authorization or Work Breakdown Structure element;

(2) The categorization of each work item as "must make," "must buy," or "can make or buy," with the reasons for such categorization in consideration of the program specific make-or-buy criteria (including least-cost considerations). For non-core capabilities categorized as "must make," a cost/benefit analysis must be performed for each item if (i) the Contractor is not the least-cost performer and (ii) a program specific make-or-buy criteria does not otherwise justify a "must make" categorization;

(3) A decision to either "make" or "buy" in consideration of the program specific make-or-buy criteria (including least cost considerations) for work effort categorized as "can make or buy";

(4) Identification of potential suppliers and subcontractors, if known, and their location and size status;

(5) A recommendation to defer a make-or-buy decision where categorization of an identifiable work effort(s) is impracticable at the time of initial development of the plan and schedule for future reevaluation;

(6) A description of the impact of a change in current practice of making or buying on the existing workforce; and

(7) Any additional information appropriate to support and explain the plan.

(d) Conduct of operations. Once a make-or-buy plan is approved, the Contractor shall perform in accordance with the plan.

(e) Changes to the make-or-buy plan. The make-or-buy plan established in accordance with paragraph (b) above shall remain in effect for the term of the contract, unless:

- (1) A lesser period is provided either for the total plan or for individual items or work effort;
- (2) The circumstances supporting the original make-or-buy decisions change subsequent to the initial approval; or

(3) New work is identified.

(f) Periodic reviews. At least annually, the Contractor shall review its approved make-or-buy plan to ensure that it reflects current conditions. Changes to the approved make-or-buy plan shall be submitted in advance of the effective date of the proposed change in sufficient time to permit evaluation and review. Changes shall be submitted in accordance with instructions provided by the Contracting Officer. Modification of the make-or-buy plan to incorporate proposed changes or additions shall be effective upon the Contractor's receipt of the Contracting Officer's written approval.

CLAUSE 6.19 - EPIDEMIOLOGIC STUDIES OF WORKERS AT THE SITE (SPECIAL)

The Contractor shall cooperate in the conduct of epidemiologic studies of workers at the contract site. Pursuant to a memorandum of agreement between DOE and the Department of Health and Human Services (HHS), HHS, through its agencies at the Centers for Disease Control and Prevention, conducts epidemiologic studies of workers at DOE facilities. The conduct of these studies requires access by researchers to personal information about workers including historical and current data on work assignments and duties, medical history, and exposure to radiation, toxins, and other occupational hazards. Access to Contractor-owned records containing personal information is governed by Clause 11.1, Access to and Ownership of Records. The studies may also require access by researchers to workers for personal interviews during normal work hours. The Contractor understands that its cooperation in such studies is an integral part of addressing the health and safety of workers at the site and that it may be reimbursed for reasonable costs associated with assisting the various agencies. The Contractor shall identify a point of contact for coordinating this work and for assuring that responses are timely, and shall submit to the Contracting Officer for approval procedures for liaison with external researchers carrying out such work.

CLAUSE 6.20 - LEASE AND OCCUPANCY BY DOE OF REAL PROPERTY OR FACILITIES OWNED BY THE CONTRACTOR (SPECIAL)

(a) Campus building space and equipment. The Contractor shall provide building space and equipment as set forth Appendix I, Lease and Occupancy Agreements, Campus Buildings, Space and Equipment.

(b) Disposition of premises altered or constructed.

(1) The Contractor and DOE have developed mutually satisfactory arrangements for the lease and occupancy of real property of the Contractor upon which structures and other improvements financed by the Government may be constructed or altered. These lease and occupancy agreements are identified in Appendix I to this contract. These arrangements also cover the disposition of such structures and improvements. The basic terms and conditions applicable to arrangements for property of the Contractor known as the Wilson Tract, Plots "O" and "M" and the regular Contractor campus (herein deemed to include the Bailey Tract and two sections of state Contractor

Tract) are set forth in Appendix I. It is understood that, except as provided in Appendix I, DOE shall have no obligation to restore the premises with respect to such structures and improvements.

(2) It is understood that with respect to construction and alterations financed by the Government to Contractor-owned buildings and structures under this contract, the Contractor, after termination or by mutual agreement at any time prior thereto, shall elect whether (i) to retain the benefit of such construction or alteration, in which case the Contractor shall return to or credit the Government with the portion of the reimbursement by the Government for its expenditures therefor determined by negotiation between the Contractor and DOE to be fair and proper, or (ii) to have such premises restored to substantially the same condition as prior to such alteration or construction, in which case the Contractor shall retain all such reimbursement and the Government shall pay the net cost of such restoration; provided that as to any such alteration or construction commenced after October 1, 1962, the Government shall be under no obligation to restore or bear costs of restoration except as otherwise agreed upon.

(c) Responsibility for environmental restoration and remedial work. Upon termination or expiration of this contract or any lease or occupancy agreements identified in Appendix I, DOE shall be responsible for complying with applicable laws, regulations, and DOE directives requiring investigation, monitoring, cleanup, containment, restoration, removal, or other remedial activity with respect to any hazardous substances present in the soil, ground water, or buildings as a result of activities conducted during the term of this contract or any prior contract modifications or during the term of any said lease or occupancy agreements.

7.0 TECHNOLOGY TRANSFER/ INTELLECTUAL PROPERTY RIGHTS

CLAUSE 7.1 - 970.5204-40 TECHNOLOGY TRANSFER MISSION (JAN 1996)
(DEVIATION)

This clause has as its purpose implementation of the National Competitiveness Technology Transfer Act of 1989 (Sections 3131, 3132, 3133, and 3157 of Pub. L. 101-189 as amended by Pub. L. 103-160, Sections 3134 and 3160) and the National Technology Transfer Advancement Act of 1995 (Pub. L. 104-113). This clause applies to activities of Contractor employees at the Laboratory or by Contractor employees assigned to the Laboratory doing work under this contract for the Laboratory at a location other than the Laboratory.

(a) Definitions.

(1) "Assignment" means any agreement by which the Contractor transfers ownership of Contract-owned Intellectual Property, subject to the Government's retained rights.

(2) "Bailment" means any agreement in which the Contractor permits the commercial or non-commercial access and use of Laboratory Biological Materials or Laboratory Tangible Research Product for the specified purpose of technology transfer or research and development, including without limitation for the purpose of evaluation, and without transferring ownership to the bailee. Bailment does not apply to computer software.

(3) "Cooperative Research and Development Agreement" (CRADA) means an agreement entered into between the Contractor as operator of the Laboratory, and one or more parties including at least one non-federal party under which the Government, through the Laboratory, provides personnel, services, facilities, equipment, intellectual property, or other resources with or without reimbursement (but not funds to non-federal parties) and the non-federal parties provide funds, personnel, services, facilities, equipment, intellectual property, or other resources toward the conduct of specified research or development efforts which are consistent with the missions of the Laboratory; except that such term does not include a procurement contract, grant, or cooperative agreement as those terms are used in 31 U.S.C. §§ 6303- 6305.

(4) "Intellectual Property" means patents, trademarks, copyrights, mask works, protected CRADA information, and other forms of comparable property rights protected by federal law or foreign intellectual property laws.

(5) "Joint Work Statement (JWS) " means a proposal for a CRADA prepared by the Contractor, signed by the Laboratory Director or designee which describes the following:

(i) Purpose;

(ii) Scope of work which delineates the rights and responsibilities of the Government, the Contractor and third parties, one of which must be a non-federal party;

(iii) Schedule for the work; and

(iv) Cost and resource contributions of the parties associated with the work and the schedule.

(6) "Laboratory Biological Materials" means biological materials capable of replication or reproduction, such as plasmids, deoxyribonucleic acid molecules, ribonucleic acid molecules, living organisms of any sort and their progeny, including viruses, prokaryote and eukaryote cell lines, transgenic plants and animals, and any derivatives or modifications thereof or products produced through their use or associated biological products, made under this contract.

(7) "Laboratory Tangible Research Product" (TRP) means tangible material results of research which

(i) Are provided to permit replication, reproduction, evaluation or confirmation of the research effort, or to evaluate its potential commercial utility;

(ii) Are not materials generally commercially available; and

(ii) Were made under this contract.

(b) Authority.

(1) In order to ensure the full use of the results of research and development efforts and capabilities of the Laboratory, technology transfer, including CRADAs, is established as a mission of the Laboratory consistent with the policies, principles and purposes of Sections 11(a)(1) and 12(g) of the Stevenson-Wydler Technology Innovation Act of 1980, as amended (15 U.S.C. §3710a); Section 3132(b) of Pub. L. 101-189, Sections 3134 and 3160 of Pub.L. 103-160; Chapter 38 of the Patent Laws (35 U.S.C. §§200 *et seq.*); Section 152 of the Atomic Energy Act of 1954, as amended (42 U.S.C. §2182); Section 9 of the Federal Nonnuclear Energy Research and Development Act of 1974 (42 U.S.C. §5908); the National Technology Transfer Advancement Act of 1995 (Pub. L. 104-113); and Executive Order 12591 of April 10, 1987.

(2) The Contractor shall conduct technology transfer activities with a purpose of providing benefit from federally-funded research to United States industrial competitiveness.

(3) In pursuing the technology transfer mission, the Contractor is authorized to conduct activities including but not limited to identification and Intellectual Property protection of inventions, discoveries, copyrightable works and other innovations made or created under this contract; negotiation of licensing agreements and Assignments for Intellectual Property made, created or acquired under this contract; Bailments; negotiation and execution of CRADAs; technical consulting and personnel exchanges; science education activities; performance of work for other federal and non-federal entities (WFO) authorized under Clause 2.5, Agreements to Perform Non-DOE Activities; information exchanges; and making available Laboratory or weapons production user facilities. It is fully expected that the Contractor shall use all of the mechanisms available to it as set forth above to accomplish this technology transfer mission. Technology transfer mechanisms other than those listed above are also available to the Contractor when approved by the Contracting Officer.

(c) Allowable costs.

(1) The Contractor shall establish and carry out its technology transfer efforts through appropriate organizational elements consistent with the requirements for an Office of Research and Technology Applications (ORTA) pursuant to paragraphs (b) and (c) of Section 11 of the Stevenson-Wydler Technology Innovation Act of 1980, as amended (15 U.S.C. §3710a). The costs associated with the conduct of technology transfer including activities associated with obtaining, maintaining, licensing, and assigning Intellectual Property rights, increasing the potential for the transfer of technology, and the widespread notice of technology transfer

opportunities, shall be deemed allowable provided that such costs meet the other requirements of the allowable costs provisions of this contract. In addition to any separately designated funds, these costs in any fiscal year shall not exceed an amount equal to one percent of the operating funds included in the federal research and development budget (including WFO) of the Laboratory for that fiscal year without written approval of the Contracting Officer.

(2) The Contractor's participation in litigation to enforce or defend Intellectual Property claims incurred in its technology transfer efforts shall be as provided in the Clause 4.1, Insurance-Litigation and Claims.

(d) Conflicts of interest-technology transfer. The Contractor shall have implementing procedures that seek to avoid employee and organizational conflicts of interest, or the appearance of conflicts of interest, in the conduct of its technology transfer activities under this contract. These procedures shall apply to any person or organization participating in Laboratory research or related technology transfer activities. Such implementing procedures shall be provided to the Contracting Officer for review and approval within 60 days after execution of this contract. The Contracting Officer shall have 30 days thereafter to approve or require specific changes to such procedures. Such implementing procedures shall include procedures to:

(1) Inform employees of and require conformance with standards of conduct and integrity in connection with the CRADA activity in accordance with the provisions of subparagraph (n)(5) below;

(2) Review and approve employee activities so as to avoid conflicts of interest arising from commercial utilization activities relating to Contractor-developed Intellectual Property;

(3) Conduct work performed using royalties so as to avoid interference with or adverse effects on ongoing DOE projects and programs;

(4) Conduct activities relating to commercial utilization of Contractor-developed Intellectual Property so as to avoid interference with or adverse effects on user facility or WFO activities of the Contractor;

(5) Conduct DOE-funded projects and programs so as to avoid the appearance of conflicts of interest or actual conflicts of interest with non-Government funded work;

(6) Notify the Contracting Officer with respect to any new work to be performed or proposed to be performed under the contract for DOE or other federal agencies where the new work or proposal involves Intellectual Property in which the Contractor has obtained or intends to request or elect title;

(7) Except as may be provided elsewhere in this contract, obtain the approval of the Contracting Officer for any license or assignment of title to Intellectual Property rights by the Contractor to any business or corporate affiliate of the Contractor;

(8) Obtain the approval of the Contracting Officer prior to any assignment, exclusive license, or option for exclusive license of Intellectual Property to any person who has been a Laboratory employee or consultant within the previous two years or to the company in which he or she is a principal;

(9) Notify non-federal sponsors of WFO activities, or non-federal users of user facilities, of any relevant Intellectual Property interest of the Contractor prior to execution of WFO Agreements or User Facility Agreements; and

(10) Notify DOE prior to evaluating a proposal by a third party or DOE, when the subject matter of the proposal involves an elected or waived Subject Invention or one in which the Contractor intends to elect to retain title.

(e) Fairness of opportunity. In conducting its technology transfer activities, the Contractor shall prepare procedures and take all reasonable measures to ensure widespread notice of availability of technologies suited for transfer and opportunities for exclusive licensing and joint research arrangements. The requirement to widely disseminate the availability of technology transfer opportunities does not apply to a specific application originated outside of the Laboratory and by entities other than the Contractor.

(f) United States industrial competitiveness.

(1) In the interest of enhancing the industrial competitiveness of the United States, the Contractor shall, in its licensing and assignments of Intellectual Property, give preference in such a manner as to enhance the accrual of economic and technological benefits to the United States economy. The Contractor shall consider the following factors in all of its licensing and assignment decisions involving Laboratory intellectual property where the Contractor obtains rights during the course of the Contractor's operation of the Laboratory:

(i) Whether any resulting design and development will be performed in the United States and whether resulting products, embodying parts, including components thereof, will be substantially manufactured in the United States; or

(ii) (A) Whether the proposed licensee or assignee has a business unit located in the United States and whether significant economic and technical benefits will flow to the United States as a result of the license or assignment agreement; and

(B) In licensing any entity subject to the control of a foreign company or government, whether such foreign government permits United States agencies, organizations or other persons to enter into CRADAs and license agreements, and has policies to protect United States Intellectual Property rights.

(2) If the Contractor determines that neither of the conditions in subparagraphs (f)(1)(i) or (ii) above are likely to be fulfilled, the Contractor, prior to entering into such an agreement, must obtain the approval of the Contracting Officer. The Contracting Officer shall act on any such requests for approval within 30 days.

(3) The Contractor agrees to be bound by the provisions of 35 U.S.C. §204 (Preference for United States Industry).

(g) Indemnity-product liability. In entering into written technology transfer research and development (R&D), license or assignment agreements, the Contractor agrees to include in such agreements a requirement that the Contractor and the Government be indemnified for all damages, costs, and expenses, including attorney's fees, arising from the commercialization and utilization of such technologies, including, but not limited to, the making, using, selling or exporting of products, processes, or services derived from the transferred technology, or such other provision as mutually agreed upon by the Contractor and DOE.

(h) Disposition of income.

(1) Royalties or other income earned or retained by the Contractor as a result of performance of authorized technology transfer activities herein shall be used by the Contractor for scientific research, development, technology transfer, and education at the Laboratory, consistent with the research and development mission and objectives of the Laboratory and subject to 15 U.S.C. §3710a(b)(5) and Chapter 38 of the Patent Laws (35 U.S.C. §§200 *et seq.*) as amended through the effective date of this Supplemental Agreement. If the net amounts of such royalties and income received from patent licensing after payment of patenting costs, licensing costs, payments to inventors and other expenses incidental to the administration of Subject Inventions during any fiscal year exceed five percent of the Laboratory's budget for that fiscal year, 75 percent of such excess amounts shall be paid to the Treasury of the United States, and the remaining amount of such excess shall be used by the Contractor for the purposes described in this subparagraph (h)(1). Any inventions arising out of such scientific research and development activities shall be deemed to be Subject Inventions under the contract.

(2) The Contractor shall include as a part of its annual Laboratory Institutional Plan or other such annual document a plan setting out those uses to which royalties and other income received as a result of performance of authorized technology transfer activities herein will be applied at the Laboratory, and at the end of the year, provide a separate accounting for how the funds were actually used. Under no circumstances shall these royalties and income be used for an illegal augmentation of funds furnished by the Government.

(3) The Contractor shall establish a policy for making awards or sharing of royalties with Contractor employees, other coinventors and co-authors, including federal employee coinventors when deemed appropriate by the Contracting Officer. Such policy shall be in accordance with 35 U.S.C. §202(a) and 37 CFR 401.10. The Contractor certifies that the current Patent Policy of the Contractor is in substance the same Patent Policy in effect in 1987 and 1992, with certain changes in inventor share percentages introduced in 1990. The Contractor represents that it now has a "Policy on Accepting Equity When Licensing Contractor Technology" dated February 16, 1996. In addition to the provisions of the Contractor's policy regarding equity, the Contractor agrees that:

(i) It will apply the same conflict of interest review procedures to technology transfer transactions involving equity that the Contractor applies to other matters;

(ii) It will provide in the transaction documents in which equity is taken that the equity can be transferred to a successor operating contractor; and

(iii) The net proceeds for the sale of equity of Laboratory origin will be used for the purposes provided in subparagraph (h)(1) above.

(4) DOE reserves the right to review and concur in the implementation of any substantive changes to the Contractor's patent and associated equity sharing policies at the Laboratory.

(i) Transfer to successor contractor. In the event of termination or upon the expiration of this Contract, any unexpended balance of income received for use at the Laboratory shall be transferred, at the Contracting Officer's request, to a successor contractor, or in the absence of a successor contractor, to such other entity as designated by the Contracting Officer. The Contractor shall transfer title, as one package, to the extent the Contractor retains title, in all patents and patent applications, licenses, accounts containing royalty revenues from such license agreements, including equity positions in third party entities, and other Intellectual Property rights which arose at the Laboratory, to the successor contractor or to the Government as directed by the Contracting

Officer, if the successor contractor or Government agrees to honor all license terms, obligations to inventors, and obligations and liabilities of the Contractor in connection with these patents and patent applications. If the successor contractor or the Government refuses to fully honor the foregoing, then the Contractor shall continue to hold title to Intellectual Property and to have use of royalty revenues; provided that royalties or other income earned and retained by the Contractor is utilized for the purposes described in subparagraph (h)(1) above.

(j) Technology transfer affecting the national security.

(1) The Contractor shall notify and obtain the approval of the Contracting Officer, prior to entering into any technology transfer arrangement, when such technology or any part of such technology is classified or sensitive under Section 148 of the Atomic Energy Act (42 U.S.C. §2168). Such notification shall include sufficient information to enable DOE to determine the extent that commercialization of such technology would affect the security interests of the United States, or diminish communications within DOE's nuclear weapon production complex. DOE shall use its best efforts to complete its determination within 60 days of the Contractor's notification and provision of any supporting information, and DOE shall promptly notify the Contractor as to whether the technology is transferable.

(2) The Contractor shall include in all of its technology transfer agreements with third parties, including, but not limited to, CRADAs, license agreements and assignments, notice to such third parties that the export of goods and/or technical data from the United States may require some form of export control license or other authority from the Government and that failure to obtain such export control license may result in criminal liability under federal law.

(3) For other than fundamental research as defined in National Security Decision Directive 189, the Contractor is responsible to conduct internal export control reviews and assure that technology is transferred in accordance with applicable law.

(k) Records. The Contractor shall maintain records of its technology transfer activities in a manner and to the extent satisfactory to DOE and specifically including, but not limited to, the license agreements, assignments and the records required to implement the requirements of paragraphs (e), (f), and (h) above and shall provide reports to the Contracting Officer to enable DOE to maintain the reporting requirements of Section 12(c)(6) of the Stevenson-Wydler Technology Innovation Act of 1980, as amended (15 U.S.C. §3710a(c)(6)). Such reports shall be made annually in a format to be agreed upon between the Contractor and DOE and in such a format which will serve to adequately inform DOE of the Contractor's technology transfer activities while protecting any data not subject to disclosure under Clause 7.2, Rights in Data-Technology Transfer Activities, and paragraph (n) below. Such records shall be made available consistent with the terms of this contract and shall be subject to appropriate conditions to protect the confidentiality of the information involved.

(l) Reports to Congress. To facilitate DOE's reporting to Congress, the Contractor is required to submit annually to DOE a technology transfer plan for conducting its technology transfer function for the upcoming year, including plans for securing Intellectual Property rights in Laboratory innovations with commercial promise and plans for managing such innovations so as to benefit the competitiveness of United States industry. This plan shall be provided to the Contracting Officer on or before October 1st of each year.

(m) Oversight and appraisal. The Contractor is responsible for developing and implementing effective internal controls for all technology transfer activities consistent with the audit and record requirements of this contract. Contractor performance in implementing the technology transfer

mission and the effectiveness of the Contractor's procedures will be evaluated by the Contracting Officer as part of the annual appraisal process.

(n) Technology transfer through CRADAs. Upon approval of the Contracting Officer and as provided in a DOE-approved JWS, the Laboratory Director or designee may enter into CRADAs on behalf of DOE subject to the requirements set forth in this paragraph.

(1) Review and approval of CRADAs.

(i) Except as otherwise directed in writing by the Contracting Officer, each JWS shall be submitted to the Contracting Officer for approval. The Laboratory Director or designee shall provide a program mission impact statement and shall include an impact statement regarding related Intellectual Property rights known by the Contractor to be owned by the Government to assist the Contracting Officer in the approval determination.

(ii) The Contractor shall also include for each proposed CRADA a statement of compliance with the fairness of opportunity requirements of paragraph (e) above.

(iii) Within 90 days after submission of a JWS, the Contracting Officer shall approve, disapprove or request modification to the JWS. If a modification is required, the Contracting Officer shall approve or disapprove any resubmission of the JWS within 30 days of its resubmission, or 90 days from the date of the original submission, whichever is later. The Contracting Officer shall provide a written explanation to the Laboratory Director or designee of any disapproval or requirement for modification of a JWS.

(iv) Upon approval of a JWS, the Laboratory Director or designee may submit a CRADA, based upon the approved JWS, to the Contracting Officer. The Contracting Officer, within 30 days of receipt of the CRADA, shall approve or request modification of the CRADA. If the Contracting Officer requests a modification of the CRADA, an explanation of such request shall be provided to the Laboratory Director or designee.

(v) Except as otherwise directed in writing by the Contracting Officer, the Contractor shall not enter into, or begin work under, a CRADA until the Contracting Officer has approved the CRADA. The Contractor may submit its proposed CRADA to the Contracting Officer at the time of submitting its proposed JWS or any time thereafter. However, the Contracting Officer is not obligated to respond under subparagraph (n)(1)(iv) above until 30 days after approval of the JWS or 30 days after submittal of the CRADA, whichever is later.

(2) Selection of participants. The Laboratory Director or designee in deciding what CRADA to enter into shall:

(i) Give special consideration to small business firms, and consortia involving small business firms;

(ii) Give preference to business units located in the United States which agree that products or processes embodying Intellectual Property will be substantially manufactured or practiced in the United States and, in the case of any industrial organization or other person subject to the control of a foreign company or government, take into consideration whether or not such foreign government permits United States agencies, organizations, or other persons to enter into CRADAs and license agreements;

(iii) Provide fairness of opportunity in accordance with the requirements of paragraph (e) above; and

(iv) Give consideration to the conflicts of interest requirements of paragraph (d) above.

(3) Withholding of data.

(i) Data that is first produced as a result of research and development activities conducted under a CRADA and that would be a trade secret or commercial or financial data that would be privileged or confidential, if such data had been obtained from a non-federal third party, may be protected from disclosure under the Freedom of Information Act (5 U.S.C. §552b) as provided in the Stevenson-Wydler Technology Innovation Act of 1980, as amended (15 U.S.C. §3710a(c)(7)) for a period, as agreed in the CRADA, of up to five years from the time the data is first produced. DOE shall cooperate with the Contractor in protecting such data.

(ii) Unless otherwise expressly approved by the Contracting Officer in advance for a specific CRADA, the Contractor agrees, at the request of the Contracting Officer, to transmit such data to other DOE facilities for use by DOE or its contractors by or on behalf of the Government. When data protected pursuant to subparagraph (n)(3)(i) above is so transferred, the Contractor shall clearly mark the data with a legend setting out the restrictions against private use and further dissemination, along with the expiration date of such restrictions.

(iii) In addition to its authority to license Intellectual Property, the Contractor may enter into license agreements with third parties for data developed by the Contractor under a CRADA subject to other provisions of this contract. However, the Contractor shall neither use the protection against dissemination nor the licensing of data as an alternative to the submittal of invention disclosures which include data protected pursuant to subparagraph (n)(3)(i) above.

(4) WFO and user facility programs.

(i) WFO Agreements and User Facility Agreements are not CRADAs and will be available for use by the Contractor in addition to CRADAs for achieving utilization of employee expertise and unique facilities for maximizing technology transfer. The Contractor agrees to inform prospective CRADA participants, which are intending to substantially pay full cost recovery for the effort under a proposed CRADA, of the availability of these alternative forms of agreements and of DOE's class patent waiver provisions associated therewith.

(ii) Where the Contractor believes that an arrangement other than the class waiver of patent rights to the sponsor(s) will result in a transfer of technology of benefit to the United States economy or is dictated by equity considerations, a request may be made to the Contracting Officer for an exception to the class waivers in WFO Agreements and User Facility Agreements.

(5) Conflicts of interest.

(i) Except as provided in subparagraph (n)(5)(iii) below, the Contractor shall assure that no employee of the Contractor shall have a substantial role (including an advisory role) in the preparation, negotiation, or approval of a CRADA, if, to such employee's knowledge:

(A) Such employee, or the spouse, child, parent, sibling, or partner of such employee, or an organization (other than the Contractor) in which such employee serves as an officer, director, trustee, partner, or employee--

1. holds financial interest in any entity, other than the Contractor, that has a substantial interest in the preparation, negotiation, or approval of the CRADA; or

2. receives a gift or gratuity from any entity, other than the Contractor, that has a substantial interest in the preparation, negotiation, or approval of the CRADA; or

(B) Any person or organization, with whom such employee is negotiating or has any arrangement concerning prospective employment, holds a financial interest in any entity, other than the Contractor, that has a substantial interest in the preparation, negotiation, or approval of the CRADA

(ii) The Contractor shall require that each employee of the Contractor who has a substantial role (including an advisory role) in the preparation, negotiation, or approval of a CRADA certify through the Contractor to the Contracting Officer that the circumstances described in subparagraph (n)(5)(i) above do not apply to that employee.

(iii) The requirements of subparagraphs (n)(5)(i) and (n)(5)(ii) above shall not apply in a case where the Contracting Officer is advised by the Contractor in advance of the participation of an employee described in those paragraphs in the preparation, negotiation or approval of a CRADA of the nature of and extent of any financial interest described in subparagraph (n)(5)(i) above, and the Contracting Officer determines that such financial interest is not so substantial as to be considered likely to affect the integrity of the Contractor employee's participation in the process of preparing, negotiating, or approving the CRADA.

(o) Technology transfer in other cost-sharing agreements. In conducting research and development activities in cost-sharing agreements not covered by paragraph (n) above, the Contractor, with prior written permission of the Contracting Officer, may provide for the withholding of data produced thereunder in accordance with subparagraph (n)(3) above.

CLAUSE 7.2 - RIGHTS IN DATA- TECHNOLOGY TRANSFER ACTIVITIES (SPECIAL)

NOTE: This clause applies to data and copyrightable works created by Contractor employees at the Laboratory or by Contractor employees assigned to the Laboratory doing work under this contract for the Laboratory at a location other than the Laboratory. For data or copyrightable works created by Contractor employees not assigned to the Laboratory and who are engaged in campus research and supporting efforts under the contract, the Contractor's rights and obligations shall be treated as if the campus were a nonprofit subcontractor under this contract.

(a) Definitions.

(1) "Computer Software," as used in the clause, means computer data bases and computer program and documentation thereof.

(2) "Data," as used in this clause, means recorded information, regardless of form or the media on which it may be recorded. The term includes Technical Data and Computer Software. The term does not include information incidental to contract administration, such as financial, administrative, cost or pricing, or management information.

(3) "Limited Rights," as used in this clause, means the rights of the Government in Limited Rights Data as set forth in paragraph (g) below.

(4) "Limited Rights Data," as used in this clause, means data (other than Computer Software) developed at private expense that embodies trade secrets or is commercial or financial and confidential or privileged.

(5) "Patent Counsel" means the DOE Patent Counsel assisting the DOE contracting activity.

(6) "Restricted Computer Software," as used in this clause, means Computer Software, including minor modifications of such Computer Software, developed at private expense and that is a trade secret; is commercial or financial and is confidential or privileged; or is published copyrighted Computer Software.

(7) "Restricted Rights," as used in this clause, means the rights of the Government in Restricted Computer Software, including minor modifications of such Computer Software, as set forth in paragraph (h) below.

(8) "Technical Data," as used in this clause, means data (other than Computer Software) which is scientific or technical in nature.

(9) "Unlimited Rights," as used in this clause, means the right of the Government to use, disclose, reproduce, prepare derivative works, distribute copies to the public, and perform publicly and display publicly, in any manner and for any purpose, and to have or permit others to do so.

(b) Allocation of rights.

(1) Except as may be otherwise expressly provided or directed in writing by the DOE Patent Counsel, the Government shall have:

(i) Ownership of all Technical Data and Computer Software first produced in the performance of this contract;

(ii) The right to inspect Technical Data and Computer Software first produced or specifically used in the performance of this contract at all reasonable times (for which inspection the proper facilities shall be afforded DOE by the Contractor and its subcontractors);

(iii) The right to have all Technical Data and Computer Software first produced or specifically used in the performance of this contract delivered to the Government or otherwise disposed of by the Contractor, either as the Contracting Officer may from time to time direct during the progress of the work or in any event as the Contracting Officer shall direct upon completion or termination of this contract; provided that nothing contained in this paragraph (b) shall require the Contractor to actually deliver any Technical Data or Computer Software, the delivery of which is excused by other provisions of this clause;

(iv) Unlimited Rights in Technical Data and Computer Software specifically used in the performance of this contract, except as provided herein regarding copyright, and except for Technical Data and Computer Software pertaining to items of standard commercial design, and further, subject to the withholding provisions for protected CRADA information in accordance with Technology Transfer actions under this contract; the Contractor agrees to leave a copy of such data at the facility or plant to which such data relates, and to make available for access or to deliver to the Government such data upon request by the Contracting Officer; provided, that if such data is Limited Rights Data or Restricted Computer Software, the rights of the Government in such data shall be governed solely by the provisions of paragraph (g) or paragraph (h) below, respectively; and

(v) The right to remove, cancel, correct, or ignore any markings not authorized by the terms of this contract on any data furnished hereunder if, in response to a written inquiry by DOE concerning the propriety of the markings, the Contractor fails to respond thereto within 60 days or

fails to substantiate the propriety of the markings. In either case DOE will notify the Contractor of the action taken.

(2) (i) The Contractor shall have:

(A) The right to withhold its Limited Rights Data and Restricted Computer Software in accordance with this clause;

(B) The right to use for its private purposes, subject to patent, security or other provisions of this contract, data it first produces in the performance of this contract, except for data in DOE's Uranium Enrichment Technology, including diffusion, centrifuge, and atomic vapor laser isotope separation, provided the data requirements of this contract have been met as of the date of the private use of such data; and

(C) The right to assert copyright subsisting in scientific and technical articles as provided in paragraph (d) below and the right to request permission to assert copyright in works subsisting in works other than scientific and technical articles as provided in paragraph (e) below.

(ii) The Contractor agrees that for Limited Rights Data or Restricted Computer Software or other technical, business or financial data in the form of recorded information which it receives from, or is given access to by, DOE or a third party, including a DOE contractor or subcontractor, and for Technical Data or Computer Software it first produces under this contract which is authorized to be marked by DOE, the Contractor shall treat such data in accordance with any restrictive legend contained thereon.

(iii) Nothing contained in this clause shall imply a license to the Government under any patent or be construed as affecting the scope of any licenses or other rights otherwise granted to the Government under any patent.

(c) Copyright (general).

(1) The Contractor agrees not to mark, register or otherwise assert a copyright in any data in a published or unpublished work, other than as set forth in paragraphs (d) and (e) below.

(2) Except for material to which the Contractor has obtained the right to assert copyright in accordance with either paragraph (d) or (e) below, the Contractor agrees not to include in the data delivered under this contract any material copyrighted by the Contractor and not to knowingly include any material copyrighted by others without first granting or obtaining at no cost a license therein for the benefit of the Government of the same scope as set forth in paragraph (d) below. If the Contractor believes that such copyrighted material for which the license cannot be obtained must be included in the data to be delivered, rather than merely incorporated therein by reference, the Contractor shall obtain the written authorization of the Contracting Officer to include such material in the data prior to its delivery.

(d) Copyrighted works (scientific and technical articles). The Contractor shall have the right to assert, without prior approval of the Contracting Officer, copyright subsisting in scientific and technical articles based on or containing data first produced in the performance of this contract, and published in academic, technical or professional journals, symposia proceedings, or similar works. When assertion of copyright is made, the Contractor shall affix the applicable copyright notice of 17 U.S.C. §§401 or 402 and acknowledgment of Government sponsorship (including contract number) on the data when such data is delivered to the Government as well as when the data is published or deposited for registration as a published work in the United States Copyright Office. The Contractor grants to the Government, and others acting on its behalf, a paid-up, nonexclusive,

irrevocable, worldwide license in such copyrighted data to reproduce, prepare derivative works, distribute copies to the public, and perform publicly and display publicly, by or on behalf of the Government.

(e) Copyrighted works (other than scientific and technical articles).

(1) The Contractor may obtain permission to assert copyright subsisting in Technical Data and Computer Software first produced by the Contractor in performance of this contract, where the Contractor can show that commercialization would be enhanced by such copyright protection, subject to the following:

(i) Contractor request to assert copyright.

(A) For data other than scientific and technical articles, the Contractor shall submit in writing to Patent Counsel its request to assert copyright in data first produced in the performance of this contract pursuant to this clause. Each request by the Contractor to be complete must include: the identity of the data (including any computer program) for which the Contractor requests permission to assert copyright, as well as an abstract which is descriptive of the data and is suitable for dissemination purposes; the program under which it was funded; whether the data is subject to an international treaty or agreement; whether the data is subject to export control; a statement that the Contractor plans to commercialize the data within five years of obtaining permission to assert copyright; and, for data other than Computer Software, a statement explaining why the assertion of copyright is necessary to enhance commercialization. For data that is developed using other funding sources in addition to DOE funding, the permission to assert copyright in accordance with this clause must also be obtained by the Contractor from all other funding sources prior to the Contractor's request to Patent Counsel. The request shall include the Contractor's certification or other documentation acceptable to Patent Counsel demonstrating such permission has been obtained.

(B) Permission for the Contractor to assert copyright in excepted categories of data as determined by DOE is expressly withheld. Such excepted categories include data whose release would be detrimental to national security, *i.e.*, involve classified information or data or sensitive information under Section 148 of the Atomic Energy Act of 1954, as amended, or are subject to export control for nonproliferation and other nuclear-related national security purposes; would not enhance the appropriate transfer or dissemination and commercialization of such data; would have a negative impact on United States industrial competitiveness; would prevent DOE from meeting its obligations under treaties and international agreements; or would be detrimental to one or more of DOE's programs. Additional excepted categories may be added by the Assistant General Counsel for Technology Transfer and Intellectual Property. Where data are determined to be under an export control restriction, the Contractor may still obtain permission to assert copyright in such restricted data for purposes of limited commercialization within the constraints provided by the export control statutes and regulations subject to the provisions of this clause. However, notwithstanding any other provision of this contract, all data developed with Naval Reactors' funding and those data that are classified fall within the above excepted categories and permission to assert copyright will not be granted by DOE for those data. Additionally, the rights of the Contractor in data are subject to the disposition of data rights in the treaties and international agreements identified in Appendix C, Treaties and International Agreements/Waived Inventions, of this contract. Additional treaties and international agreements may be added by DOE from time to time by unilateral modification of Appendix C; such modification shall be effective only for data which is developed after the date that a treaty or international agreement is added to this contract. Also, the Contractor will not be permitted to assert copyright in data in the form of various technical reports generated by the Contractor under the contract without first obtaining advance written permission of the Contracting Officer.

(ii) DOE review and response to Contractor's request. The Patent Counsel shall use best efforts to respond in writing within 90 days of receipt of a complete request by the Contractor to assert copyright in Technical Data and Computer Software pursuant to this clause. Such response shall either give or withhold permission for the Contractor to assert copyright or advise the Contractor that DOE needs additional time to respond and the reasons therefor.

(iii) Permission for Contractor to assert copyright.

(A) For Computer Software, the Contractor shall furnish to the contractor designated by DOE to serve as the DOE centralized software distribution and control point, at the time permission to assert copyright is given under (ii) above: an abstract describing the software suitable for publication, the source code for each software program, and the object code and at least the minimum support documentation needed by a technically competent user to understand and use the software. The Patent Counsel, for good cause shown by the Contractor, may allow the minimum support documentation to be delivered within 60 days after permission to assert copyright is given or at such time the minimum support documentation becomes available. The Contractor acknowledges that the above-identified DOE-designated contractor may provide a technical description of the software in an announcement to DOE, its contractors, and the public identifying its availability from the copyright holder.

(B) Unless otherwise directed by the Contracting Officer, for data other than Computer Software to which the Contractor has received permission to assert copyright under subparagraph (e)(1)(ii) above, the Contractor shall within 60 days of obtaining such permission furnish to DOE's Office of Scientific and Technical Information (OSTI) a copy of such data as well as an abstract of the data suitable for dissemination purposes. The Contractor acknowledges that OSTI may provide an abstract of the data in an announcement to DOE, its contractors, and the public identifying its availability from the copyright holder.

(C) For a period of five years beginning on the date the Contractor is given permission to assert copyright in data, the Contractor grants to the Government, and others acting on its behalf, a paid-up, nonexclusive, irrevocable, worldwide license in such copyrighted data to reproduce, prepare derivative works, and perform publicly and display publicly, by or on behalf of the Government. Subject to DOE approval, the five-year period is renewable for successive five-year periods. The DOE approval will be based on the standard that the work is still commercially available and the market demand is being met.

(D) After the five-year period(s) set forth in subparagraph(e)(1)(iii)(C) above, or if, prior to the end of such period, the Contractor abandons commercialization activities pertaining to the data to which the Contractor has been given permission to assert copyright, the Contractor grants to the Government, and others acting on its behalf, a paid-up, nonexclusive, irrevocable, worldwide license in such copyrighted data to reproduce, distribute copies to the public, prepare derivative works, perform publicly and display publicly, and to permit others to do so.

(E) Whenever the Contractor obtains permission to assert copyright in data, the Contractor shall affix the applicable copyright notice of 17 U.S.C. §401 or §402 on the copyrighted data and also an acknowledgment of the Government sponsorship and license rights of subparagraphs (e)(1)(iii)(C) and (D) above. Such action shall be taken when the data is delivered to the Government, published, licensed, or deposited for registration as a published work in the United States Copyright Office. The acknowledgment of Government sponsorship and license rights shall be as follows:

NOTICE: The Government is granted for itself and others acting on its behalf a paid-up, nonexclusive, irrevocable, worldwide license in this data to reproduce, prepare derivative works, and perform publicly and display publicly. Beginning five (5) years after (date permission to assert copyright was obtained) and subject to any subsequent five (5) year renewals, the Government is granted for itself and others acting on its behalf a paid-up, nonexclusive, irrevocable, worldwide license in this data to reproduce, prepare derivative works, distribute copies to the public, perform publicly and display publicly, and to permit others to do so. NEITHER THE UNITED STATES NOR THE UNITED STATES DEPARTMENT OF ENERGY, NOR ANY OF THEIR EMPLOYEES, MAKES ANY WARRANTY, EXPRESS OR IMPLIED, OR ASSUMES ANY LEGAL LIABILITY OR RESPONSIBILITY FOR THE ACCURACY, COMPLETENESS, OR USEFULNESS OF ANY INFORMATION, APPARATUS, PRODUCT, OR PROCESS DISCLOSED, OR REPRESENTS THAT ITS USE WOULD NOT INFRINGE PRIVATELY OWNED RIGHTS.

(F) With respect to any data to which the Contractor has received permission to assert copyright, the DOE has the right, during the five year period set forth in subparagraph (e)(1)(i)(A) above, to request the Contractor to grant a nonexclusive, partially exclusive or exclusive license in any field of use to a responsible applicant(s) upon terms that are reasonable under the circumstances, and if the Contractor refuses such request, to grant such license itself, if the DOE determines that the Contractor has not made a satisfactory demonstration that either it or its licensee(s) is actively pursuing commercialization of the data as set forth in subparagraph (e)(1)(i)(A) above. Before licensing under this subparagraph (e)(1)(iii)(F), DOE shall furnish the Contractor a written request for the Contractor to grant the stated license, and the Contractor shall be allowed 30 days (or such longer period as may be authorized by the Contracting Officer for good cause shown in writing by the Contractor) after such notice to show cause why the license should not be granted. The Contractor shall have the right to appeal the decision of the DOE to grant the stated license to the Invention Licensing Appeal Board as set forth in 10 CFR 781.65 - "Appeals".

(G) No costs shall be allowable for maintenance of copyrighted data, where such maintenance is primarily for the benefit of the Contractor or a licensee and exceeds DOE Program needs, except as otherwise provided in writing by the Contracting Officer. The Contractor may use its net royalty income to pay for such maintenance costs.

(H) At any time the Contractor abandons commercialization activities for data for which the Contractor has received permission to assert copyright in accordance with this clause, it shall advise OSTI and Patent Counsel and upon request assign the copyright to the Government so that the Government can distribute the data to the public.

(f) Subcontracting.

(1) The Contractor agrees to use a Rights in Data clause as directed by the Contracting Officer in subcontracts having as a purpose the conduct of research, development, and demonstration work and in subcontracts for supplies or services, where needed.

(2) It is the responsibility of the Contractor to obtain from its subcontractors data and rights therein, on behalf of the Government, necessary to fulfill the Contractor's obligations to the Government with respect to such data. In the event of refusal by a subcontractor to accept a clause affording the Government such rights, the Contractor shall:

(i) Promptly submit written notice to the Contracting Officer setting forth reasons for the subcontractor's refusal and other pertinent information which may expedite disposition of the matter; and

(ii) Not proceed with the subcontract without the written authorization of the Contracting Officer.

(g) Rights in Limited Rights Data. Except as may be otherwise specified in this contract as data which is not subject to this paragraph, the Contractor agrees to and does hereby grant to the Government an irrevocable, nonexclusive, paid-up license and right to use by or for the Government, any Limited Rights Data of the Contractor specifically used in the performance of this contract; provided, however, that to the extent that any Limited Rights Data when furnished or delivered is specifically identified by the Contractor at the time of initial delivery to the Government or a representative of the Government, such data shall not be used within or outside the Government except as provided in the "Limited Rights Notice" set forth below. All such Limited Rights Data shall be marked with the following "Limited Rights Notice":

LIMITED RIGHTS NOTICE

This data contains "Limited Rights Data", furnished under Contract No. _____ with the United States Department of Energy (and Purchase Order/Subcontract No. _____ if applicable) which may be duplicated and used by the Government with the express limitations that the "Limited Rights Data" may not be disclosed outside the Government or be used for purposes of manufacture without prior permission of the Contractor, except that further disclosure or use may be made solely for the following purposes:

(a) This "Limited Rights Data" may be disclosed for evaluation purposes under the restriction that the "Limited Rights Data" be retained in confidence and not be further disclosed;

(b) This "Limited Rights Data" may be disclosed to other contractors participating in the Government's program of which this contract is a part for information or use in connection with the work performed under their contracts and under the restriction that the "Limited Rights Data" be retained in confidence and not be further disclosed; and

(c) This "Limited Rights Data" may be used by the Government or others on its behalf for emergency repair or overhaul work under the restriction that the "Limited Rights Data" be retained in confidence and not be further disclosed .

This Notice shall be marked on any reproduction of this data in whole or in part.

(END OF NOTICE)

(h) Rights in Restricted Computer Software.

(1) Except as may be otherwise specified in this contract as data which is not subject to this paragraph, the Contractor agrees to and does hereby grant to the Government an irrevocable, nonexclusive, paid-up license and right to use by or for the Government, any Restricted Computer Software of the Contractor specifically used in the performance of this contract; provided, however, that to the extent that any Restricted Computer Software when furnished or delivered is specifically identified by the Contractor at the time of initial delivery to the Government or a representative of the Government, such data shall not be used within or outside the Government except as provided in the "Restricted Rights Notice - Long Form" set forth below. All such Restricted Computer Software shall be marked with the following Notice:

RESTRICTED RIGHTS NOTICE—LONG FORM

(a) This Computer Software is submitted with restricted rights under Government Contract No. _____ (and subcontract _____ if appropriate). It may not be used, reproduced, or disclosed by the Government except as provided in paragraph (b) of this notice.

(b) This Computer Software may be:

(1) Used, or copied for use, in or with the computer or computers for which it was acquired, including use at any Government installation to which such computer or computers may be transferred;

(2) Used, or copied for use, in a backup or replacement computer, if any computer for which it was acquired is inoperative or is replaced;

(3) Reproduced for safekeeping (archives) or backup purposes;

(4) Modified, adapted, or combined with other Computer Software, provided that only the portions of the derivative consisting of the Restricted Computer Software are to be made subject to restricted rights; and

(5) Disclosed to and reproduced for use by contractors under a service contract (of the type defined in FAR 37.101) in accordance with subparagraphs (b)(1) through (4) of this Notice, provided the Government makes such disclosure or reproduction subject to these restricted rights.

(c) Notwithstanding the foregoing, if this Computer Software has been published under copyright, it is licensed to the Government, without disclosure prohibitions, with the rights set forth in the Notice above.

(d) This Notice shall be marked on any reproduction of this Computer Software, in whole or in part.

(END OF NOTICE)

(2) Where it is impractical to include the "Restricted Rights Notice - Long Form" on Restricted Computer Software, the following short-form Notice may be used in lieu thereof:

RESTRICTED RIGHTS NOTICE—SHORT FORM

Use, reproduction, or disclosure is subject to restrictions set forth in the "Restricted Rights Notice - Long Form" of Contract No. _____ (subcontract No. _____ if appropriate) with (name of contractor or subcontractor).

(END OF NOTICE)

(3) If the software is embedded, or if it is commercially impractical to mark it with human readable text, the Contractor may use the symbol R and the month and year of the effective date of the contract modification effecting the applicable five-year extension of this contract. Such information may be placed in brackets or a box; e.g., [R-Nov/92]. This will be read to mean Restricted Computer Software, subject to the rights of the Government as described in the

"Restricted Rights Notice - Long Form," in effect as of the date indicated next to the symbol. The symbol shall not be used to mark human readable material. In the event this contract contains any variation to the rights in the "Restricted Rights Notice - Long Form," then the contract number must also be cited.

(4) If Restricted Rights Computer Software is delivered with the copyright notice of 17 U.S.C. §401, the software will be presumed to be published copyrighted Computer Software licensed to the Government without disclosure prohibitions and with unlimited rights, unless the Contractor includes the following statement with such copyright notice: "Unpublished—rights reserved under the Copyright Laws of the United States."

(i) Scholarly works.

(1) Each article first produced or composed under this contract and submitted for journal publication shall contain a notice on the front to the effect that the publisher, by accepting the article for publication, acknowledges the Government's right to retain a nonexclusive, royalty-free license in and to any copyright covering the article. The notice shall be similar to the following:

"The submitted manuscript has been authored under a contract of the United States Government, Contract No. _____. Accordingly, the Government retains a nonexclusive, royalty-free license to publish or reproduce the published form of this contribution, or allow others to do so, for Government purposes."

(2) The Contractor further agrees that if Technical Data first produced under the contract is intended to be incorporated in other than a Government publication, the Contractor shall notify the publisher and Contracting Officer in writing that the Government reserves a nonexclusive, royalty-free, worldwide license in such Technical Data.

(3) The Parties agree that the title to the original of unclassified graduate theses and the original of related unclassified scientific papers shall vest in the author thereof, subject to the right of DOE to retain duplicates of such documents and to use such documents for any purpose whatsoever without any claim on the part of the author or the Contractor for additional compensation other than direct expenses.

(4) For purposes of this paragraph (i), the term "article" means scholarly works including textbooks and reference books.

CLAUSE 7.3 - PATENT INDEMNITY IN SUBCONTRACTS (SPECIAL)

Except as otherwise authorized by the Contracting Officer, the Contractor shall obtain indemnification of the Government and its officers, agents, and employees against liability, including costs, for infringement of United States Letters Patent (except Letters Patent issued upon an application which is now or may hereafter be kept secret or otherwise withheld from issue by order of the Government) from the Contractor's subcontractors in accordance with FAR 27.203.

CLAUSE 7.4 - FAR 52.227-1 AUTHORIZATION AND CONSENT (JUL 1995)
ALTERNATE I (APRIL 1984) (MODIFIED)

(a) The Government authorizes and consents to all use and manufacture of any invention described in and covered by a United States patent in the performance of this contract or any subcontract at any tier.

(b) The Contractor agrees to include, and require inclusion of, this clause, suitably modified to identify the parties, in all subcontracts at any tier for supplies or services (including construction, architect-engineer services, and materials, supplies, models, samples, and design or testing services expected to exceed the simplified acquisition threshold); however, omission of this clause from any subcontract, including those at or below the simplified acquisition threshold, does not affect this authorization and consent.

(c) In the case of suit or potential suit for copyright infringement, the Contractor may request authorization and consent in copyright from DOE. Programmatic necessity shall be a major consideration in the grant of authorization and consent.

CLAUSE 7.5 - FAR 52.227-2 NOTICE AND ASSISTANCE REGARDING PATENT AND COPYRIGHT INFRINGEMENT (AUG 1996)

(a) The Contractor shall report to the Contracting Officer promptly and in reasonable written detail, each notice or claim of patent or copyright infringement based on the performance of this contract of which the Contractor has knowledge.

(b) In the event of any claim or suit against the Government on account of any alleged patent or copyright infringement arising out of the performance of this contract or out of the use of any supplies furnished or work or services performed under this contract, the Contractor shall furnish to the Government when requested by the Contracting Officer, all evidence and information in possession of the Contractor pertaining to such suit or claim. Such evidence and information shall be furnished at the expense of the Government except where the Contractor has agreed to indemnify the Government.

(c) The Contractor agrees to include, and require inclusion of, this clause in all subcontracts at any tier for supplies or services (including construction and architect-engineer subcontracts and those for material, supplies, models, samples, or design or testing services) expected to exceed the simplified acquisition threshold at FAR 2.101.

**CLAUSE 7.6 - FAR 52.227-6 PATENT ROYALTY INFORMATION (APRIL 1984)
(DEVIATION)**

(a) Cost of charges for patent royalties. If any patent royalty payments are directly involved in the contract or are reflected in the contract cost to the Government, the Contractor agrees to report to the Contracting Officer the following information relating to each separate item of royalty or license fee:

- (1) Name and address of licensor;
- (2) Date of license agreement;
- (3) Patent numbers, patent application serial numbers, or other basis on which the royalty is payable;
- (4) Brief description, including any part or model numbers of each contract item or component on which the royalty is payable;
- (5) Percentage or dollar rate of royalty per unit;

- (6) Unit price of contract item;
- (7) Number of units; and
- (8) Total dollar amount of royalties.

(b) Copies of current licenses. In addition, if specifically requested by the Contracting Officer, but only to the extent the Contractor has obtained licenses and is legally permitted to provide them to the Government, the Contractor shall furnish a copy of the current license agreement and an identification of applicable claims of specific patents.

(c) Procedures. The Contractor shall follow the procedures of FAR 27.204 and FAR 27.206 in all subcontracting.

CLAUSE 7.7 - DEAR 970.5204-71 PATENT RIGHTS - NONPROFIT MANAGEMENT AND OPERATING CONTRACTORS (FEB 1995) (DEVIATION)

This clause applies to inventions conceived or first actually reduced to practice by Contractor employees at the Laboratory or by Contractor employees assigned to the Laboratory doing work under this contract for the Laboratory at a location other than the Laboratory. For inventions conceived or first actually reduced to practice by Contractor employees not assigned to the Laboratory and who are engaged in campus research and supporting efforts under the contract, the Contractor's rights and obligations shall be governed by paragraph (g) below as if the campus were a nonprofit subcontractor under this contract .

(a) Definitions.

(1) "Agency licensing regulations" and "agency regulations concerning the licensing of Government-owned inventions" means the DOE patent licensing regulations at 10 CFR Part 781.

(2) "Exceptional Circumstance Subject Invention" means any Subject Invention in a technical field or task determined by DOE to be subject to Exceptional Circumstance(s) under 35 U.S.C. §202(a)(ii).

(3) "Invention" means any invention or discovery which is or may be patentable or otherwise protectable under Title 35 of the United States Code, or any novel variety of plant which is or may be protected under the Plant Variety Protection Act (7 U.S.C. §§2321 *et seq.*)

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

(5) "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 U.S.C. §501(c)) and exempt from taxation under Section 501(a) of the Internal Revenue Code (26 U.S.C. §501(a)) or any nonprofit scientific or educational organization qualified under a state nonprofit organization statute.

(6) "Patent Counsel" means the DOE Patent Counsel assisting the DOE contracting activity.

(7) "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.

(8) "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 standard for small business concerns involved in Government procurement and subcontracting at 13 CFR 121.601, 13 CFR 121.3-8, and 13 CFR 121.3-12 will be used.

(9) "Subject Invention" means any invention of the Contractor conceived or first actually reduced to practice in the performance of work under this contract, provided that in the case of a variety of plant, the date of determination (as defined in Section 41(d) of the Plant Variety Protection Act, 7 U.S.C § 2401(d)) must also occur during the period of contract performance.

(10) "Weapons Related Subject Invention" means any Subject Invention occurring under the work funded by or through the Assistant Secretary for Defense Programs (ASDP), including Department of Defense and Intelligence reimbursable work, or the Naval Nuclear Propulsion Program of DOE.

(b) Allocation of principal rights.

(1) 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 Government shall have a nonexclusive, nontransferable, irrevocable, paid-up license to practice or have practiced for or on behalf of the Government the Subject Invention throughout the world.

(2) The Contractor shall not elect to retain title to any Weapons Related Subject Invention or any Exceptional Circumstance Subject Invention until DOE procedural requirements have been met to DOE's sole satisfaction.

(3) DOE reserves the right to unilaterally amend this contract to identify specific treaties or international agreements entered into by the Government after the effective date of this contract and effectuate those license or other rights which are necessary for the Government to meet its obligations to foreign governments, their nationals and international organizations under such treaties or international agreements with respect to Subject Inventions made after the date of the amendment. Such treaties and agreements shall be listed in Appendix C, Treaties and International Agreements/Waived Inventions.

(4) The right of the Contractor to elect title to Subject Inventions is subject to the invention rights disposition in treaties or international agreements identified at Appendix C and existing or future class waivers of Government invention rights to third parties by DOE, such as Work for Others, User Facility, and Cooperative Research and Development Agreement (CRADA) waivers.

(5) DOE has declared the following to be Exceptional Circumstance Subject Inventions:

- (i) Subject Inventions relating to uranium enrichment, including isotope separation;
- (ii) Subject Inventions relating to storage and disposal of civilian high-level nuclear waste or spent nuclear fuel;
- (iii) Subject Inventions related to subject matter that is classified or sensitive under

Section 148 of the Atomic Energy Act of 1954, as amended (42 U.S.C. §2168 (1982));

(iv) Subject Inventions arising under the United States Advanced Battery Consortium research and development;

(v) Subject Inventions arising under the DOE Steel Initiative and DOE Metals Initiative;
and

(vi) Subject Inventions arising under any funding agreement, or subcontract thereunder, which is funded in part by the Electric Power Research Institute (EPRI) or the Gas Research Institute (GRI).

DOE reserves the right to unilaterally amend this contract to add or delete Exceptional Circumstance Subject Inventions that may, in the national interest, be designated by the Secretary.

(6) The Contractor, pursuant to applicable laws and regulations, may petition for waiver of the Government's rights with respect to Subject Inventions not electable by the Contractor under the terms of this paragraph (b).

(c) Invention disclosure, election of title and filing of patent application by the Contractor.

(1) The Contractor will disclose each Subject Invention to the Patent Counsel within two months after the inventor discloses it in writing to Contractor personnel responsible for patent matters. The disclosure to the Patent Counsel shall be in the form of a written report and shall identify the contract under which the invention was made and the inventor(s), all sources of funding by Budget and Resources code for the invention, and whether the invention is an Exceptional Circumstance Subject Invention. DOE reserves the right to make a final determination whether any invention is an Exceptional Circumstance Subject Invention, subject to appeal under Clause 5.10, Disputes. 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 Patent Counsel, the Contractor will promptly notify the Patent Counsel of (i) the acceptance of any manuscript for publication which describes the invention or (ii) any on sale or public use planned by the Contractor.

(2) Except as provided in subparagraph (b)(4) above, the Contractor will elect in writing whether or not to retain title to any such invention by notifying the Patent Counsel within two years of disclosure to the Patent Counsel. However, 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 is shortened by the Patent Counsel 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 a Subject Invention to which it elects to retain title within one year after election of title 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 or international patent offices within either ten months of the corresponding initial patent application or six months from the date permission is granted by the Commissioner of Patents and Trademarks to file foreign patent applications where such filing has been prohibited by a Secrecy Order issued pursuant to 35 U.S.C. §281 and 34 CFR Part 5.2.

(4) Requests for extension of the time for disclosure, election, and filing under subparagraphs (c)(1), (2), and (3) may, at the discretion of the Patent Counsel, be granted.

(d) Conditions when the government may obtain title.

(1) The Contractor will convey to DOE, upon written request, title to any Subject Invention:

(i) If the Contractor fails to disclose or elect title to the Subject Invention within the times specified in paragraph (c) above, or elects not to retain title; provided that DOE may only request title within 60 days after learning of the failure of the Contractor to disclose or elect within the specified times.

(ii) In those countries in which the Contractor fails to file patent applications within the times specified in paragraph (c) above; provided, however, that if the Contractor has filed a patent application in a country after the times specified in paragraph (c) above, but prior to its receipt of the written request of DOE, 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 a reexamination or opposition proceeding on, a patent on a Subject Invention.

(e) Minimum rights to Contractor and protection of the Contractor.

(1) The Contractor may request the right to reserve a revocable, nonexclusive, paid-up license in each patent application filed in any country on a Subject Invention and any resulting patent in which the Government acquires title except if the Contractor fails to disclose the invention within the times specified in paragraph (c) above. When DOE approves such reservation, the Contractor's license will extend to its domestic subsidiary and affiliates, if any, within the corporate structure of which the Contractor is a part 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 DOE except when transferred to the successor of that part of the Contractor's business to which the invention pertains.

(2) The Contractor's domestic license may be revoked or modified by DOE 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 at 37 CFR Part 404 and DOE licensing regulations (if any). 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 DOE to the extent the Contractor, its licensees, or the domestic subsidiaries or affiliates have failed to achieve practical application in that foreign country.

(3) Before revocation or modification of the license, DOE will furnish the Contractor a written notice of its intention to revoke or modify the license, and the Contractor will be allowed 30 days (or such other time as may be authorized by DOE 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 37 CFR Part 404 and DOE regulations (if any) concerning the licensing of Government owned inventions, any decision concerning the revocation or modification of the license.

(f) Contractor action to protect Government's interest.

(1) The Contractor agrees to execute or to have executed and promptly deliver to the Patent Counsel 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 DOE when requested under paragraphs (b) or (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 nontechnical 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 this 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 requested by subparagraph (c)(1) above. The Contractor shall establish and maintain active and effective procedures to ensure that Subject Inventions are promptly identified and timely disclosed. 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 United States or foreign statutory bars.

(3) The Contractor will notify the Patent Counsel of any decision not to continue 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 30 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 United States Department of Energy. The Government has certain rights in the invention."

(5) The Contractor shall provide upon request, the filing date, serial number and title; a copy of the patent application; and patent number and issue date for any Subject Invention in any country in which the Contractor has applied for patents.

(6) The Contractor shall furnish the Patent Counsel on a DOE approved form, annually, interim reports listing Subject Inventions disclosed to DOE and subcontracts awarded containing a Patent clause for that period or stating that there were none.

(7) Upon request, the Contractor, prior to closeout of the contract, shall provide a report to Patent Counsel listing all Subject Inventions or stating that there were none.

(8) Where the Contractor has elected to retain title, the Contractor agrees that the Government may duplicate and disclose Subject Invention disclosures and all other reports and papers furnished or required to be furnished pursuant to this clause provided, however, that any such disclosure of a Subject Invention in which is subject to 35 U.S.C. §205.

(g) Subcontracts.

(1) Unless otherwise authorized or directed by the Contracting Officer, the Contractor will include the clause set forth in FAR 52.227-11 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 except subcontracts which are subject to Exceptional Circumstances. (Note: DOE has declared Exceptional Circumstances as indicated in subparagraph (b)(3) above.) 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 any 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 FAR 52-227-13, suitably modified to identify the parties or such clause as modified for such subcontracts which are subject to Exceptional Circumstances.

(3) The Contractor agrees that subcontractors may elect in subcontracts to carry out their obligations under this clause directly with DOE rather than through the Contractor. The Contractor shall include in all subcontracts the appropriate patent rights clause specified in federal regulations. Nothing in this paragraph is intended to confer any jurisdiction under the Contract Disputes Act with respect to a subcontractor in connection with proceedings under paragraph (i) below.

(h) Reporting on utilization of Subject Inventions. The Contractor agrees to submit on request periodic reports no more frequently than annually on the utilization of a Subject Invention or on efforts at obtaining such utilization that are being made by the Contractor or its licensees or assignees. Such reports shall include information regarding the status of development, date of first commercial sale or use, gross royalties received by the Contractor, and such other data and information as DOE may reasonably specify. The Contractor also agrees to provide additional reports as may be requested by DOE in connection with any march-in proceeding undertaken by DOE in accordance with paragraph (i) below. As required by 35 U.S.C. §202(c)(5), DOE agrees it will not disclose such information to persons outside the Government without permission of the Contractor.

(i) March-in Rights. The Contractor agrees that with respect to any Subject Invention in which it has acquired title, DOE has the right in accordance with the procedures in 37 CFR 401.6 and any supplemental regulations of DOE to require the Contractor, an assignee or exclusive licensee of a Subject Invention to grant a nonexclusive, 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, DOE has the right to grant such a license itself if DOE 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 Clause 7.1, Technology Transfer Mission, 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.

(j) Special provision for contracts with nonprofit organizations. If the Contractor is a nonprofit organization, it agrees that:

(1) Rights to a Subject Invention in the United States may not be assigned without the approval of DOE, except where such assignment is made to an organization which has as one of its primary functions the management of inventions, provided that such assignee will be subject to the same provisions as the Contractor.

(2) It will make efforts that are reasonable under the circumstances to attract licensees of Subject Inventions that are small business firms and that it will give a preference to a small business firm when licensing a Subject Invention if the Contractor determines that the small business firm has a plan or proposal for marketing the invention which, if executed, is equally as likely to bring the invention to practical application as any plans or proposals from applicants that are not small business firms; provided, that the Contractor is also satisfied that the small business firm has the capability and resources to carry out its plan or proposal. The decision whether to give a preference in any specific case will be at the discretion of the Contractor. However, the Contractor agrees that the Secretary of Commerce may review the Contractor's licensing program and decisions regarding small business applicants, and the Contractor will negotiate changes to its licensing policies, procedures, or practices with the Secretary when the Secretary's review discloses that the Contractor could take reasonable steps to implement more effectively the requirements of this subparagraph (j)(2).

(k) Communications. Communications to DOE with regard to this clause shall be directed to the Patent Counsel.

(l) Facilities license. In addition to the rights of the Parties with respect to inventions or discoveries conceived or first actually reduced to practice in the course of or under this contract, the Contractor agrees to and does hereby grant to the Government an irrevocable, nonexclusive, paid-up license in and to any inventions or discoveries regardless of when conceived or actually reduced to practice or acquired by the Contractor at any time through completion of this contract and which are incorporated or embodied in the construction of the facility, which are utilized in the operation of the facility or which cover articles, materials, or products manufactured at the facility

(1) to practice or have practiced by or for the Government at the facility, and

(2) to transfer such license with the transfer of that facility.

The acceptance or exercise by the Government of these rights shall not prevent the Government at any time from contesting the enforceability, validity or scope of or title to, any rights or patents herein licensed.

(m) Atomic Energy.

(1) No claim for pecuniary award or compensation under the provisions of the Atomic Energy Act of 1954, as amended, shall be asserted by the Contractor or its employees with respect to any invention or discovery made or conceived in the course of or under this contract.

(2) Except as otherwise authorized in writing by the Contracting Officer, the Contractor will obtain patent agreements to effectuate the provisions of subparagraph (m)(1) above from all

persons who perform any part of the work under this contract, except nontechnical personnel, such as clerical employees and manual laborers.

(n) Patent functions. The Contractor upon written request of the Contracting Officer or Patent Counsel will use reasonable efforts to support the Patent Counsel in carrying out patent-related functions for work arising out of the contract, which functions include but are not limited to prosecution of patent applications where the Government obtains title, determination of questions of novelty, patentability, prior art searches and inventorship.

(o) Educational awards subject to 35 U.S.C. §212. Because of the provisions of 35 U.S.C. §212, DOE retains the right to restrict assignment of certain individuals to research projects in the following circumstances:

- (1) The project involves an area of technology related to Exceptional Circumstances technology;
- (2) The project involves matters covered by treaties or international agreements as set forth in subparagraphs (b)(1), (2), and (3) above; or
- (3) The project involves an agreement other than a funding agreement.

The Contractor shall provide advance notification to the Contracting Officer where an individual covered by 35 U.S.C. §212 is proposed for an assignment to a project described in this paragraph.

(p) Examination of records. The Contracting Officer or authorized representative, until the expiration of three years after final payment under this contract, shall have the right to examine any books (including laboratory notebooks), records, documents, and other supporting data of the Contractor which the Contracting Officer or authorized representative reasonably deem pertinent to the discovery or identification of Exceptional Circumstance Subject Inventions or to determine compliance with the requirements of this clause. Any examination of records under this paragraph will be subject to appropriate conditions to protect the confidentiality of the information involved.

(q) Rights governed by other agreements. Rights to inventions made under agreements other than funding agreements with third parties shall be governed by the appropriate provisions incorporated, with DOE approval, in such agreements, notwithstanding any disposition of rights contained in this contract. Disposition of rights under any such agreement shall be in accordance with any DOE class waiver of Government invention rights (including Work for Others, User Facility and CRADA class waivers) or individually negotiated waiver which applies to the agreement and shall take precedence over any disposition of rights in this contract. Where an invention is conceived in the course of work under this contract, but is later reduced to practice under a Work for Others or CRADA agreement, rights to such invention shall be governed by the provisions incorporated, with DOE approval, in the Work for Others or CRADA agreement. Nothing in this paragraph shall abrogate the rights of third parties under any agreement approved by DOE and entered into prior to any such DOE class waiver.

(r) Publication release. It is recognized that during the course of the work under this contract, the Contractor or its employees may from time to time desire to release or publish information regarding scientific or technical developments conceived or first actually reduced to practice in the course of or under this contract. In order that public disclosure of such information will not adversely affect the patent interest of DOE or the Contractor, patent approval for release or publication shall be secured from the Contractor personnel responsible for patent matters prior to any such release or publication. Where publication releases are requested of DOE, DOE's response to such requests for approval shall not be withheld for more than 90 days except in circumstances

in which a domestic application must be filed in order to protect foreign patent rights. In the latter case, DOE shall be granted an additional 180 days within which to respond to the request for approval. The period of 180 days may be extended by mutual agreement of the Parties.

CLAUSE 7.8 - 41 CFR 9-9.106 CLASSIFIED INVENTIONS (JUN 1979)

(a) When filing a patent application in the United States on any invention or discovery conceived of or first actually reduced to practice in the course of or under this contract, the subject matter of which is classified for reasons of security, the Contractor shall observe all applicable security regulations covering the transmission of classified subject matter. When transmitting the patent application to the United States Patent and Trademark Office, the Contractor shall, by separate letter, identify, by agency and number, the contract(s) which require security classification markings to be placed on the application.

(b) The Contractor shall follow the procedures of FAR 27.207-2 and FAR 52.227-10 in all subcontracts which cover or are likely to cover classified subject matter.

CLAUSE 7.9 - ADDITIONAL TECHNICAL DATA REQUIREMENTS (SPECIAL)

Except as otherwise authorized by the Contracting Officer, the Contractor, pursuant to FAR 27.409(h), shall normally include the clause at FAR 52.227-16 in any subcontract for research, development or demonstration to enable the ordering of technical data as actual need and requirements therefor become known during the course of the subcontract.

CLAUSE 7.10 - RIGHTS TO PROPOSAL DATA (SPECIAL)

Except as otherwise authorized by the Contracting Officer, the Contractor, pursuant to FAR 27.409(s), shall include the clause at FAR 52.227-23 in any subcontract awarded based on consideration of a technical proposal.

8.0 SUBCONTRACT MANAGEMENT

CLAUSE 8.1 - DEAR 970.5204-22 CONTRACTOR PURCHASING SYSTEM (OCT 1995) (MODIFIED)

(a) General. The Contractor shall develop, implement, and maintain formal policies, practices, and procedures to be used in the award of subcontracts consistent with this clause, DEAR 970.5204-44, and DEAR 970.71. The Contractor's purchasing system and methods shall be fully documented, consistently applied, and acceptable to DOE in accordance with DEAR 970.7102. The Contractor shall maintain file documentation which is appropriate to the value of the purchase and is adequate to establish the propriety of the transaction and the price paid. The Contractor's purchasing performance will be evaluated against such performance objectives, criteria, and measures as may be set forth elsewhere in this contract. DOE reserves the right at any time to require that the Contractor submit for approval any or all purchases under this contract. The Contractor shall not purchase any item or service the purchase of which is expressly prohibited by the written direction of the Contracting Officer and shall use such special and directed sources as may be expressly required by the Contracting Officer. The Contractor's approved purchasing system and methods shall include the requirements set forth in paragraphs (b) through (bb) below.

(b) Acquisition of utility services. Utility services shall be acquired in accordance with the requirements of DEAR 970.0803.

(c) Acquisition of real property. Real property shall be acquired in accordance with DEAR 917.74 and Clause 6.16, Acquisition of Real Property.

(d) Advance notice of proposed subcontract awards. Advance notice shall be provided in accordance with DEAR 970.7109.

(e) Audit of subcontractors.

(1) The Contractor shall provide for

(i) periodic post-award audit of cost-reimbursement subcontracts at all tiers; and

(ii) audits, where necessary, to provide a valid basis for pre-award or cost or price analysis.

(2) Responsibility for determining the costs allowable under each cost-reimbursement subcontract remains with the Contractor or next higher-tier subcontractor. The Contractor shall provide, in appropriate cases, for the timely involvement of the Contractor and the Contracting Officer in resolution of subcontract cost allowability.

(3) Where audits of subcontracts at any tier are required, arrangements may be made to have the cognizant federal agency perform the audit of the subcontract. These arrangements shall be made administratively between DOE and the other agency involved and shall provide for the cognizant agency to audit in an appropriate manner in light of the magnitude and nature of the subcontract. In no case, however, shall arrangements preclude determination by the Contracting Officer of the allowability or unallowability of subcontract costs claimed for reimbursement by the Contractor.

(4) Allowable costs for cost reimbursable subcontracts are to be determined in accordance with the cost principles of FAR Part 31, appropriate for the type of organization to which the subcontract is to be awarded, as supplemented by DEAR Part 931. Allowable costs in the purchase or transfer from Contractor-Affiliated sources shall be determined in accordance with DEAR 970.7105 and DEAR 970.3102-15(B).

(f) Bonds and Insurance.

(1) The Contractor shall require performance bonds in penal amounts as set forth in FAR 28.102-2(a) for all fixed-price and unit-priced construction subcontracts in excess of \$100,000. The Contractor shall consider the use of performance bonds in fixed-price nonconstruction subcontracts, where appropriate.

(2) A payment bond shall be obtained on Standard Form 25a or an alternate form approved by the Contracting Officer, modified to name the Contractor as well as the United States of America as obligees, for all fixed-price, unit-priced, and cost-reimbursement construction subcontracts in excess of \$100,000. The penal amounts shall be determined as set forth in FAR 28.102-2(b).

(3) A subcontractor may have more than one acceptable surety in both construction and other subcontracts, provided that in no case will the liability of any one surety exceed the maximum penal sum for which it is qualified for any one obligation. For subcontracts other than construction, co-sureties (two or more sureties together) may reinsure amounts in excess of each surety's individual capacity, with each surety having the required underwriting capacity that appears on the list of acceptable corporate sureties.

(g) Buy American. The Contractor shall comply with the provisions of Clause 8.13, Buy American Act-Supplies, and Clause 8.14, Buy American Act-Construction Materials. The Contractor shall forward determinations of nonavailability of individual items to the Contracting Officer for approval. If the Contractor has an approved purchasing system, the Contracting Officer may authorize the Contractor to make determinations of nonavailability for individual items valued at \$100,000 or less.

(h) Competition. The Contractor's purchasing system shall ensure the use of effective competitive techniques.

(i) Construction and Architect-Engineer subcontracts.

(1) Independent estimates. A detailed, independent estimate of costs shall be prepared for all construction work to be subcontracted.

(2) Specifications. Specifications for construction shall be prepared in accordance with applicable DOE Directives.

(3) Prevention of conflicts of interest.

(i) The Contractor shall not award a subcontract for construction to the architect-engineering firm or an affiliate that prepared the design. This prohibition does not preclude the award of a "turnkey" subcontract or a design-build subcontract for a pre-engineered building so long as the subcontractor assumes all liability for defects in design and construction and consequential damages.

(ii) The Contractor shall not award both a cost-reimbursement subcontract and a fixed-price subcontract for construction or architect-engineer services or any combination thereof to the same subcontractor where those subcontracts will be performed at the same site.

(iii) The Contractor shall not employ the construction subcontractor or an affiliate to inspect the subcontractor's work. The Contractor shall assure that the working relationships of the construction subcontractor and the subcontractor inspecting the construction subcontractor's work and the authority of the inspector are clearly defined.

(4) Labor standards. The Contractor shall comply with the provisions of Clause 8.12, Subcontracts (Labor Standards).

(j) Contractor-affiliated sources. Equipment, materials, supplies, or services from a contractor-affiliated source shall be purchased or transferred in accordance with DEAR 970.7105.

(k) Contractor-subcontractor relationship. The obligations of the Contractor under paragraph (a) above, including the development of the purchasing system and methods, and purchases made pursuant thereto, shall not relieve the Contractor of any obligation under this contract (including, among other things, the obligation to properly supervise, administer, and coordinate the work of subcontractors). Subcontracts shall be in the name of the Contractor and shall not bind or purport to bind the Government.

(l) Equal opportunity preaward clearance. The Contractor shall not enter into a non-construction subcontract for an estimated or actual amount of \$1 million or more without obtaining, in writing, from the Contracting Officer a clearance that the proposed subcontractor is in compliance with equal opportunity requirements and therefore is eligible for award.

(m) Government property. Identification, inspection, maintenance, protection, and disposition of Government property shall conform to the policies and principles of FAR Part 45, DEAR Part 945, the Federal Property Management Regulations (41 CFR Part 1010), the DOE Property Management Regulations (41 CFR Part 109), and this contract.

(n) Guard force. The Contractor shall include in any subcontract for protective services authorized under Section 161(k) of the Atomic Energy Act of 1954, as amended, a provision to make allowable, upon approval or ratification in writing by the Contracting Officer, litigation expenses (including reasonable counsel fees and the premium for bail bond) necessary to defend adequately an on-site uniformed guard against whom a civil or criminal action is brought based upon an act or acts of the guard undertaken within the course and scope of employment.

(o) Indemnification. Except for Price-Anderson nuclear hazards indemnification, no subcontractor may be indemnified except with the prior approval of the Procurement Executive.

(p) Intellectual Property. The Contractor shall comply with the relevant provisions in DEAR Parts 927 and 970 and this contract.

(q) Leasing of motor vehicles. The Contractor shall comply with FAR 8.11 and DEAR 908.11.

(r) Legal service acquisitions. The Contractor's purchasing system shall incorporate the acquisition provisions of the Contractor's approved litigation management procedures.

(s) Make-or-buy plans. Acquisition of property and services shall be consistent with the requirements of Clause 6.18, Make-or-Buy Plan, and the Contractor's approved Make-or-Buy Plan.

(t) Management, acquisition, and use of information resources. Requirements for automatic data processing resources and telecommunications facilities, services, and equipment, shall be reviewed and approved in accordance with applicable federal regulations and DOE Directives regarding information resources.

(u) Priorities, allocations, and allotments. Priorities, allocations, and allotments shall be extended to appropriate subcontracts in accordance with Clause 8.3, Priorities and Allocations.

(v) Purchase of special items. Purchase of the following items shall be in accordance with the following provisions of DEAR 908.71 and the Federal Property Management Regulations (41 CFR Part 101):

- (1) Motor vehicles - DEAR 908.7101
- (2) Aircraft - DEAR 908.7102
- (3) Security cabinets - DEAR 908.7106
- (4) Alcohol - DEAR 908.7107
- (5) Helium - DEAR 908.7108
- (6) Fuels and packaged petroleum products - DEAR 908.7109
- (7) Coal - DEAR 908.7110
- (8) Arms and ammunition - DEAR 908.7111
- (9) Heavy water - DEAR 908.7121(a)
- (10) Precious metals - DEAR 908.7121(b)
- (11) Lithium - DEAR 908.7121(c)
- (12) Products and services of the blind and severely handicapped - 41 CFR 101-26.701
- (13) Products made in federal penal and correctional institutions - 41 CFR 101-26.702

(w) Purchase vs. lease determinations. The Contractor shall determine whether required equipment and property should be purchased or leased, and establish appropriate thresholds for application of lease vs. purchase determinations. Such determinations will be made at time of original acquisition and when lease renewals are being considered.

(x) Quality assurance. The Contractor shall provide no less protection for the Government in the Contractor's subcontracts than is provided to the Government in this contract.

(y) Research acquired from colleges and universities. In order to increase the participation in scientific collaboration, the Parties agree to develop terms and conditions for research subcontracts with colleges and universities, other than University campuses, that meet the needs of these institutions.

(z) Setoff of assigned subcontractor proceeds. If a subcontractor has been permitted to assign payments to a financial institution, the assignment shall treat any right of setoff in accordance with DEAR 932.803.

(aa) Strategic and critical materials. The Contractor may use strategic and critical materials in the national defense stockpile.

(bb) Termination. When subcontracts are terminated as a result of the termination of all or a portion of this contract, the Contractor shall settle with subcontractors in conformity with the policies and principles relating to settlement of prime contracts in FAR 49.1, 49.2 and 49.3. When subcontracts are terminated for reasons other than termination of this contract, the Contractor shall settle such subcontracts in general conformity with the policies and principles in FAR 49.1, 49.2, 49.3 and 49.4. Each such termination shall be documented and consistent with the terms of this contract.

Terminations which require approval by the Contracting Officer shall be supported by accounting data and other information as may be directed by the Contracting Officer. -

CLAUSE 8.2 - DEAR 970.5204-24 SUBCONTRACTOR COST OR PRICING DATA (OCT 1995) (MODIFIED)

The following clause shall be inserted in all subcontracts where such subcontracts are over \$500,000 and any modification over \$500,000 to such subcontracts, even though the original amount of the subcontract is \$500,000 or less:

CERTIFIED COST OR PRICING DATA (OCT 1995) (MODIFIED):

(a) (1) The subcontractor shall require under the situations described in subparagraph (2) below, unless exempted under the exceptions set forth in subparagraph (3) below, each sub-subcontractor under this subcontract to submit cost or pricing data and to certify that, to the best of his knowledge and belief, such cost or pricing data are accurate, complete and current.

(2) Except as provided in subparagraph (3) below, certified cost or pricing data shall be submitted prior to

(i) the award of each sub-subcontract, the price of which is expected to exceed \$500,000, and

(ii) the negotiation of the price of each change or modification to a sub-subcontract under this subcontract which involves aggregate increases and/or decreases in costs plus applicable profits expected to exceed \$500,000.

(3) Certified cost or pricing data need not be furnished pursuant to this paragraph (a) where

(i) the subcontractor has not been required to furnish cost or pricing data; or

(ii) the price adjustment is based on adequate price competition, established catalog or market prices of commercial items sold in substantial quantities to the general public, or the prices are set by law or regulation; and the subcontractor states, in writing, the basis for applying this exception.

(4) In submitting the cost or pricing data, the subcontractor shall use the form of certificate set forth in paragraph (b) below and shall certify that the data are accurate, complete, and current. Such certificate and data (actual or identified, as provided in the certificate prescribed below) shall be submitted by sub-subcontractors to the next higher-tier sub-subcontractor or the subcontractor, as applicable, for retention.

(b) The certificates required by this clause shall be in the form set forth below.

Subcontractor's Certificate of Current Cost or Pricing Data: This is to certify that, to the best of my knowledge and belief, cost or pricing data submitted, in writing, or specifically identified, in writing, if actual submission of the data is impracticable (See FAR 15.804-6(d)), to the Contractor in support of _____ * are accurate, complete, and current as of _____ **.

Firm _____
Name _____
Title _____
Date of execution*** _____

* Identify the proposal, quotation, request for price adjustment, or other submission involved.

** Insert the day, month, and year when price negotiations were concluded and price agreement was reached.

*** Insert the day, month, and year of signing, which should be as close as practicable to the date when the price negotiations were concluded and the contract price was agreed to.

(END OF CERTIFICATE)

(c) For purposes of verifying that certified cost or pricing data submitted in conjunction with the negotiation of this subcontract change or other modification which involves aggregate increases and/or decreases in costs plus applicable profits expected to exceed \$500,000, were accurate, complete, and current, DOE shall, until the expiration of three (3) years from the date of final payment under this subcontract, have the right to examine those books, records, documents, papers, and other supporting data which involve transactions related to this subcontract or which will permit adequate evaluation of the cost or pricing data submitted, along with the computations and projections used therein.

(d) Whenever the price of any change or other modification to this subcontract exceeds \$500,000 or involves aggregate increases and/or decreases in costs plus applicable profits expected to exceed \$500,000, the subcontractor agrees to furnish the Contractor certified cost or pricing data, using the certificate set forth in paragraph (b) above, unless the price is based on adequate price competition, established catalog or market prices of commercial items sold in substantial quantities to the general public, or prices set by law or regulation.

(e) The requirement for submission of certified cost or pricing data with respect to any change or other modification does not apply to any sub-subcontract change or other modification, at any tier, where the subcontract is firm fixed-price or fixed-price with escalation unless such change or other modification result from a change or modification to the subcontract, nor does it apply to a sub-subcontract change or modification, at any tier, where the subcontract is not firm fixed-price or fixed-price with escalation unless the price for such change or other modification becomes reimbursable under the subcontract.

(f) The subcontractor agrees to insert paragraph (c) without change and the substance of paragraphs (a), (b), (d), (e), and (f) of this clause in each sub-subcontract hereunder in excess of \$500,000 and in each sub-subcontract of \$500,000 or less, at the time of making a change or other modification thereto which involves aggregate increases and/or decreases in costs plus applicable profits expected to exceed \$500,000.

(g) If the prime Contractor determines that any price, including profit or fee, negotiated in connection with this subcontract or any cost reimbursable under this subcontract was increased by any significant sums because the subcontractor, or any sub-subcontractor pursuant to this clause or any sub-subcontract clause herein required, furnished incomplete or inaccurate cost or pricing data or data not current as certified in the subcontractor's certificate of current cost or pricing data, then such price or cost shall be reduced accordingly and the contract shall be modified, in writing, to reflect such reduction.

(h) Failure of the Contractor and the subcontractor to agree on any of the matters in paragraph (g) above, shall be a dispute concerning a question of fact subject to the disputes clause of this subcontract.

Note: Since the subcontract is subject to reduction under this clause by reason of defective cost or pricing data submitted in connection with certain sub-subcontracts, it is expected that the subcontractor may wish to include a clause in each such sub-subcontract requiring the sub-subcontractor to appropriately indemnify the subcontractor. It is also expected that any sub-subcontractor subject to such indemnification will generally require substantially similar indemnification for defective cost or pricing data required to be submitted by its lower-tier sub-subcontractors.

CLAUSE 8.3 - DEAR 970.5204-33 PRIORITIES AND ALLOCATIONS (APR 1994)

(a) The Contractor shall follow the rules and procedures of the Defense Priorities and Allocations System (DPAS) regulation (15 CFR Part 700) in obtaining controlled materials and other products and materials needed for contract performance.

(b) A program or project under this contract may be determined to be eligible for priorities and allocations support as provided for by Section 101(c) of the Defense Production Act of 1950, as amended by the Energy Policy and Conservation Act, Pub. L. 94-163 (42 U.S.C. §§6201 *et seq.*), if it is determined that its purpose is to maximize domestic energy supplies. Eligibility is dependent on an executive decision on a case-by-case basis with the decision being jointly made by the Departments of Energy and Commerce.

(c) DOE regulations regarding material allocation and priority performance under contracts or orders to maximize domestic energy supplies can be found at 10 CFR Part 216.

(d) Additional guidance is provided by DOE Publication MA-0192, "Priorities and Allocations Support for Energy: Keeping Energy Programs on Schedule", dated August 1985, as it may from time to time be revised. Copies may be obtained by written request to: Department of Energy, Office of Scientific and Technical Information (OSTI), Post Office Box 62, Oak Ridge, Tennessee 37830.

CLAUSE 8.4 - DEAR 970.5204-39 ACQUISITION AND USE OF ENVIRONMENTALLY PREFERABLE PRODUCTS AND SERVICES (OCT 1995)

(a) In the performance of this contract, the Contractor shall comply with the following requirements:

(1) Executive Order 12873 of October 20, 1993, entitled "Federal Acquisition, Recycling, and Waste Prevention."

(2) Section 6002 of the Resource Conservation and Recovery Act (RCRA) of 1976, as amended, Pub. L. 94-580 (42 U.S.C. §6962).

(3) 40 CFR Part 247, comprehensive guidelines for the procurement of products containing recovered materials, and such other relevant guidelines of the Environmental Protection Agency.

(4) "United States Department of Energy Affirmative Procurement Program for Products Containing Recovered Materials" and applicable DOE Directives.

(b) The Contractor shall prepare and submit reports on matters related to the use of environmentally preferable products and services from time to time in accordance with written direction from the Contracting Officer.

(c) In complying with the requirements of paragraph (a) above, the Contractor shall coordinate its concerns and seek implementing guidance on federal and DOE policy, plans, and program guidance with the DOE recycling point of contact, who shall be identified by the Contracting Officer. Reports required pursuant to paragraph (b) above, shall be submitted through the DOE recycling point of contact.

CLAUSE 8.5 - DEAR 970.5204-44 FLOWDOWN OF CONTRACT REQUIREMENTS TO SUBCONTRACTS (FEB 1997) (DEVIATION)

(a) Requirement. The Contractor shall include the clauses in paragraph (c) below in appropriate subcontracts.

(1) To the extent that a clause listed in paragraph (c) below is included in this contract, the Contractor shall comply with that portion of the clause that directs application to subcontracts.

(2) To the extent a clause listed in paragraph (c) below is not included in this contract, or where it is included but there is no instruction for treatment in subcontracts, the Contractor shall include the clause in accordance with applicable regulatory guidance.

(3) In all cases, where a regulation is cited in connection with a clause listed in paragraph (c) below, the Contractor shall comply with the regulation in administration of the related clause.

(b) Commercial item subcontracts. Only those clauses in paragraph (c) below marked with an asterisk are required to be included in all subcontracts for commercial items. These mandatory flowdowns for commercial item subcontracts are in addition to the mandatory requirements contained in Clause 8.16, Subcontracts for Commercial Items and Commercial Components. Clauses listed in paragraph (c) below marked with a double-asterisk may be required to be incorporated into subcontracts for commercial items depending upon the type and/or nature of the commercial item being acquired. Specific guidance pertaining to the applicability of each of the double-asterisked clauses and the requirements to flowdown other clauses to commercial item subcontracts are contained in Acquisition Letter 96-03, Attachment 2, the FAR, and the DEAR. The remainder of the clauses listed in paragraph (c) below, which are not marked with a single or double asterisk, are not required to be included in subcontracts for commercial items.

(c) Subcontract clauses and related requirements .

** (1) Accounts, Records, and Inspection. Clause at DEAR 970.5204-9.

(2) Access to and Ownership of Records. Clause 11.1, Access to and Ownership of Records.

(3) Air Transportation by U.S. Flag Carriers. Clauses at FAR 52.247-63 and FAR 52.247-64.

(4) Anti-Kickback Act of 1986. Clause at FAR 52.203-7.

- (5) Clean Air and Water. Clause at FAR 52.223-2; requirements at FAR 23.1.
- (6) Contract Work Hours and Safety Standards Act. Clause at FAR 52.222-4; requirements at FAR 22.3.
- (7) Continuity of Services. Clause similar to Clause 9.12, Collective Bargaining.
- ** (8) Cost or Pricing Data. Clause at DEAR 970.5204-24.
- (9) Cost and Schedule Control Systems. Clause at DEAR 970.5204-50.
- ** (10) Cost Accounting Standards. Clause at FAR 52.230-2; requirements at DEAR 970.30.
- (11) Damages for Illegal or Improper Activity. Clause at FAR 52.203-10.
- (12) Displaced Employee Hiring. Clause 9.14, Workforce Restructuring Under Section 3161 of the National Defense Authorization Act For Fiscal Year 1993.
- * (13) Employment of the Handicapped. Clause at FAR 52.222-36; requirements at FAR 22.14.
- ** (14) Environment, Safety and Health. Clause 6.7, Integration of Environment, Safety and Health into Work Planning and Execution, or other clauses as prescribed in DEAR 970.2303-2.
- * (15) Equal Employment Opportunity. Clause at FAR 52.222-26, and other clauses as prescribed in FAR 22.810, as applicable; requirements at FAR 22.8, DEAR 922.8, Executive Order 11246, and 41 CFR Part 60.
- (16) Foreign Owned or Controlled Interest. Clause at DEAR 952.204-74.
- (17) Foreign Purchases. Clause at FAR 52.225-11.
- (18) Foreign Travel. Clause at DEAR 970.5204-52.
- (19) Hazardous Materials. Clause 6.10, Hazardous Material Identification and Material Safety Data.
- (20) Labor Standards.
 - ** (i) Construction. Clauses at Clause 8.12, Subcontracts (Labor Standards); requirements at FAR 22.4 and DEAR 922.4 and 970.2273.
 - (ii) Services. Clause at FAR 52.222-41, Service Contract Act.
 - (iii) Walsh-Healy. Clause 8.20, Walsh-Healy Public Contracts Act.
 - (iv) Overtime. Clause at FAR 52.222-4.
- (21) Reserved.
- ** (22) Nuclear Hazards Indemnity. Clause at DEAR 952.250-70.
- (23) Nuclear Materials. Clause 10.1, Control of Nuclear Materials.

- ** (24) Organizational Conflicts of Interest. Clause at DEAR 952.209-72; requirements at DEAR 970.0905.
- ** (25) Patents, Data, and Copyrights. Clauses as required by Patents/Data Rights clauses of this contract.
- ** (26) Printing. Clause at DEAR 970.5204-19.
- ** (27) Privacy Act. Clauses at FAR 52.224-1 and FAR 52.224-2; requirements at FAR 24.1.
- (28) Property.
 - (i) Government Property. Clause at DEAR 970-5204-21.
 - (ii) Real Property. Clause at DEAR 952.217-70.
- (29) Restrictions on Subcontractor Sales to the Government. Clause at FAR 52.203-6.
- ** (30) Safeguards and Security. Clauses prescribed at DEAR 970.0404 and by this contract.
- ** (31) Small, Small Disadvantaged, and Women-owned Small Business Concerns. Clauses at FAR 52.219-8 and -9.
- * (32) Special Disabled and Vietnam Era Veterans. Clauses at FAR 52.222-35 and FAR 52.222-37; requirements at FAR 22.13.
- (33) Substance Abuse Programs. Clause at DEAR 970.5204-58.
- (34) Taxes. Clause similar to DEAR 970.5204-23, Cost-reimbursement. An appropriate tax clause covering tax matters should also be included in fixed-price subcontracts.
- (35) Termination. Clause or clauses as set forth at FAR 52.249-1 through 52.249-14.
- (36) Unclassified Controlled Nuclear Information. Clause 10.5, Unclassified Controlled Nuclear Information.
- (37) Whistleblower Protection. Clause at DEAR 970.5204-59.
- (38) Workmanship and Materials. Clause at DEAR 970.5204-25.
- (d) Omissions. Omission from the foregoing list of contract flowdown provisions shall not be construed as waiving a requirement for the Contractor to comply with a flowdown requirement for subcontracts appearing elsewhere in this contract.

CLAUSE 8.6 - UNIVERSITY RESEARCH AND SUPPORTING EFFORTS FOR THE LABORATORY (SPECIAL)

Although the work of this contract is to be accomplished primarily through Contractor personnel at the Laboratory and through subcontractors, the Contractor may, pursuant to Clause 8.1(j) and as provided for in policies and procedures approved by the Contracting Officer, use its expertise and resources at its campuses. A "campus," for the purpose of this clause, includes any Contractor

organization except Lawrence Berkeley National Laboratory, Lawrence Livermore National Laboratory, and Los Alamos National Laboratory.

CLAUSE 8.7 - FAR 52.203-6 RESTRICTIONS ON SUBCONTRACTOR SALES TO THE GOVERNMENT (JUL 1995)

- (a) Except as provided in paragraph (b) below, the Contractor shall not enter into any agreement with an actual or prospective subcontractor, nor otherwise act in any manner, which has or may have the effect of restricting sales by such subcontractors directly to the Government of any item or process (including computer software) made or furnished by the subcontractor under this contract or under any follow-on production contract.
- (b) The prohibition in paragraph (a) above does not preclude the Contractor from asserting rights that are otherwise authorized by law or regulation.
- (c) The Contractor agrees to incorporate the substance of this clause, including this paragraph (c), in all subcontracts under this contract which exceed \$100,000.

CLAUSE 8.8 - FAR 52.209-6 PROTECTING THE GOVERNMENT'S INTEREST WHEN SUBCONTRACTING WITH CONTRACTORS DEBARRED, SUSPENDED, OR PROPOSED FOR DEBARMENT (AUG 1995)

- (a) The Government suspends or debar contractors to protect the Government's interests. The Contractor shall not enter into any subcontract in excess of the small purchase limitation at FAR Part 13 with a party that is debarred, suspended, or proposed for debarment unless there is a compelling reason to do so.
- (b) The Contractor shall require each proposed first-tier subcontractor, whose subcontract will exceed the small purchase limitation at FAR Part 13, to disclose to the Contractor, in writing, whether as of the time of award of the subcontract, the subcontractor, or its principals, is or is not debarred, suspended, or proposed for debarment by the federal Government.
- (c) A corporate officer or a designee of the Contractor shall notify the Contracting Officer, in writing, before entering into a subcontract with a party that is debarred, suspended, or proposed for debarment (see FAR 9.404 for information on the List of Parties Excluded from Procurement And Non-Procurement Programs). The notice must include the following:
 - (1) The name of the prospective subcontractor.
 - (2) The Contractor's knowledge of the reasons for the prospective subcontractor being on the List of Parties Excluded from Procurement And Non-Procurement Programs.
 - (3) The compelling reason(s) for doing business with the prospective subcontractor notwithstanding its inclusion on the List of Parties Excluded From Procurement And Non-Procurement Programs.
 - (4) The systems and procedures the Contractor has established to ensure that it is fully protecting the Government's interests when dealing with such prospective subcontractor in view of the specific basis for the party's debarment, suspension or proposed debarment.

CLAUSE 8.9 - FAR 52.219-8 UTILIZATION OF SMALL, SMALL DISADVANTAGED, AND WOMEN-OWNED SMALL BUSINESS CONCERNS (OCT 1995) (MODIFIED)

(a) It is the policy of the United States that small business concerns, small business concerns owned and controlled by socially and economically disadvantaged individuals, and small business concerns owned and controlled by women shall have the maximum practicable opportunity to participate in performing contracts let by any federal agency, including contracts and subcontracts for subsystems, assemblies, components, and related services for major systems. It is further the policy of the United States that its prime contractors establish procedures to ensure the timely payment of amounts due pursuant to the terms of their subcontracts with small business concerns, small business concerns owned and controlled by socially and economically disadvantaged individuals, and small business concerns owned and controlled by women.

(b) The Contractor hereby agrees to carry out this policy in the awarding of subcontracts to the fullest extent consistent with efficient contract performance. The Contractor further agrees to cooperate in any studies or surveys as may be conducted by the Small Business Administration or the awarding agency of the United States as may be necessary to determine the extent of the Contractor's compliance with this clause.

(c) As used in this contract, the term, "small business concern," shall mean a small business as defined pursuant to Section 3 of the Small Business Act and relevant regulations promulgated pursuant thereto. The term, "small business concern owned and controlled by socially and economically disadvantaged individuals," shall mean a small business concern:

(1) Which is at least 51 percent unconditionally owned by one or more socially and economically disadvantaged individuals; or, in the case of any publicly owned business, at least 51 percent of the stock of which is unconditionally owned by one or more socially and economically disadvantaged individuals; and

(2) Whose management and daily business operations are controlled by one or more of such individuals. This term also means a small business concern that is at least 51 percent unconditionally owned by an economically disadvantaged American Indian tribe or Native Hawaiian Organization, or a publicly owned business having at least 51 percent of its stock unconditionally owned by one of these entities which has its management and daily business controlled by members of an economically disadvantaged American Indian tribe or Native Hawaiian Organization, and which meets the requirements of 13 CFR Part 124. The Contractor shall presume that socially and economically disadvantaged individuals include Black Americans, Hispanic Americans, Native Americans, Asian-Pacific Americans, Subcontinent Asian Americans, and other minorities or any other individual found to be disadvantaged by the Administration pursuant to Section 8(a) of the Small Business Act.

(d) The term, "small business concern owned and controlled by women," shall mean a small business concern (1) which is at least 51 percent owned by one or more women, or, in the case of any publicly owned business, at least 51 percent of the stock of which is owned by one or more women, and (2) whose management and daily business operations are controlled by one or more women.

(e) The Contractor acting in good faith may rely on written representations by subcontractors regarding their status as a small business concern, a small business concern owned and controlled by socially and economically disadvantaged individuals, or a small business concern owned and controlled by women.

(f) The failure of the Contractor or subcontractor to comply in good faith with this clause shall be a material breach of the contract.

CLAUSE 8.10 - FAR 52.219-9 SMALL, SMALL DISADVANTAGED, AND WOMEN-OWNED SMALL BUSINESS SUBCONTRACTING PLAN (AUG 1996) (MODIFIED)

(a) This clause does not apply to small business concerns.

(b) (1) "Commercial product," as used in this clause, means a product in regular production that is sold in substantial quantities to the general public and/or industry at established catalog or market prices. It also means a product which, in the opinion of the Contracting Officer, differs only insignificantly from the Contractor's commercial product.

(2) "Subcontract," as used in this clause, means any agreement (other than one involving an employer-employee relationship) entered into by a federal Government prime contractor or subcontractor calling for supplies or services required for performance of the contract or subcontract.

(c) The Contractor, upon request by the Contracting Officer, shall submit and negotiate a subcontracting plan which separately addresses subcontracting with small business concerns, with small disadvantaged business concerns and with women-owned small business concerns. If the Contractor is submitting an individual contract plan, the plan must separately address subcontracting with small business concerns, with small disadvantaged business concerns and with women-owned small business concerns with a separate part for the basic contract and separate parts for each option (if any). The plan shall be included in and made a part of the contract. The subcontracting plan shall be negotiated within the time specified by the Contracting Officer.

(d) The subcontracting plan shall include the following:

(1) Goals, expressed in terms of percentages of total planned subcontracting dollars, for the use of small business concerns, small disadvantaged business concerns and women-owned small business concerns as subcontractors. The Contractor shall include all subcontracts that contribute to contract performance, and may include a proportionate share of products and services that are normally allocated as indirect costs.

(2) A statement of:

(i) Total dollars planned to be subcontracted;

(ii) Total dollars planned to be subcontracted to small business concerns;

(iii) Total dollars planned to be subcontracted to small disadvantaged business concerns;

and

(iv) Total dollars planned to be subcontracted to women-owned small business concerns.

(3) A description of the principal types of supplies and services to be subcontracted, and an identification of the types planned for subcontracting to (i) small business concerns, (ii) small disadvantaged business concerns, and (iii) women-owned small business concerns.

(4) A description of the method used to develop the subcontracting goals in subparagraph (d)(1) above.

(5) A description of the method used to identify potential sources for solicitation purposes.

(i) The Contractor may use existing company source lists, the Procurement Automated Source System (PASS) of the Small Business Administration, the National Minority Purchasing Council Vendor Information Service, the Research and Information Division of the Minority Business Development Agency in the Department of Commerce, or small, small disadvantaged, and women-owned small business concerns trade associations.

(ii) The Contractor may rely on PASS for information on a potential subcontractor's size and ownership characteristics. However, using PASS as its source list does not relieve the Contractor responsibility for outreach, assistance, counseling, and publicizing subcontracting opportunities.

(6) A statement as to whether indirect costs are included in subcontracting goals, and, if so, a description of the method used to determine the proportionate share of indirect costs to be incurred with (i) small business concerns, (ii) small disadvantaged business concerns, and (iii) women-owned small business concerns.

(7) The name of the individual employed by the Contractor who administers the Contractor's subcontracting program, and a description of the duties of the individual.

(8) A description of the efforts to assure that small business, small disadvantaged business, and women-owned small business concerns have an equitable opportunity to compete for subcontracts.

(9) Assurances that Clause 8.9, Utilization of Small, Small Disadvantaged and Women-Owned Small Business Concerns, is included in all subcontracts that offer further subcontracting opportunities, and that the Contractor will require all subcontractors (except small business concerns) who receive subcontracts in excess of \$500,000 (\$1,000,000 for construction of any public facility), to adopt a plan similar to the plan agreed to by the Contractor.

(10) Assurances that the Contractor will (i) cooperate in any studies or surveys as may be required; (ii) submit periodic reports in order to allow the Government to determine the extent of compliance by the Contractor with the subcontracting plan; (iii) submit Standard Form (SF) 294, Subcontracting Report for Individual Contracts, and/or SF 295, Summary Subcontract Report, in accordance with the instructions on the forms; and (iv) ensure that its subcontractors agree to submit Standard Forms 294 and 295.

(11) A recitation of the types of records the Contractor will maintain to demonstrate procedures that have been adopted to comply with the requirements and goals in the plan, including establishing source lists; and a description of its efforts to locate small, small disadvantaged, and women-owned small business concerns and award subcontracts to them. The records shall include at least the following (on a Laboratory-wide or Contractor-wide basis, unless otherwise indicated):

(i) Source lists.

(ii) Organizations contacted in an attempt to locate sources that are small or small disadvantaged or women-owned small business concerns.

(iii) Records on each subcontract solicitation resulting in an award of more than \$100,000, indicating (A) whether small business concerns were solicited and if not, why not; (B) whether small disadvantaged business concerns were solicited and if not, why not; (C) whether

women-owned small business concerns were solicited and if not, why not; and (D) if applicable, the reason award was not made to a small business concern.

(iv) Records of any outreach efforts to contact (A) trade associations, (B) business development organizations, and (C) conferences and trade fairs to locate small, small disadvantaged, and women-owned small business sources.

(v) Records of internal guidance and encouragement provided to buyers through workshops, seminars, training, etc.; and monitoring performance to evaluate compliance with the program's requirements.

(vi) Records to support award data submitted by the Contractor to the Government, including the name, address, and business size of each subcontractor for each subcontract. Contractors having company or division-wide annual plans need not comply with this requirement.

(e) In order to effectively implement this plan to the extent consistent with efficient contract performance, the Contractor shall perform the following functions:

(1) Assist small, small disadvantaged, and women-owned small business concerns by arranging solicitations, time for the preparation of bids, quantities, specifications, and delivery schedules so as to facilitate the participation by such concerns. Where the Contractor's lists of potential small, small disadvantaged, and women-owned small business subcontractors are excessively long, reasonable effort shall be made to give all such small business concerns an opportunity to compete over a period of time;

(2) Provide adequate and timely consideration of the potentialities of small, small disadvantaged, and women-owned small business concerns in all "make-or-buy" decisions;

(3) Counsel and discuss subcontracting opportunities with representatives of small, small disadvantaged, and women-owned small business firms; and

(4) Provide notice to subcontractors concerning penalties and remedies for misrepresentations of business status as small, small disadvantaged, and women-owned small business concerns for the purpose of obtaining a subcontract that is to be included as part or all of a goal contained in the Contractor's subcontracting plan.

(f) A master subcontracting plan on a Laboratory-wide basis which contains all the elements required by paragraph (d) above, except goals, may be incorporated by reference as a part of the subcontracting plan required by the Contractor by this clause; provided (1) the master plan has been approved, and (2) goals and any deviations from the master plan deemed necessary by the Contracting Officer to satisfy the requirements of this contract are set forth in the individual subcontracting plan.

(g) The provisions of this paragraph are included for purposes of flowdown to subcontractors.

(1) If this contract is for delivery of a commercial product, the subcontracting plan required by this clause may relate to the offeror's production generally, for both commercial and noncommercial products, rather than solely to the Government contract. In these cases, the offeror shall, with the concurrence of the Contracting Officer, submit one annual plan.

(2) The annual plan shall be reviewed for approval by the agency awarding the offeror its first prime contract requiring a subcontracting plan during the fiscal year, or by an agency satisfactory to the Contracting Officer.

(3) The approved plan shall remain in effect during the offeror's fiscal year for all of the offeror's commercial products.

(4) Prior compliance of the offeror with other subcontracting plans under previous contracts will be considered by the Contracting Officer in determining the responsibility of the offeror for award of the contract.

(h) The failure of the Contractor or subcontractor to comply in good faith with an approved plan required by this clause shall be a material breach of the contract.

CLAUSE 8.11 - FAR 52.219-16 LIQUIDATED DAMAGES - SUBCONTRACTING PLAN
(OCT 1995)

(a) "Failure to make a good faith effort to comply with the subcontracting plan," as used in this clause, means a willful or intentional failure to perform in accordance with the requirements of the subcontracting plan approved under Clause 8.10, Small, Small Disadvantaged, and Women-Owned Small Business Subcontracting Plan, or willful or intentional action to frustrate the Plan.

(b) If, at contract completion, or in the case of a commercial products plan, at the close of the fiscal year for which the Plan is applicable, the Contractor has failed to meet its subcontracting goals and the Contracting Officer decides in accordance with paragraph (c) below that the Contractor failed to make a good faith effort to comply with the approved subcontracting plan, the Contractor shall pay the Government liquidated damages in an amount stated. The amount of probable damages attributable to the Contractor's failure to comply, shall be an amount equal to the actual dollar amount by which the Contractor failed to achieve each subcontract goal or, in the case of a commercial products plan, that portion of the dollar amount allocable to Government contracts by which the Contractor failed to achieve each subcontract goal.

(c) Before the Contracting Officer makes a final decision that the Contractor has failed to make such good faith effort, the Contracting Officer shall give the Contractor written notice specifying the failure and permitting the Contractor to demonstrate what good faith efforts have been made. Failure to respond to the notice may be taken as an admission that no valid explanation exists. If, after consideration of all the pertinent data, the Contracting Officer finds that the Contractor failed to make a good faith effort to comply with the subcontracting plan, the Contracting Officer shall issue a final decision to that effect and require that the Contractor pay the Government liquidated damages as provided in paragraph (b) above.

(d) With respect to commercial products plans, *i.e.*, company-wide or division-wide subcontracting plans approved under paragraph (g) of Clause 8.10, Small, Small Disadvantaged, and Women-Owned Small Business Subcontracting Plan, the Contracting Officer of the agency that originally approved the plan will exercise the functions of the Contracting Officer under this clause on behalf of all agencies that awarded contracts covered by that commercial product plan.

(e) The Contractor shall have the right of appeal, under Clause 5.10, Disputes, from any final decision of the Contracting Officer.

(f) Liquidated damages shall be in addition to any other remedies that the Government may have.

CLAUSE 8.12 - FAR 52.222-11 SUBCONTRACTS (LABOR STANDARDS) (FEB 1988)
(MODIFIED)

(a) The Contractor shall insert in any subcontract for the construction, alteration, or repair (including painting and decorating) of public buildings or public works the clauses entitled, Davis-Bacon Act, Contract Work Hours and Safety Standards Act-Overtime Compensation, Apprentices and Trainees, Payrolls and Basic Records, Compliance with Copeland Act Requirements, Withholding of Funds, Subcontracts (Labor Standards), Contract Termination-Debarment, Disputes Concerning Labor Standards, Compliance with Davis-Bacon and Related Act Regulations, and Certification of Eligibility (FAR 52.222-6 through -15), and such other clauses as the Contracting Officer may, by appropriate instructions, require, and also a clause requiring subcontractors to include these clauses in any lower tier subcontracts. The Contractor shall be responsible for compliance by any subcontractor or lower-tier subcontractor with all the contract clauses cited in this paragraph.

(b) Within 14 days after the award of any subcontract referred to in paragraph (a) above, the Contractor shall deliver to the Contracting Officer a completed Statement and Acknowledgment Form (SF 1413) for each subcontract, including the subcontractor's signed and dated acknowledgment that the clauses set forth in paragraph (a) above have been included in the subcontract.

CLAUSE 8.13 - DEAR 952.225-3 BUY AMERICAN ACT - SUPPLIES (JAN 1994)

(a) The Buy American Act (41 U.S.C. §10) provides that the Government give preference to domestic end products.

(1) "Component," as used in this clause, means those articles, materials, and supplies incorporated directly into the end products.

(2) "Domestic end product," as used in this clause, means --

(i) An unmanufactured end product mined or produced in the United States; or

(ii) An end product manufactured in the United States, if the cost of its components mined, produced, or manufactured in the United States exceeds 50 percent of the cost of all its components. Components of foreign origin of the same class or kind as the products referred to in subparagraphs (b)(2) or (3) below shall be treated as domestic. Scrap generated, collected, and prepared for processing in the United States is considered domestic.

(3) "End products," as used in this clause, means those articles, materials, and supplies to be acquired for public use under this contract.

(b) The Contractor shall use only domestic end products, except those -

(1) For use outside the United States;

(2) That the Government determines are not mined, produced, or manufactured in the United States in sufficient and reasonably available commercial quantities of a satisfactory quality;

(3) For which the agency determines that domestic preference would be inconsistent with the public interest; or

- (4) For which the agency determines the cost to be unreasonable (see FAR 25.105).

CLAUSE 8.14 - FAR 52.225-5 BUY AMERICAN ACT - CONSTRUCTION MATERIALS
(JUN 1997)

Applicable to construction subcontracts valued at less than \$6.5 million.

(a) Definitions. As used in this clause--

(1) "Components" means those articles, materials, and supplies incorporated directly into construction materials.

(2) "Construction material" means an article, material, or supply brought to the construction site for incorporation into the building or work. Construction material also includes an item brought to the site pre-assembled from articles, materials or supplies. However, emergency life safety systems, such as emergency lighting, fire alarm, and audio evacuation systems, which are discrete systems incorporated into a public building or work and which are produced as a complete system, shall be evaluated as a single and distinct construction material regardless of when or how the individual parts or components of such systems are delivered to the construction site.

(3) "Domestic construction material" means (1) an unmanufactured construction material mined or produced in the United States, or (2) a construction material manufactured in the United States, if the cost of its components mined, produced, or manufactured in the United States exceeds 50 percent of the cost of all its components. Components of foreign origin of the same class or kind as the construction materials determined to be unavailable pursuant FAR subparagraph 25.202(a)(2) shall be treated as domestic.

(b) (1) The Buy American Act (41 U.S.C. 10a-10d) requires that only domestic construction material be used in performing this contract, except as provided in subparagraphs (b)(2) and (b)(3) below.

(2) This requirement does not apply to the excepted construction material or components listed by the Government as follows:

(List applicable accepted materials or indicate "none")

(3) Other foreign construction material may be added to the list in subparagraph (b)(2) above if the Government determines that--

(i) The cost would be unreasonable (the cost of a particular domestic construction material shall be determined to be unreasonable when the cost of such material exceeds the cost of foreign material by more than six percent, unless the agency head determines a higher percentage to be appropriate);

(ii) The application of the restriction of the Buy American Act to a particular construction material would be impracticable or inconsistent with the public interest; or

(iii) The construction material is not mined, produced, or manufactured in the United States in sufficient and reasonably available commercial quantities of a satisfactory quality.

(4) The Contractor agrees that only domestic construction material will be used by the Contractor, subcontractors, material men, and suppliers in the performance of this contract, except for foreign construction materials, if any, listed in subparagraph (b)(2) above.

(c) Request for determination.

(1) Contractors requesting to use foreign construction material under subparagraph (b)(3) above shall provide adequate information for Government evaluation of the request for a determination regarding the inapplicability of the Buy American Act. Each submission shall include a description of the foreign and domestic construction materials, including unit of measure, quantity, price, time of delivery or availability, location of the construction project, name and address of the proposed contractor, and a detailed justification of the reason for use of foreign materials cited in accordance with subparagraph (b)(3) above. A submission based on unreasonable cost shall include a reasonable survey of the market and a completed price comparison table in the format in paragraph (d) below. The price of construction material shall include all delivery costs to the construction site and any applicable duty (whether or not a duty-free certificate may be issued).

(2) If the Government determines after contract award that an exception to the Buy American Act applies, the contract shall be modified to allow use of the foreign construction material, and adequate consideration shall be negotiated. However, when the basis for the exception is the unreasonable price of a domestic construction material, adequate consideration shall not be less than the differential established in subparagraph (b)(3)(i) above.

(3) If the Government does not determine that an exception to the Buy American Act applies, the use of that particular foreign construction material will be a failure to comply with the Act.

(d) For evaluation of requests under paragraph (c) above based on unreasonable cost, the following information and any applicable supporting data based on the survey of suppliers shall be included in the request:

FOREIGN AND DOMESTIC CONSTRUCTION MATERIALS PRICE COMPARISON

<u>Construction Material Description</u>	<u>Unit Of Measure</u>	<u>Quantity</u>	<u>Price (Dollars)*</u>
Item 1: Foreign construction material			
Domestic construction material			
Item 2: Foreign construction material			
Domestic construction material			

List name, address, telephone number, and contact for suppliers surveyed. Attach copy of response; if oral, attach summary. Include other applicable supporting information. * Include all delivery costs to the construction site and any applicable duty (whether or not a duty-free entry certificate is issued).

CLAUSE 8.15 - FAR 52.225-11 RESTRICTIONS ON CERTAIN FOREIGN PURCHASES
(OCT 1996)

- (a) Unless advance written approval of the Contracting Officer is obtained, the Contractor shall not acquire for use in the performance of this contract, any supplies or services originating from sources within, or that were located in or transported from or through, countries whose products are banned from importation into the United States under regulations of the Office of Foreign Assets Control, Department of the Treasury. Those countries include Cuba, Iran, Iraq, Libya, and North Korea.
- (b) The Contractor shall not acquire for use in the performance of this contract any supplies or services from entities controlled by the Government of Iraq.
- (c) The Contractor agrees to insert the provisions of this clause, including this paragraph (c), in all subcontracts hereunder.

CLAUSE 8.16 - FAR 52.244-6 SUBCONTRACTS FOR COMMERCIAL ITEMS AND
COMMERCIAL COMPONENTS (OCT 1995)

- (a) (1) "Commercial item," as used in this clause, has the meaning contained in Clause 1.1, Definitions.
- (2) "Subcontract," as used in this clause, includes a transfer of commercial items between divisions, subsidiaries, or affiliates of the Contractor or subcontractor at any tier.
- (b) To the maximum extent practicable, the Contractor shall incorporate, and require its subcontractors at all tiers to incorporate, commercial items or nondevelopmental items as components of items to be supplied under this contract.
- (c) Notwithstanding any other clause of this contract, except paragraph (b) of Clause 8.5, Flowdown of Contract Requirements to Subcontracts, the Contractor is not required to include any FAR provision or clause, other than those listed below to the extent they are applicable and as may be required to establish the reasonableness of prices under FAR Part 15, in a subcontract at any tier for commercial items or commercial components:
- (1) 52.222-26 - Equal Opportunity (Executive Order 11246);
 - (2) 52.222-35 - Affirmative Action for Special Disabled and Vietnam Era Veterans (38 U.S.C. §4212(a)); and
 - (3) 52.222-36 - Affirmative Action for Handicapped Workers (29 U.S.C. §793).
- (d) The Contractor shall include the terms of this clause, including this paragraph (d), in subcontracts awarded under this contract.

CLAUSE 8.17 - FAR 52.247-63 PREFERENCE FOR U.S.-FLAG AIR CARRIERS
(JAN 1997)

- (a) (1) "International air transportation," as used in this clause, means transportation by air between a place in the United States and a place outside the United States or between two places both of which are outside the United States.

(2) "United States," as used in this clause, means the 50 States, the District of Columbia, the Commonwealth of Puerto Rico, and possessions of the United States.

(3) "U.S.-Flag air carrier," as used in this clause, means an air carrier holding a certificate under 49 U.S.C. §411.

(b) Section 5 of the International Air Transportation Fair Competitive Practices Act of 1974 (49 U.S.C. §1571)(Fly America Act) requires that all federal agencies and Government contractors and subcontractors use U.S.-flag air carriers for U.S. Government-financed international air transportation of personnel (and their personal effects) or property, to the extent that service by those carriers is available. It requires the Comptroller General of the United States, in the absence of satisfactory proof of the necessity for foreign-flag air transportation, to disallow expenditures from funds, appropriated or otherwise established for the account of the United States, for international air transportation secured aboard a foreign-flag air carrier if a U.S.-flag air carrier is available to provide such services.

(c) The Contractor agrees, in performing work under this contract, to use U.S.-flag air carriers for international air transportation of personnel (and their personal effects) or property to the extent that service by those carriers is available.

(d) In the event that the Contractor selects a carrier other than a U.S.-flag air carrier for international air transportation, the Contractor shall include a statement on vouchers involving such transportation essentially as follows:

STATEMENT OF UNAVAILABILITY OF U.S.-FLAG AIR CARRIERS

I hereby certify that international air transportation of persons (and their personal effects) or property by U.S.-flag air carrier was not available or it was necessary to use foreign-flag air carrier service for the following reasons (see Section 47.403 of the Federal Acquisition Regulation):

[State reasons]:

(End of Certification)

(e) The Contractor shall include the substance of this clause, including this paragraph (e), in each subcontract or purchase order under this contract that may involve international air transportation.

CLAUSE 8.18 - FAR 52.247-64 PREFERENCE FOR PRIVATELY-OWNED U.S. FLAG COMMERCIAL VESSELS (AUG 1996)

(a) The Cargo Preference Act of 1954 (46 U.S.C. §1241(b)) requires that federal departments and agencies shall transport in privately owned U.S.-flag commercial vessels at least 50 percent of the gross tonnage of equipment, materials, or commodities that may be transported in ocean vessels (computed separately for dry bulk carriers, dry cargo liners, and tankers). Such transportation shall be accomplished when any equipment, materials, or commodities, located within or outside the United States, that may be transported by ocean vessel are:

(1) Acquired for a United States Government agency account;

(2) Furnished to, or for the account of, any foreign nation without provision for reimbursement;

(3) Furnished for the account of a foreign nation in connection with which the United States advances funds or credits, or guarantees the convertibility of foreign currencies; or

(4) Acquired with advance of funds, loans, or guarantees made by or on behalf of the United States.

(b) The Contractor shall use privately owned U.S.-flag commercial vessels to ship at least 50 percent of the gross tonnage involved under this contract (computed separately for dry bulk carriers, dry cargo liners, and tankers) whenever shipping any equipment, materials, or commodities under the conditions set forth in paragraph (a) above, to the extent that such vessels are available at rates that are fair and reasonable for privately owned U.S.-flag commercial vessels.

(c) (1) The Contractor shall submit one legible copy of a rated onboard ocean bill of lading for each shipment to both (i) the Contracting Officer and (ii) the Division of National Cargo, Office of Market Development, Maritime Administration, United States Department of Transportation, Washington, D.C. 20590. Subcontractor bills of lading shall be submitted through the prime Contractor.

(2) The Contractor shall furnish these bill of lading copies (i) within 20 working days of the date of loading for shipments originating in the United States or (ii) within 30 working days for shipments originating outside the United States. Each bill of lading copy shall contain the following information:

- (A) Sponsoring United States Government agency;
- (B) Name of vessel;
- (C) Vessel flag or registry;
- (D) Date of loading;
- (E) Port of loading;
- (F) Port of final discharge;
- (G) Description of commodity;
- (H) Gross weight in pounds and cubic feet, if available; and
- (I) Total ocean freight revenue in United States dollars.

(d) Except for contracts at or below the simplified acquisition threshold as described in FAR Part 13, the Contractor shall insert the substance of this clause, including this paragraph (d), in all subcontracts or purchase orders under this contract.

(e) The requirement in paragraph (a) above does not apply to:

- (1) Contracts at or below the simplified acquisition threshold as defined in FAR Part 13;

(2) Cargoes carried in vessels of the Panama Canal Commission or as required or authorized by law or treaty;

(3) Ocean transportation between foreign countries of supplies purchased with foreign currencies made available, or derived from funds that are made available, under the Foreign Assistance Act of 1961 (22 U.S.C. §2353); and

(4) Shipments of classified supplies when the classification prohibits the use of non-Government vessels.

(f) Guidance regarding fair and reasonable rates for privately owned U.S.-flag commercial vessels may be obtained from the Division of National Cargo, Office of Market Development, Maritime Administration, U.S. Department of Transportation, Washington, D.C. 20590, Phone: (202) 366-4610.

CLAUSE 8.19 - FAR 52.251-1 GOVERNMENT SUPPLY SOURCES (APR 1984)

The Contracting Officer may issue the Contractor an authorization to use Government supply sources in the performance of this contract. Title to all property acquired by the Contractor under such an authorization shall vest in the Government.

CLAUSE 8.20 - WALSH-HEALY PUBLIC CONTRACTS ACT (SPECIAL)

Except as otherwise may be approved, in writing, by the Contracting Officer, the Contractor agrees to insert the following provision in subcontracts under this contract:

If this subcontract is for the manufacture or furnishing of materials, supplies, articles, or equipment in an amount which exceeds or may exceed \$10,000.00 and is otherwise subject to the Walsh-Healy Public Contracts Act, as amended (41 U.S.C. §§35 through 45), there are hereby incorporated by reference all stipulations required by said Act and regulations issued thereunder by the Secretary of Labor, such stipulations being subject to all applicable rulings and interpretations of the Secretary of Labor which are now or may hereafter be in effect.

9.0 LABOR RELATIONS/ SOCIO-ECONOMIC

CLAUSE 9.1 - FAR 52.222-1 NOTICE TO THE GOVERNMENT OF LABOR DISPUTES
(FEB 1997)

If the Contractor has knowledge that any actual or potential labor dispute is delaying or threatens to delay the timely performance of this contract, the Contractor shall immediately give notice, including all relevant information, to the Contracting Officer.

CLAUSE 9.2 - FAR 52.222-3 CONVICT LABOR (AUG 1996)

(a) The Contractor agrees not to employ in the performance of this contract any person undergoing a sentence of imprisonment which has been imposed by any court of a State, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, Guam, American Samoa, the Commonwealth of the Northern Mariana Islands, or the Trust Territory of the Pacific Islands. This limitation, however, shall not prohibit the employment by the Contractor in the performance of this contract of persons on parole or probation to work at paid employment during the term of their sentence or persons who have been pardoned or who have served their terms. Nor shall it prohibit the employment by the Contractor in the performance of this contract of persons confined for violation of the laws of any of the States, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, Guam, American Samoa, the Commonwealth of the Northern Mariana Islands, or the Trust Territory of the Pacific Islands who are authorized to work at paid employment in the community under the laws of such jurisdiction, if-

(1) The worker is paid or is in an approved work training program on a voluntary basis;

(2) Representatives of local union central bodies or similar labor union organizations have been consulted;

(3) Such paid employment will not result in the displacement of employed workers, or be applied in skills, crafts, or trades in which there is a surplus of available gainful labor in the locality, or impair existing contracts for services; and

(4) The rates of pay and other conditions of employment will not be less than those paid or provided for work of a similar nature in the locality in which the work is being performed.

(b) The Attorney General of the United States has certified that the work-release laws or regulations of the jurisdiction involved are in conformity with the requirements of Executive Order 11755, as amended by Executive Orders 12608 and 12943.

CLAUSE 9.3 - FAR 52.222-4 CONTRACT WORK HOURS AND SAFETY STANDARDS
ACT - OVERTIME COMPENSATION (JUL 1995)

(a) Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics (see FAR 22.300) shall require or permit any such laborers or mechanics in any workweek in which the individual is employed on such work to work in excess of 40 hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than 1-1/2 times the basic rate of pay for all hours worked in excess of 40 hours in such workweek.

(b) Violation, liability for unpaid wages, liquidated damages. In the event of any violation of the provisions set forth in paragraph (a) above, the Contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, the Contractor and any subcontractor shall be liable to the Government (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic employed in violation of the provisions set forth in paragraph (a) above in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of 40 hours without payment of the overtime wages required by provisions set forth in paragraph (a) above.

(c) Withholding for unpaid wages and liquidated damages. The Contracting Officer shall upon his or her own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any monies payable on account of work performed by the Contractor or any subcontractor under this contract or any other federal contract with the Contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act which is held by the Contractor, such sums as may be determined to be necessary to satisfy any liabilities of the Contractor or any subcontractor for unpaid wages and liquidated damages as provided in the provisions set forth in paragraph (b) above.

(d) Payrolls and basic records.

(1) The Contractor or subcontractor shall maintain payrolls and basic payroll records during the course of contract work and shall preserve them for a period of three years from the completion of the contract for all laborers and mechanics working on the contract. Such records shall contain the name and address of each such employee, social security number, correct classifications, hourly rates of wages paid, daily and weekly number of hours worked, deductions made, and actual wages paid. Nothing in this paragraph shall require the duplication of records required to be maintained for construction work by Department of Labor regulations at 29 CFR 5.5(a)(3) implementing the Davis-Bacon Act.

(2) The records to be maintained under subparagraph (d)(1) above shall be made available by the Contractor or subcontractor for inspection, copying, or transcription by authorized representatives of the Contracting Officer or the Department of Labor. The Contractor or subcontractor shall permit such representatives to interview employees during working hours on the job.

(e) Subcontracts. The Contractor or subcontractor shall insert in any subcontracts exceeding \$100,000 the provisions set forth in paragraphs (a) through (e) of this clause and also a clause requiring the subcontractors to include these provisions in any lower-tier subcontracts. The Contractor shall be responsible for compliance by any subcontractor or lower-tier subcontractor with the provisions set forth in paragraphs (a) through (e) of this clause.

CLAUSE 9.4 - FAR 52.222-26 EQUAL OPPORTUNITY (APR 1984)

(a) If, during any 12-month period (including the 12 months preceding the award of this contract), the Contractor has been or is awarded nonexempt federal contracts and/or subcontracts that have an aggregate value in excess of \$10,000, the Contractor shall comply with paragraph (b) below. Upon request, the Contractor shall provide information necessary to determine the applicability of this clause.

(b) During performing this contract, the Contractor agrees as follows:

(1) The Contractor shall not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin.

(2) The Contractor shall take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex, or national origin. This shall include, but not be limited to, (i) employment, (ii) upgrading, (iii) demotion, (iv) transfer, (v) recruitment or recruitment advertising, (vi) layoff or termination, (vii) rates of pay or other forms of compensation, and (viii) selection for training, including apprenticeship.

(3) The Contractor shall post in conspicuous places available to employees and applicants for employment the notices to be provided by the Contracting Officer that explain this clause.

(4) The Contractor shall, in all solicitations or advertisement for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, or national origin.

(5) The Contractor shall send, to each labor union or representative of workers with which it has a collective bargaining agreement or other contract or understanding, the notice to be provided by the Contracting Officer advising the labor union or workers' representative of the Contractor's commitments under this clause, and post copies of the notice in conspicuous places available to employees and applicants for employment.

(6) The Contractor shall comply with Executive Order 11246, as amended, and the rules, regulations, and orders of the Secretary of Labor.

(7) The Contractor shall furnish to DOE all information required by Executive Order 11246, as amended, and by the rules, regulations, and orders of the Secretary of Labor. Standard Form 100 (EEO-1), or any successor form, is the prescribed form to be filed.

(8) The Contractor shall permit access to its books, records, and accounts by DOE or the Office of Federal Contract Compliance Programs (OFCCP) for the purposes of investigation to ascertain the Contractor's compliance with the applicable rules, regulations, and orders.

(9) If the OFCCP determines that the Contractor is not in compliance with this clause or any rule, regulation, or order of the Secretary of Labor, this contract may be canceled, terminated, or suspended in whole or in part and the Contractor may be declared ineligible for further Government contracts, under the procedures authorized in Executive Order 11246, as amended. In addition, sanctions may be imposed and remedies invoked against the Contractor as provided in Executive Order 11246, as amended, the rules, regulations, and orders of the Secretary of Labor, or as otherwise provided by law.

(10) The Contractor shall include the terms and conditions of this paragraph (b) in every subcontract that is not exempted by the rules, regulations, or orders of the Secretary of Labor issued under Executive Order 11246, as amended, so that these terms and conditions will be binding upon each subcontractor or vendor.

(11) The Contractor shall take such action with respect to any subcontract as DOE may direct as a means of enforcing these terms and conditions, including sanctions for noncompliance; provided, that if the Contractor becomes involved in, or is threatened with, litigation with a

subcontractor as a result of any direction, the Contractor may request the Government to enter into the litigation to protect the interests of the Government.

(c) Notwithstanding any other clause in this contract, disputes relative to this clause will be governed by the procedures in 41 CFR Part 60.

CLAUSE 9.5 - FAR 52.222-35 AFFIRMATIVE ACTION FOR SPECIAL DISABLED AND VIETNAM ERA VETERANS (APR 1984)

(a) Definitions.

(1) "Appropriate office of the state employment service system," as used in this clause, means the local office of the federal-state national system of public employment offices assigned to serve the area where the employment opening is to be filled, including the District of Columbia, Guam, Puerto Rico, Virgin Islands, American Samoa, and the Trust Territory of the Pacific Islands.

(2) "Openings that the Contractor proposes to fill from within its own organization," as used in this clause, means employment openings for which no one outside the Contractor's organization (including any affiliates, subsidiaries, and the parent companies) will be considered and includes any openings that the Contractor proposes to fill from regularly established "recall" lists.

(3) "Openings that the Contractor proposes to fill under a customary and traditional employer-union hiring arrangement," as used in this clause, means employment openings that the Contractor proposes to fill from union halls, under their customary and traditional employer-union hiring relationship.

(4) "Suitable employment openings," as used in this clause:

(i) Includes, but is not limited to, openings that occur in jobs categorized as:

(A) Production and nonproduction;

(B) Plant and office;

(C) Laborers and mechanics;

(D) Supervisory and nonsupervisory;

(E) Technical; and

(F) Executive, administrative, and professional positions compensated on a salary basis of less than \$25,000 a year; and

(ii) Includes full-time employment, temporary employment of over three days, and part-time employment, but not openings that the Contractor proposes to fill from within its own organization or under a customary and traditional employer-union hiring arrangement, nor openings in an educational institution that are restricted to students of that institution.

(b) General.

(1) Regarding any position for which the employee or applicant for employment is qualified, the Contractor shall not discriminate against the individual because the individual is a special disabled or Vietnam Era veteran. The Contractor agrees to take affirmative action to employ, advance in employment, and otherwise treat qualified special disabled and Vietnam Era veterans without discrimination based upon their disability or veterans' status in all employment practices such as:

- (i) Employment;
- (ii) Upgrading;
- (iii) Demotion or transfer;
- (iv) Recruitment;
- (v) Advertising;
- (vi) Layoff or termination;
- (vii) Rates of pay or other forms of compensation; and
- (viii) Selection for training, including apprenticeship.

(2) The Contractor agrees to comply with the rules, regulations, and relevant orders of the Secretary of Labor issued under the Vietnam Era Veteran's Readjustment Assistance Act of 1972 (the Act), as amended.

(c) Listing openings.

(1) The Contractor agrees to list all suitable employment openings occurring during contract performance, at an appropriate office of the state employment service system in the locality where the opening occurs. These openings include those occurring at any Contractor facility, including one not connected with performing this contract. An independent corporate affiliate is exempt from this requirement.

(2) State and local government agencies holding federal contracts of \$10,000 or more shall also list all their suitable openings with the appropriate office of the state employment service.

(3) The listing of suitable employment openings with the state employment service system is required at least concurrently with using any other recruitment source or effort and involves the obligations of placing a bona fide job order, including accepting referrals of veterans and nonveterans. This listing does not require hiring any particular job applicant or hiring any particular group of job applicants and is not intended to relieve the Contractor from any requirements of Executive Orders or regulations concerning nondiscrimination in employment.

(4) Whenever the Contractor becomes contractually bound to the listing terms of this clause, it shall advise the state employment service system, in each state where it has establishments, of the name and location of each hiring location in the state. As long as the Contractor is contractually bound to these terms and has so advised the state system, it need not advise the state system of subsequent contracts. The Contractor may advise the state system when it is no longer bound by this contract clause.

(5) Under the most compelling circumstances, an employment opening may not be suitable for listing, including situations when (i) the Government's needs cannot reasonably be supplied, (ii) listing would be contrary to national security, or (iii) the requirement of listing would not be in the Government's interest.

(d) Applicability.

(1) This clause does not apply to the listing of employment openings which occur and are filled outside the 50 states, the District of Columbia, Puerto Rico, Guam, Virgin Islands, American Samoa, and the Trust Territory of the Pacific Islands.

(2) The terms of paragraph (c) above do not apply to openings that the Contractor proposes to fill from within its own organization or under a customary and traditional employer-union hiring arrangement. This exclusion does not apply to a particular opening once an employer decides to consider applicants outside of its own organization or employer-union arrangement for that opening.

(e) Postings.

(1) The Contractor agrees to post employment notices stating (i) the Contractor's obligation under the law to take affirmative action to employ and advance in employment qualified special disabled veterans and veterans of the Vietnam era, and (ii) the rights of applicants and employees.

(2) These notices shall be posted in conspicuous places that are available to employees and applicants for employment. They shall be in a form prescribed by the Director, Office of Federal Contract Compliance Programs, Department of Labor (Director), and provided by or through the Contracting Officer.

(3) The Contractor shall notify each labor union or representative of workers with which it has a collective bargaining agreement or other contract understanding, that the Contractor is bound by the terms of the Act, and is committed to take affirmative action to employ, and advance in employment, qualified special disabled and Vietnam Era veterans.

(f) Noncompliance. If the Contractor does not comply with the requirements of this clause, appropriate actions may be taken under the rules, regulations, and relevant orders of the Secretary of Labor issued pursuant to the Act.

(g) Subcontracts. The Contractor shall include the terms of this clause in every subcontract of \$10,000 or more unless exempted by rules, regulations, or orders of the Secretary of Labor. The Contractor shall act as specified by the Director to enforce the terms, including action for noncompliance.

CLAUSE 9.6 - FAR 52.222-36 AFFIRMATIVE ACTION FOR HANDICAPPED WORKERS
(APR 1984)

(a) General.

(1) Regarding any position for which the employee or applicant for employment is qualified, the Contractor shall not discriminate against any employee or applicant because of physical or mental handicap. The Contractor agrees to take affirmative action to employ, advance in

employment, and otherwise treat qualified handicapped individuals without discrimination based upon their physical or mental handicap in all employment practices such as:

- (i) Employment;
- (ii) Upgrading;
- (iii) Demotion or transfer;
- (iv) Recruitment;
- (v) Advertising;
- (vi) Layoff or termination;
- (vii) Rates of pay or other forms of compensation; and
- (viii) Selection for training, including apprenticeship.

(2) The Contractor agrees to comply with the rules, regulations, and relevant orders of the Secretary of Labor issued under the Rehabilitation Act of 1973 (29 U.S.C. §793) (the Act), as amended.

(b) Postings.

(1) The Contractor agrees to post employment notices stating (i) the Contractor's obligation under the law to take affirmative action to employ and advance in employment qualified handicapped individuals, and (ii) the rights of applicants and employees.

(2) These notices shall be posted in conspicuous places that are available to employees and applicants for employment. They shall be in a form prescribed by the Director, Office of Federal Contract Compliance Programs, Department of Labor (Director), and provided by or through the Contracting Officer.

(3) The Contractor shall notify each labor union or representative of workers with which it has a collective bargaining agreement or other contract understanding, that the Contractor is bound by the terms of Section 503 of the Act and is committed to take affirmative action to employ, and advance in employment, qualified physically and mentally handicapped individuals.

(c) Noncompliance. If the Contractor does not comply with the requirements of this clause, appropriate actions may be taken under the rules, regulations, and relevant orders of the Secretary of Labor issued pursuant to the Act.

(d) Subcontracts. The Contractor shall include the terms of this clause in every subcontract in excess of \$2,500 unless exempted by rules, regulations, or orders of the Secretary of Labor. The Contractor shall act as specified by the Director to enforce the terms, including action for noncompliance.

CLAUSE 9.7 - FAR 52.222-37 EMPLOYMENT REPORTS ON SPECIAL DISABLED VETERANS AND VETERANS OF THE VIETNAM ERA (JAN 1988)

(a) The Contractor shall report at least annually, as required by the Secretary of Labor, on:

(1) The number of special disabled veterans and the number of veterans of the Vietnam era in the workforce of the Contractor by job category and hiring location; and

(2) The total number of new employees hired during the period covered by the report, and of that total, the number of special disabled veterans, and the number of veterans of the Vietnam era.

(b) The above items shall be reported by completing the form entitled "Federal Contractor Veterans' Employment Report VETS-100."

(c) Reports shall be submitted no later than March 31 of each year beginning March 31, 1988.

(d) The employment activity report required by subparagraph (a)(2) above shall reflect total hires during the most recent 12-month period as of the ending date selected for the employment profile report required by subparagraph (a)(1) above. Contractors may select an ending date: (i) As of the end of any pay period during the period January through March 1st of the year the report is due, or (ii) as of December 31, if the Contractor has previous written approval from the Equal Employment Opportunity Commission to do so for purposes of submitting the Employer Information Report EEO-1 (Standard Form 100).

(e) The count of veterans reported according to paragraph (a) above shall be based on voluntary disclosure. Each contractor subject to the reporting requirements at 38 U.S.C. §2012(d) shall invite all special disabled veterans and veterans of the Vietnam Era who wish to benefit under the affirmative action program at 38 U.S.C. §2012 to identify themselves to the Contractor. The invitation shall state that the information is voluntarily provided, that the information will be kept confidential, that disclosure or refusal to provide the information will not subject the applicant or employee to any adverse treatment and that the information will be used only in accordance with the regulations promulgated under 38 U.S.C. §2012.

(f) The Contractor shall include the terms of this clause in every subcontract of \$10,000 or more unless exempted by rules, regulations, or orders of the Secretary of Labor.

CLAUSE 9.8 - DEAR 970.5204-58 WORKPLACE SUBSTANCE ABUSE PROGRAMS AT DOE SITES (AUG 1992) (MODIFIED)

(a) Program implementation. The Contractor shall, consistent with 10 CFR Part 707, Workplace Substance Abuse Programs at DOE Sites, incorporated herein by reference with full force and effect, develop, implement, and maintain a workplace substance abuse program.

(b) Remedies. The Contractor's failure to comply with the requirements of 10 CFR Part 707 or to perform in a manner consistent with its approved program may render the Contractor subject to termination in accordance with Clause 13.2, Termination

(c) Subcontracts.

(1) The Contractor agrees to notify the Contracting Officer reasonably in advance of, but not later than 30 days prior to, the award of any subcontract the Contractor believes may be subject to the requirements of 10 CFR Part 707.

(2) The Contractor shall require all subcontracts subject to the provisions of 10 CFR Part 707 to agree to develop and implement a workplace substance abuse program that complies with the requirements of 10 CFR Part 707, Workplace Substance Abuse Programs at DOE Sites, as a

condition for award of the subcontract. The Contractor shall review and approve each subcontractor's program, and shall periodically monitor each subcontractor's implementation of the program for effectiveness and compliance with 10 CFR Part 707.

(3) The Contractor agrees to include, and require the inclusion of, the requirements of this clause in all subcontracts, at any tier, that are subject to the provisions of 10 CFR Part 707.

CLAUSE 9.9 - DEAR 970.5204-59 WHISTLEBLOWER PROTECTION FOR CONTRACTOR EMPLOYEES (JAN 1993)

(a) The Contractor shall comply with the requirements of the "DOE Contractor Employee Protection Program" at 10 CFR Part 708.

(b) The Contractor shall insert or have inserted the substance of this clause in subcontracts, at all tiers, with respect to work performed on-site at a DOE-owned or leased facility, as provided for at 10 CFR Part 708.

CLAUSE 9.10 - ACCIDENT RESPONSE GROUP/NUCLEAR EMERGENCY SEARCH TEAM (ARG/NEST) INSURANCE BACK UP (SPECIAL)

(a) Definitions.

(1) "Laboratory ARG/NEST Team" means that emergency response team established by the Laboratory at the request of DOE to be available, upon call by public authorities, through DOE, for immediate technical assistance and advice in accidents involving nuclear weapons or situations involving alleged unauthorized use of radioactive materials.

(2) "ARG/NEST assignment" means any activity of a Laboratory employee when engaged as a member of the Laboratory ARG/NEST Team.

(3) "ARG/NEST insurance coverage" means insurance coverage obtained by the Contractor, with the consent of DOE, to cover each Contractor employee member of the Laboratory ARG/NEST Team for accidental death, dismemberment, and disability occurring directly or indirectly from said employee's participation in an ARG/NEST assignment, including but not limited to travel to and from the ARG/NEST assignment.

(4) "ARG/NEST Roster" means the list maintained by the Laboratory of Contractor employees who have volunteered to serve on, and been accepted for, the Laboratory ARG/NEST Team.

(b) Notwithstanding Clause 9.11, Special Hazards, whenever the Contractor shall determine that any employee listed on the ARG/NEST Roster has become disabled or has died as a result of an ARG/NEST assignment, and the ARG/NEST insurance coverage has been found to have been invalidated or nonexistent, and the approval of the Contracting Officer has been obtained in accordance with the procedure set forth in Clause 9.11, Special Hazards, the Contractor shall have the right to pay such employee, or his or her spouse, or one or more of his or her next of kin, or his or her designee, or his or her legal representative, as the Contractor may determine, a sum in the amount of the said insurance but in no event in excess of \$1,000,000 provided that when any such payment shall have been made to an employee who has become disabled, no further payment shall be made by reason of the death of such employee which would bring the total sum paid to an amount in excess of \$1,000,000. In the event of eligibility for payment, the Contractor agrees to

obtain prior to such payment a release from the payee if the Contracting Officer and the Contractor deem it necessary or appropriate; and a commitment from the employee, or his or her spouse, or one or more of his or her next of kin, or his or her designee, or his or her legal representative, as appropriate, that (1) any payments which might later be made under any ARG/NEST insurance coverage would be credited to any payments made by the Contractor, and (2) that the Contractor and/or DOE shall have a right of subrogation against the company issuing the ARG/NEST insurance coverage policy to the amount of any payment(s) by the Contractor.

CLAUSE 9.11 - SPECIAL HAZARDS (SPECIAL)

(a) The performance of the Contractor's operations hereunder may, in extraordinary circumstances, subject workers to special hazards for which workers' compensation laws, other statutes, the Contractor's welfare plan and policies, or the worker's private insurance may not provide adequate financial protection to the worker in the event of disability, or to the worker's estate in the event of death.

(b) Definitions.

(1) "Worker" as used in this clause shall mean any person who is or has been employed by the Contractor or any subcontractor, or who is or has been engaged as a consultant or borrowed personnel by the Contractor or any subcontractor.

(2) "Within the course and scope of employment" as used in this clause shall mean that the worker was performing duties as assigned, in conformance with the direction of the Contractor or a subcontractor or an agreement with the Contractor, and in furtherance of the work under this contract.

(c) The Contractor is authorized to pay to a worker, or in the event of the worker's death, the worker's estate, a sum in an amount which the Contractor determines appropriate, not to exceed the worker's annual salary, whenever—

(1) The Contractor believes that an worker has become disabled or has died as a result of any special hazard listed in paragraph (d) below to which the worker has been exposed within the course and scope of employment;

(2) The Contractor believes that Workers' compensation laws, other statutes, the Contractor's welfare plan and policies, or the worker's private insurance does not provide adequate financial protection under the particular circumstances of the worker's disability or death; and

(3) The Contracting Officer approves the payment.

(d) The special hazards referred to in paragraphs (a) and (c) above are:

(1) Exposure to radiant energy or emitted particles from radioactive materials or from high voltage sources or machines, including ingestion, inhalation or other bodily uptake of radioactive materials.

(2) Exposure to explosions due to atomic disintegrations or to explosions in the course of experimental work with or using high explosives or propellants, or to explosions arising in the course of field experimentation with nuclear propulsion systems.

(3) Exposure to toxic materials comprising polonium, uranium, plutonium, fluorine, barium, cadmium, beryllium, any compounds of these, phosgene, or any other material in use in the course of authorized work which may be shown to have toxic effects.

(4) Work assignments not specifically covered in this clause and of such a nature as will invalidate the worker's personal insurance otherwise applicable to the injury or death and in effect at the time of performance of the assigned duties.

(5) Exposure to hazards incident to flights in military aircraft in the course of which necessary experimental work is conducted. Where a release of liability has been signed, such release will in no way bar the worker from receiving any payment under this clause.

(6) Exposure due to hazards from the fall of bombs or mockups from planes as opposed to hazards due to explosion.

(7) Exposure in the course of employment incident to flights in chartered or military aircraft or transportation on military vessels. Where a release of liability has been signed, such release will in no way bar the worker from receiving any payment under this clause.

(8) Exposure peculiar to and as the result of work assignment required to be conducted outside the continental United States.

(9) Such other exposures not now known but which may later be discovered and which by the nature thereof are similar to the exposure or hazards set forth above. Such other exposures as may from time to time be agreed upon in writing by the Contractor and the Contracting Officer as a basis for payment.

(e) The total sum authorized to be paid under this clause to a worker or a worker's estate shall not exceed the worker's annual salary even where (1) a payment has been made to a worker on account of a disability and who thereafter dies as a result of the disabling injury or (2) a worker is disabled by one injury compensable under this clause and dies of a separate injury compensable under this clause. The Contractor assumes no obligation hereunder to make any payment from the Contractor's own funds. A release may be required from the payee if the Contracting Officer and the Contractor deem it necessary or appropriate.

(f) Whenever there is an injury or death which is compensable in accordance with paragraph (c) above, the Contractor may also, with Contracting Officer approval, pay for the cost of transportation (including hotel, subsistence and other incidental expenses) of the spouse and one or more of next of kin of such injured or dead worker from their respective homes to the place where such injured or dead worker shall be situated and their return.

CLAUSE 9.12 - COLLECTIVE BARGAINING (SPECIAL)

(a) The Contractor shall respect the right of employees to organize, form, join or assist labor organizations, to bargain collectively through representatives of the employees' own choosing, and to engage in other concerted activities for the purpose of collective bargaining and also the right to refrain from such activities, in accordance with applicable law.

(b) When negotiating collective bargaining agreements applicable to the work force under this contract, consistent with applicable federal and state law, the Contractor shall use its best efforts to ensure such agreements contain provisions designed to assure continuity of services. All such agreements entered into during the contract period of performance should provide that grievances

and disputes involving the interpretation or application of the agreement will be settled without resorting to strike, lockout, or other interruption of normal operations. For this purpose, each collective bargaining agreement should provide an effective grievance procedure with arbitration as its final step, unless the parties mutually agree upon some other method of assuring continuity of operations. As part of such agreements, management and labor should agree to cooperate fully with appropriate federal or state administrative agencies (e.g. FMCS; PERB). The Contractor shall include the substance of this paragraph (b) in any subcontracts for protective services or other services performed on the DOE-owned site which will affect the continuity of operation of the facility.

(c) Prior to an announcement and/or implementation of initiatives by the Contractor that may impact on the collective bargaining agreement between an on-site subcontractor and its employees, the Contractor shall notify the subcontractor.

CLAUSE 9.13 - DEAR 970.5204-80 OVERTIME MANAGEMENT (JUN 1997)

(a) The contractor shall maintain adequate internal controls to ensure that employee overtime is authorized only if cost effective and necessary to ensure performance of work under this contract.

(b) The contractor shall notify the contracting officer when in any given year it is likely that overtime usage as a percentage of payroll may exceed 4 percent.

(c) The contracting officer may require the submission, for approval, of a formal annual overtime control plan whenever contractor overtime usage as a percentage of payroll has exceeded, or is likely to exceed, 4 percent, or if the contracting officer otherwise deems overtime expenditures excessive. The overtime control plan shall include, at a minimum:

- (1) An overtime premium fund (maximum dollar amount);
- (2) Specific controls for casual overtime for non-exempt employees;
- (3) Specific parameters for allowability of exempt overtime;
- (4) An evaluation of alternatives to the use of overtime; and
- (5) Submission of a semi-annual report that includes for exempt and non-exempt employees:
 - (i) Total cost of overtime;
 - (ii) Total cost of straight time;
 - (iii) Overtime cost as a percentage of straight-time cost;
 - (iv) Total overtime hours;
 - (v) Total straight-time hours; and
 - (vi) Overtime hours as a percentage of straight-time hours.

CLAUSE 9.14 - DEAR 970.5204-77 WORKFORCE RESTRUCTURING UNDER SECTION
3161 OF THE NATIONAL DEFENSE AUTHORIZATION ACT FOR FISCAL YEAR 1993
(JUN 1997) (MODIFIED)

(a) Consistent with the objectives of Section 3161 of the National Defense Authorization Act for Fiscal Year 1993, 42 U.S.C. §7274h, in instances where DOE has determined that a change in workforce at a DOE Defense Nuclear Facility is necessary, the contractor agrees to (1) comply with the Department of Energy Workforce Restructuring Plan for the facility, if applicable, and (2) use its best efforts to accomplish workforce restructuring or displacement so as to mitigate social and economic impacts.

(b) The requirements of this clause shall be included in all subcontracts at any tier (except for subcontracts for commercial items pursuant to 41 U.S.C. §403) expected to exceed \$500,000.

10.0 SECURITY

CLAUSE 10.1 - CONTROL OF NUCLEAR MATERIALS (SPECIAL)

As used in this clause, "nuclear materials" means source material, special nuclear material, and other materials to which DOE Directives regarding the control of nuclear materials apply. The Contractor shall, in a manner satisfactory to the Contracting Officer, establish and maintain a materials management program, establish and maintain appropriate nuclear material transfer procedures and control measures, establish accounting and measurement procedures, maintain current records, and institute appropriate control measures for nuclear materials in its possession commensurate with the national security and applicable DOE Directives. Except as otherwise authorized by the Contracting Officer, nuclear materials in the Contractor's possession, custody, or control shall be used only for furtherance of the work under this contract. The Contractor shall include in every subcontract involving the use of nuclear materials for which the Contractor has accountability, appropriate terms and conditions for the use of nuclear materials and the responsibilities of the subcontractor regarding control of nuclear materials.

CLAUSE 10.2 - UNCLASSIFIED SENSITIVE AND PROPRIETARY INFORMATION (SPECIAL)

The Contractor shall comply with all applicable DOE Directives regarding counterintelligence, unclassified sensitive information, and proprietary information.

CLAUSE 10.3 - DEAR 952.204-72 DISCLOSURE OF INFORMATION (APR 1994)

(a) It is mutually expected that the activities under this contract will not involve "Restricted Data" or other classified information. It is understood, however, that if in the opinion of either Party, this expectation changes prior to the expiration or termination of all activities under this contract, said Party shall notify the other Party accordingly, in writing, without delay. In any event, the Contractor shall classify, safeguard, and otherwise act with respect to all classified information in accordance with applicable law and the requirements of DOE, and shall promptly inform DOE, in writing, if and when classified information becomes involved, or in the mutual judgment of the Parties it appears likely that classified information or material may become involved. The Contractor shall have the right to terminate performance of the work under this contract and in such event the provisions of this contract respecting termination for the convenience of the Government shall apply.

(b) The Contractor shall not permit any individual to have access to classified information except in accordance with the Atomic Energy Act of 1954, as amended, Executive Order 12356, and DOE's regulations or requirements.

(c) The term "Restricted Data" as used in this clause means all data concerning the design, manufacture, or utilization of atomic weapons, the production of special nuclear material or the use of special nuclear material in the production of energy, but shall not include data declassified or removed from the Restricted Data category pursuant to Section 142 of the Atomic Energy Act of 1954, as amended.

CLAUSE 10.4 - DEAR 970.5204-35 CONTROLS IN THE NATIONAL INTEREST (JUL 1994)
(DEVIATION)

The Contractor agrees to comply with the requirements regarding foreign travel; applicable DOE Directives; and such other requirements of the same general nature as the Parties may agree to from time to time.

11.0 RECORDS AND PAPERWORK MANAGEMENT

CLAUSE 11.1 - DEAR 970.5204-79 ACCESS TO AND OWNERSHIP OF RECORDS (JUN 1997) (MODIFIED)

(a) Government-owned records. Except as provided in paragraph (b) below, all records acquired or generated by the Contractor in its performance of this contract shall be the property of the Government and shall be delivered to the Government or otherwise disposed of by the Contractor either as the Contracting Officer may from time to time direct during the process of the work or, in any event, as the Contracting Officer shall direct upon completion or termination of the contract.

(b) Contractor-owned records. The following records are considered the property of the Contractor and are not within the scope of paragraph (a) above.

(1) Employment-related records (such as workers' compensation files; employee relations records, records on salary and employee benefits; drug testing records, labor negotiation records; records on ethics, employee concerns, and other employee related investigations conducted under an expectation of confidentiality; employee assistance records; and personnel and medical/health-related records and similar files), except for those systems of records described by the contract as being maintained in Privacy Act systems of records.

(2) Confidential Contractor financial information, and correspondence between the Contractor and other segments of the Contractor located away from the DOE facility (*i.e.*, the Contractor's corporate headquarters);

(3) Records relating to any procurement action by the Contractor, except for records that are under Clause 3.1, Accounts, Records, and Inspection, are described as the property of the Government;

(4) Legal records, including legal opinions, litigation files, and documents covered by the attorney-client and attorney work product privileges; and

(5) The following categories of records maintained pursuant to the technology transfer clause of this contract:

(i) Executed license agreements, including exhibits or appendices containing information on royalties, royalty rates, other financial information, or commercialization plans, and all related documents, notes and correspondence.

(ii) The Contractor's protected Cooperative Research and Development Agreement (CRADA) information and appendices to a CRADA that contain licensing terms and conditions, or royalty or royalty rate information.

(iii) Patent, copyright, mask work, and trademark application files and related Contractor invention disclosures, documents and correspondence, where the Contractor has elected rights or has permission to assert rights and has not relinquished such rights or turned such rights over to the Government.

(c) Contract completion or termination. In the event of completion or termination of this contract, copies of any of the Contractor's own records identified in paragraph (b) above, upon the request of the Government, shall be delivered to DOE or its designees, including successor contractors.

Upon delivery, title to such records shall vest in DOE or its designees, and such records shall be protected in accordance with applicable federal laws (including the Privacy Act), as appropriate.

(d) Inspection, copying, and audit of records. All records acquired or generated by the Contractor under this contract in the possession of the Contractor, including those described at paragraph (b) above, shall be subject to inspection, copying, and audit by the Government or its designee at all reasonable times, and the Contractor shall afford the Government or its designee reasonable facilities for such inspection, copying, and audit; provided, however, that upon request by the contracting officer, the Contractor shall deliver such records to a location specified by the contracting officer for inspection, copying, and audit. The Government or its designees shall use such records in accordance with applicable federal laws (including the Privacy Act), as appropriate.

(e) Applicability. The provisions of paragraphs (b), (c), and (d) above apply to all records without regard to the date or origination of such records.

(f) Records retention standards. Special records retention standards, described at DOE Order 1324.5B, Records Management Program and DOE Records Schedules (version in effect on effective date of contract), are applicable for the classes of records described therein, whether or not the records are owned by the Government or the Contractor. In addition, the Contractor shall retain individual radiation exposure records generated in the performance of work under this contract until DOE authorizes disposal. The Government may waive application of these record retention schedules, if, upon termination or completion of the contract, the Government exercises its right under paragraph (c) above to obtain copies and delivery of records described in paragraphs (a) and (b) above.

(g) Contractor-owned records containing personal information. It is anticipated that DOE will promulgate regulations to govern DOE access to Contractor-owned records containing personal information, including medical records, which will require appropriate safeguards for the protection of such information and which may be applicable to this contract. In the absence of such regulations, access to Contractor-owned records containing personal information will be determined in accordance with the terms of this contract, existing site arrangements, and applicable law, including the application of appropriate privacy protections under law. Any Contractor-owned records containing personal information which are acquired by DOE shall be maintained in DOE's Privacy Act Systems of Records.

(h) Flowdown. The Contractor shall include the requirements of this clause in all subcontracts that are of a cost-reimbursement type if any of the following factors is present:

(1) The value of the subcontract is greater than \$2 million (unless specifically waived by the contracting officer);

(2) The contracting officer determines that the subcontract is, or involves, a critical task related to the contract; or

(3) The subcontract includes DEAR 970.5204-2, Integration of Environment, Safety and Health into Work Planning and Execution, or similar clause.

(i) The Parties understand that Contractor legal records that are subject to an attorney-client privilege or an attorney work product privilege require special handling to preserve these privileges. Therefore the Parties agree that inspection, copying, and audit of such records will be conducted by DOE Counsel and the Contractor shall permit such inspection, copying, and audit at all reasonable times, and the Contractor shall afford such Counsel reasonable facilities for such inspection, copying, and audit.

CLAUSE 11.2 - FAR 52.224-1 PRIVACY ACT NOTIFICATION (APR 1984)

The Contractor will be required to design, develop, or operate a system of records on individuals to accomplish an agency function subject to the Privacy Act of 1974, Public Law 93-579, December 31, 1974 (5 U.S.C. §552a) and applicable agency regulations. Violation of the Privacy Act of 1974 may involve the imposition of criminal penalties.

CLAUSE 11.3 - FAR 52.224-2 PRIVACY ACT (APR 1984)

(a) The Contractor agrees to:

(1) Comply with the Privacy Act of 1974 (the Privacy Act) and the agency rules and regulations issued under the Privacy Act in the design, development, or operation of any system of records on individuals to accomplish an agency function when the contract specifically identifies:

(i) The system of records; and

(ii) The design, development, or operation work that the Contractor is to perform;

(2) Include the Privacy Act notification contained in this contract in every solicitation and resulting subcontract and in every subcontract awarded without a solicitation, when the work statement in the proposed subcontract requires the design, development, or operation of a system of records on individuals that is subject to the Privacy Act; and

(3) Include this clause, including this subparagraph (a)(3), in all subcontracts awarded under this contract which require the design, development, or operation of such a system of records.

(b) In the event of violations of the Privacy Act, a civil action may be brought against the agency involved when the violation concerns the design, development, or operation of a system of records on individuals to accomplish an agency function, and criminal penalties may be imposed upon the officers or employees of the agency when the violation concerns the operation of a system of records on individuals to accomplish an agency function. For purposes of the Privacy Act, when the contract is for the operation of a system of records on individuals to accomplish an agency function, the contractor and any contractor employee are considered to be employees of the agency.

(c) (1) "Operation of a system of records," as used in this clause, means performance of any of the activities associated with maintaining the system of records, including the collection, use, and dissemination of records.

(2) "Record," as used in this clause, means any item, collection, or grouping of information about an individual that is maintained by an agency, including, but not limited to, education, financial transactions, medical history, and criminal or employment history and that contains the person's name, or the identifying number, symbol, or other identifying particular assigned to the individual, such as a fingerprint or voiceprint or a photograph.

(3) "System of records on individuals," as used in this clause, means a group of any records under the control of any agency from which information is retrieved by the name of the individual or by some identifying number, symbol, or other identifying particular assigned to the individual.

CLAUSE 11.4 - PRIVACY ACT RECORDS (SPECIAL)

In accordance with the Privacy Act of 1974, 5 U.S.C. §552a (Public Law 93-579) and implementing DOE Regulations (10 CFR Part 1008), the Contractor shall maintain the "Systems of Records" on individuals listed below in order to accomplish DOE functions. The parenthetical DOE number designations for each system of records refer to the official "System of Record" number published by the DOE in the Federal Register pursuant to the Privacy Act.

Personnel Records of Former Contractor Employees (DOE-5)

Government Motor Vehicle Operator Records (DOE-32)

Personnel Medical Records (DOE-33) (excepting University employees)

Personnel Radiation Exposure Records (DOE-35)

Occupational and Industrial Accident Records (DOE-38)

Personnel Security Clearance Files (DOE-43)

Alien Visits and Participation (DOE-52)

Epidemiologic and Other Health Studies, Surveys, and Surveillances (DOE-88)

CLAUSE 11.5 - DEAR 970.5204-19 PRINTING (APR 1984) (MODIFIED)

(a) To the extent that duplicating or printing services may be required in the performance of this contract, the Contractor shall provide or secure such services in accordance with the Government Printing and Binding Regulations, Title 44 of the United States Code, and applicable DOE Directives.

(b) Printing services not obtained in compliance with this guidance shall result in the cost of such printing being disallowed.

(c) In all subcontracts hereunder which require printing (as that term is defined in Title I of the United States Government Printing and Binding Regulations), the Contractor shall include a provision substantially the same as this clause.

CLAUSE 11.6 - FAR 52.204-4 PRINTING/COPYING DOUBLE-SIDED ON RECYCLED PAPER (JUN 1996)

(a) In accordance with Executive Order 12873, dated October 20, 1993, as amended by Executive Order 12995, dated March 25, 1996, the Contractor is encouraged to submit paper documents, such as offers, letters, or reports, that are printed/copied double-sided on recycled paper that has at least 20 percent postconsumer material.

(b) The 20 percent standard applies to high-speed copier paper, offset paper, forms bond, computer printout paper, carbonless paper, file folders, white woven envelopes, and other uncoated printed and writing paper, such as writing and office paper, book paper, cotton fiber paper, and cover stock. An alternative to meeting the 20 percent postconsumer material standard is 50 percent recovered material content of certain industrial by-products.

CLAUSE 11.7 - FAR 52.253-1 COMPUTER GENERATED FORMS (JAN 1991)

- (a) Any data required to be submitted on a Standard or Optional Form prescribed by the FAR may be submitted on a computer generated version of the form, provided there is no change to the name, content, or sequence of the data elements on the form, and provided the form carries the Standard or Optional Form number and edition date.
- (b) Unless prohibited by agency regulations, any data required to be submitted on an agency unique form prescribed by an agency supplement to the FAR may be submitted on a computer generated version of the form provided there is no change to the name, content, or sequence of the data elements on the form and provided the form carries the agency form number and edition date.
- (c) If the Contractor submits a computer generated version of a form that is different than the required form, then the rights and obligations of the Parties will be determined based on the content of the required form.

CLAUSE 11.8 - DEAR 952.224-70 PAPERWORK REDUCTION ACT (APR 1994)

NOTE: The Paperwork Reduction Act excludes from the definition of "agency," to which the Paperwork Reduction Act applies, "Government-owned contractor-operated facilities, including laboratories engaged in national defense research and laboratories engaged in national defense research and production activities (44 U.S.C. §3502)." Consequently, this clause applies only to directions by DOE to the Contractor specifically to collect information, as defined by the Paperwork Reduction Act, on behalf of DOE.

- (a) In the event that it becomes a contractual requirement to collect or record information calling either for answer to identical questions from ten or more persons other than federal employees, or information from federal employees which is to be used for statistical compilations of general public interest, the Paperwork Reduction Act will apply to this contract. No plan, questionnaire, interview guide, or other similar device for collecting information (whether repetitive or single-time) may be used without first obtaining clearance from the Office of Management and Budget (OMB).
- (b) The Contractor shall request the required OMB clearance from the Contracting Officer before expending any funds or making public contacts for the collection of data. The authority to expend funds and to proceed with the collection of data shall be, in writing, by the Contracting Officer. The Contractor must plan at least 90 days for OMB clearance.

12.0 CONTRACTOR CONDUCT

CLAUSE 12.1 - DEAR 952.209-72 ORGANIZATIONAL CONFLICTS OF INTEREST ALTERNATE I (JUN 1997)

(a) Purpose. The purpose of this clause is to ensure that the Contractor (1) is not biased because of its financial, contractual, organizational, or other interests which relate to the work under this contract, and (2) does not obtain any 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 and any of its affiliates or their successors in interest (hereinafter collectively referred to as "Contractor") in the activities covered by this clause as a prime contractor, subcontractor, cosponsor, joint venture, consultant, or in any similar capacity. For the purpose of this clause, affiliation occurs when a business concern is controlled by or has the power to control another or when a third party has the power to control both.

(1) Use of Contractor's Work Product.

(i) The Contractor shall be ineligible to participate in any capacity in DOE contracts, subcontracts, or proposals therefor (solicited and unsolicited) which stem directly from the Contractor's performance of work under this contract for a period of five years after the completion of this contract. Furthermore, unless so directed in writing by the Contracting Officer, the Contractor shall not perform any advisory and assistance services work under this contract on any of its products or services or the products or services of another firm if the Contractor is or has been substantially involved in their development or marketing. Nothing in this subparagraph shall preclude the Contractor from competing for follow-on contracts for advisory and assistance services.

(ii) If, under this contract, the Contractor prepares a complete or essentially complete statement of work or specifications to be used in competitive acquisitions, the Contractor shall be ineligible to perform or participate in any capacity in any contractual effort which is based on such statement of work or specifications. The Contractor shall not incorporate its products or services in such statement of work or specifications unless so directed in writing by the Contracting Officer, in which case the restriction in this subparagraph shall not apply.

(iii) Nothing in this paragraph shall preclude the Contractor from offering or selling its standard and commercial items to the Government.

(2) Access to and use of information.

(i) If the Contractor, in the performance of this contract, obtains access to information, such as DOE plans, policies, reports, studies, financial plans, internal data protected by the Privacy Act of 1974 (5 U.S.C. §552a), or data which has not been released or otherwise made available to the public, the Contractor agrees that without prior written approval of the Contracting Officer it shall not: (A) use such information for any private purpose unless the information has been released or otherwise made available to the public; (B) compete for work for the DOE based on such information for a period of six months after either the completion of this contract or until such information is released or otherwise made available to the public, whichever is first; (C) submit an unsolicited proposal to the Government which is based on such information until one year after

such information is released or otherwise made available to the public; and (D) release such information unless such information has previously been released or otherwise made available to the public by the DOE.

(ii) 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 (5 U.S.C. §552a), or other confidential or privileged technical, business, or financial information under this contract, it shall treat such information in accordance with any restrictions imposed on such information.

(iii) The Contractor may use technical data it first produces under this contract for its private purposes consistent with subparagraphs (b)(2)(i)(A) and (D) above and the patent, rights in data, and security provisions of this contract.

(c) Disclosure.

(1) The Contractor agrees that, if changes, including additions, to the facts disclosed by it prior to the effective date of this Supplemental Agreement, occur during the performance of this contract, it shall make an immediate and full disclosure of such changes in writing to the Contracting Officer. Such disclosure may include a description of any action which the Contractor has taken or proposes to take to avoid, neutralize, or mitigate any resulting conflict of interest. The DOE may, however, terminate the contract for convenience in accordance with Clause 13.2, Termination, if it deems such termination to be in the best interest of the Government.

(2) In the event that the Contractor was aware of facts required to be disclosed or the existence of an actual or potential organizational conflict of interest and did not disclose such facts or such conflict of interest to the Contracting Officer, DOE may terminate this contract in accordance with Clause 13.2, Termination.

(d) Remedies. For breach of any of the above restrictions or for nondisclosure or misrepresentation of any facts required to be disclosed concerning this contract, including the existence of an actual or potential organizational conflict of interest at the time of or after the effective date of this Supplemental Agreement, the Government may terminate the contract in accordance with Clause 13.2, Termination

(e) Waiver. Requests for waiver under this clause shall be directed in writing to the Contracting Officer and shall include a full description of the requested waiver and the reasons in support thereof. If it is determined to be in the best interests of the Government, the Contracting Officer may grant such a waiver in writing.

(f) Subcontracts.

(1) The Contractor shall include a clause, substantially similar to this clause, including this subparagraph, in subcontracts expected to exceed the simplified acquisition threshold determined in accordance with FAR Part 13 and involving performance of advisory and assistance services as that term is defined at FAR 37.201. The terms "contract," "Contractor," and "Contracting Officer" shall be appropriately modified to preserve the Government's rights.

(2) Prior to the award under this contract of any such subcontracts for advisory and assistance services, the Contractor shall obtain from the proposed subcontractor or consultant the disclosure required by DEAR 909.507-1, and shall determine in writing whether the interests disclosed present an actual or significant potential for an organizational conflict of interest. Where an actual or significant potential organizational conflict of interest is identified, the Contractor shall take actions to avoid, neutralize, or mitigate to the satisfaction of the Contracting Officer the

organizational conflict. If the conflict cannot be avoided or neutralized, the Contractor must obtain the approval of the DOE Contracting Officer prior to entering into the subcontract.

CLAUSE 12.2 - DEAR 970.5204-27(b) CONSULTANT OR OTHER COMPARABLE EMPLOYMENT SERVICES (MAY 1989) (DEVIATION)

(a) The Contractor shall require all employees who are employed full-time (an individual who performs work under the cost-type contract on a full-time annual basis) or part-time (50 percent or more of regular annual compensation received under terms of a contract with DOE) on the contract work to disclose to the Contractor all consultant or other comparable employment services which the employees propose to undertake for others. The Contractor shall transmit to the Contracting Officer all information obtained from such disclosures. The Contractor will require any employee who will be employed full-time on the contract work to agree, as a condition of participation in such work, that the employee will not perform consultant or other comparable employment services for another DOE contractor in the same or related energy field or another organization, except with the prior approval of the Contractor. Services of Contractor employees who are employed full-time or part-time on the contract work may be furnished to DOE contractors and other organizations on a cost reimbursement basis.

(b) The Contractor shall obtain the prior approval of the Contracting Officer when the Contractor believes, with respect to any employee who is employed full-time on the contract work, that any proposed consultant or other comparable employment service for an organization in the energy field other than a DOE cost-type contractor may involve a question regarding:

- (1) A conflict with DOE's policies regarding conduct of employees of DOE's contractors;
- (2) The Contractor's responsibility to report fully and promptly to DOE all significant research and development information; or
- (3) A conflict with the patent provisions of this contract.

CLAUSE 12.3 - DEAR 952.204-74 FOREIGN OWNERSHIP, CONTROL, OR INFLUENCE OVER CONTRACTOR (APR 1984)

(a) For purposes of this clause, a foreign interest is defined as any of the following:

- (1) A foreign government or foreign government agency;
- (2) Any form of business enterprise organized under the laws of any country other than the United States or its possessions;
- (3) Any form of business enterprise organized or incorporated under the laws of the United States or a state or other jurisdiction within the United States, which is owned, controlled, or influenced by a foreign government, agency, firm, corporation or person; or
- (4) Any person who is not a United States citizen.

(b) Foreign ownership, control, or influence (FOCI) means the situation where the degree of ownership, control, or influence over a Contractor by a foreign interest is such that a reasonable basis exists for concluding that compromise of classified information, special nuclear material as defined in 10 CFR Part 710, may result.

(c) For purposes of this clause, "subcontractor" means any subcontractor at any tier and the term "Contracting Officer" shall mean DOE Contracting Officer. When this clause is included in a subcontract, the term "Contractor" shall mean "subcontractor" and the term "contract" shall mean "subcontract".

(d) The Contractor shall immediately provide the Contracting Officer written notice of any changes in the extent and nature of FOCI over the Contractor which would affect the answers to the questions presented in DEAR 952.204-73. Further, notice of changes in ownership or control which are required to be reported to the Securities and Exchange Commission, the Federal Trade Commission, or the Department of Justice shall also be furnished concurrently to the Contracting Officer.

(e) In those cases where a Contractor has changes involving FOCI, DOE must determine whether the changes will pose an undue risk to the common defense and security. In making this determination, the Contracting Officer shall consider proposals made by the Contractor to avoid or mitigate foreign influences.

(f) If the Contracting Officer, at any time, determines that the Contractor is, or is potentially, subject to FOCI, the Contractor shall comply with such instructions as the Contracting Officer shall provide, in writing, to safeguard any classified information or significant quantity of special nuclear material.

(g) The Contractor agrees to insert terms that conform substantially to the language of this clause including this paragraph (g) in all subcontracts under this contract that will require access to classified information or a significant quantity of special nuclear material. Additionally, the Contractor shall require such subcontractors to submit a completed certification required in DEAR 952.204-73 prior to award of a subcontract. Information to be provided by a subcontractor pursuant to this clause may be submitted directly to the Contracting Officer.

(h) Information submitted by the Contractor or any affected subcontractor, as required pursuant to this clause, shall be treated by DOE to the extent permitted by law, as business or financial information submitted in confidence to be used solely for purposes of evaluating FOCI.

(i) The requirements of this clause are in addition to the requirement that a Contractor obtain and retain the security clearances required by the contract. This clause shall not operate as a limitation on DOE's rights, including its rights to terminate this contract.

(j) The Contracting Officer may terminate this contract, in accordance with Clause 13.2, Termination, either if the Contractor fails to meet obligations imposed by this clause, e.g., provide the information required by this clause, comply with the Contracting Officer's instructions about safeguarding classified information, or make this clause applicable to subcontractors, or if, in the Contracting Officer's judgment, the Contractor creates an FOCI situation in order to avoid performance. The Contracting Officer may terminate this contract for convenience, in accordance with Clause 13.2, Termination, if the Contractor becomes subject to FOCI and for reasons other than avoidance of performance of the contract, cannot, or chooses not to, avoid or mitigate the FOCI problem.

CLAUSE 12.4 - FAR 52.203-3 GRATUITIES (APR 1984)

(a) The right of the Contractor to proceed may be terminated, in accordance with Clause 13.2, Termination, by written notice if, after notice and hearing, the agency head or a designee determines that any of the Contractor's managerial personnel:

(1) Offered or gave a gratuity (*e.g.*, an entertainment or gift) to an officer, official, or employee of the Government; and

(2) Intended, by the gratuity, to obtain a contract or favorable treatment under a contract.

(b) The facts supporting this determination may be reviewed by any court having lawful jurisdiction.

(c) The rights and remedies of the Government specified herein are not exclusive, and are in addition to any other rights and remedies provided by law or under this contract.

CLAUSE 12.5 - FAR 52.203-7 ANTI-KICKBACK PROCEDURES (OCT 1995)

(a) Definitions.

(1) "Kickback," as used in this clause, means any money, fee, commission, credit, gift, gratuity, thing of value, or compensation of any kind which is provided, directly or indirectly, to any prime contractor, prime contractor employee, subcontractor, or subcontractor employee for the purpose of improperly obtaining or rewarding favorable treatment in connection with a prime contract or in connection with a subcontract relating to a prime contract.

(2) "Person," as used in this clause, means a corporation, partnership, business association of any kind, trust, joint-stock company, or individual.

(3) "Prime contract," as used in this clause, means a contract or contractual action entered into by the United States for the purpose of obtaining supplies, materials, equipment, or services of any kind.

(4) "Prime contractor," as used in this clause, means a person who has entered into a prime contract with the United States.

(5) "Prime contractor employee," as used in this clause, means any officer, partner, employee, or agent of a prime contractor.

(6) "Subcontract," as used in this clause, means a contract or contractual action entered into by a prime contractor or subcontractor for the purpose of obtaining supplies, materials, equipment, or services of any kind under a prime contract.

(7) "Subcontractor," as used in this clause, (i) means any person, other than the prime contractor, who offers to furnish or furnishes any supplies, materials, equipment, or services of any kind under a prime contract or a subcontract entered into in connection with such prime contract, and (ii) includes any person who offers to furnish or furnishes general supplies to the prime contractor or a higher-tier subcontractor.

(8) "Subcontractor Employee," as used in this clause, means any officer, partner, employee, or agent of a subcontractor.

(b) The Anti-Kickback Act of 1986 (41 U.S.C. §§51-58) (the Act), prohibits any person from—

(1) Providing or attempting to provide or offering to provide any kickback;

(2) Soliciting, accepting, or attempting to accept any kickback; or

(3) Including, directly or indirectly, the amount of any kickback in the contract price charged by a prime contractor to the Government or in the contract price charged by a subcontractor to a prime contractor or higher-tier subcontractor.

(c) (1) The Contractor shall have in place and follow reasonable procedures designed to prevent and detect possible violations described in paragraph (b) above in its own operations and direct business relationships.

(2) When the Contractor has reasonable grounds to believe that a violation described in paragraph (b) above may have occurred, the Contractor shall promptly report, in writing, the possible violation. Such reports shall be made to the inspector general of the contracting agency, the head of the contracting agency if the agency does not have an inspector general, or the Department of Justice.

(3) The Contractor shall cooperate fully with any federal agency investigating a possible violation described in paragraph (b) above.

(4) The Contracting Officer may (i) offset the amount of the kickback against any monies owed by the Government under this contract and/or (ii) direct that the Contractor withhold from sums owed a subcontractor under this contract, the amount of the kickback. The Contracting Officer may order that monies withheld under subparagraph (c)(4)(ii) above be paid over to the Government unless the Government has already offset those monies under subparagraph (c)(4)(i) above. In either case, the Contractor shall notify the Contracting Officer when the monies are withheld.

(5) The Contractor agrees to incorporate the substance of this clause, including subparagraph (c)(5) but excepting subparagraph (c)(1) above, in all subcontracts under this contract.

CLAUSE 12.6 - FAR 52.203-8 CANCELLATION, RESCISSION, AND RECOVERY OF FUNDS FOR ILLEGAL OR IMPROPER ACTIVITY (JAN 1997) (MODIFIED)

(a) For the purposes of this clause "Contractor", "person", or "someone acting for the Contractor" shall mean a Regent of the University of California.

(b) If the Government receives information that the contractor or a person has engaged in conduct constituting a violation of subsection (a), (b), (c), or (d) of Section 27 of the Office of Federal Procurement Policy Act (41 U.S.C. § 423) (the Act), as amended by section 4304 of the National Defense Authorization Act for Fiscal Year 1996 (Pub. L. 104-106), the Government may

(1) Cancel the solicitation, if the contract has not yet been awarded or issued; or

(2) Rescind the contract with respect to which

(i) The Contractor or someone acting for the Contractor has been convicted for an offense where the conduct constitutes a violation of subsection 27 (a) or (b) of the Act for the purpose of either

(A) Exchanging the information covered by such subsections for anything of value;
or

(B) Obtaining or giving anyone a competitive advantage in the award of a Federal agency procurement contract; or

(ii) The head of the contracting activity has determined, based upon a preponderance of the evidence, that the Contractor or someone acting for the Contractor has engaged in conduct constituting an offense punishable under subsection 27(e)(1) of the Act.

(c) If the Government rescinds the contract under paragraph (b) above, the Government is entitled to recover, in addition to any penalty prescribed by law, the amount expended under the contract.

(d) The rights and remedies of the Government specified herein are not exclusive, and are in addition to any other rights and remedies provided by law, regulation, or under this contract.

**CLAUSE 12.7 - FAR 52.203-10 DAMAGES FOR ILLEGAL OR IMPROPER ACTIVITY
(JAN 1997) (DEVIATION)**

(a) The Government, at its election, may assess damages against the Contractor as set forth in paragraph (b) below if the HCA or his or her designee determines that there was a violation of Subsection 27(a), (b), or (c) of the Office of Federal Procurement Policy Act, as amended (41 U.S.C. §423), as implemented in FAR 3.104.

(b) If the HCA determines that a violation referenced in paragraph (a) above has occurred, the HCA, taking into account the totality of the facts and circumstances surrounding the violation, will determine the damages appropriate to the violation in an amount, if any, not to exceed \$500,000.

(c) In addition to the remedies in (b) above, the Government may terminate this contract in accordance with Clause 13.2, Termination. The rights and remedies of the Government specified herein are not exclusive, and are in addition to any other rights and remedies provided by law or under this contract.

(d) The Contractor shall include in appropriate subcontracts the provisions of FAR 52.203-10. Where the Contractor or DOE determines that a violation of the Office of Federal Procurement Policy Act by a subcontractor has occurred, the Contractor shall take action as specified in FAR 52.203-10. Any funds collected or withheld by the Contractor from subcontractors as a result of such violation shall be transferred to the Government in such manner as the Contracting Officer may direct.

**CLAUSE 12.8 - FAR 52.203-12 LIMITATION ON PAYMENTS TO INFLUENCE CERTAIN
FEDERAL TRANSACTIONS (JAN 1990)**

(a) Definitions.

(1) "Agency," as used in this clause, means executive agency as defined in FAR 2.101.

(2) "Covered federal action," as used in this clause, means any of the following federal actions:

- (i) The awarding of any federal contract.
- (ii) The making of any federal grant.
- (iii) The making of any federal loan.
- (iv) The entering into of any cooperative agreement.
- (v) The extension, continuation, renewal, amendment, or modification of any federal contract, grant, loan, or cooperative agreement.

(3) "Indian tribe" and "tribal organization," as used in this clause, have the meaning provided in Section 4 of the Indian Self-Determination and Education Assistance Act (25 U.S.C. §450b) and include Alaskan Natives.

(4) "Influencing or attempting to influence," as used in this clause, means making, with the intent to influence, any communication to or appearance before an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with any covered federal action.

(5) "Local government," as used in this clause, means a unit of government in a state and, if chartered, established, or otherwise recognized by a state for the performance of a governmental duty, including a local public authority, a special district, an intrastate district, a council of governments, a sponsor group representative organization, and any other instrumentality of a local government.

(6) "Officer or employee of an agency," as used in this clause, includes the following individuals who are employed by an agency:

- (i) An individual who is appointed to a position in the Government under Title 5, United States Code, including a position under a temporary appointment.
- (ii) A member of the uniformed services, as defined in Subsection 101(3), Title 37, United States Code.
- (iii) A special Government employee, as defined in Section 202, Title 18, United States Code.
- (iv) An individual who is a member of a federal advisory committee, as defined by the Federal Advisory Committee Act, Title 5, United States Code, Appendix 2.

(7) "Person," as used in this clause, means an individual, corporation, company, association, authority, firm, partnership, society, state, and local government, regardless of whether such entity is operated for profit, or not for profit. This term excludes an Indian tribe, tribal organization, or any other Indian organization with respect to expenditures specifically permitted by other federal law.

(8) "Reasonable compensation," as used in this clause, means, with respect to a regularly employed officer or employee of any person, compensation that is consistent with normal

compensation for such officer or employee for work that is not furnished to, not funded by, or not furnished in cooperation with the federal Government.

(9) "Reasonable payment," as used in this clause, means, with respect to professional and other technical services, a payment in an amount that is consistent with the amount normally paid for such services in the private sector.

(10) "Recipient," as used in this clause, includes the Contractor and all subcontractors. This term excludes an Indian tribe, tribal organization, or any other Indian organization with respect to expenditures specifically permitted by other federal law.

(11) "Regularly employed," as used in this clause, means, with respect to an officer or employee of a person requesting or receiving a federal contract, an officer or employee who is employed by such person for at least 130 working days within one year immediately preceding the date of the submission that initiates agency consideration of such person for receipt of such contract. An officer or employee who is employed by such person for less than 130 working days within one year immediately preceding the date of the submission that initiates agency consideration of such person shall be considered to be regularly employed as soon as he or she is employed by such person for 130 working days.

(12) "State," as used in this clause, means a state of the United States, the District of Columbia, the Commonwealth of Puerto Rico, a territory or possession of the United States, an agency or instrumentality of a state, or any multi-state, regional, or interstate entity having governmental duties and powers.

(b) Prohibitions.

(1) Section 1352 of Title 31, United States Code, among other things, prohibits a recipient of a federal contract, grant, loan, or cooperative agreement from using appropriated funds to pay any person for influencing, or attempting to influence, an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with any of the following covered federal actions: the awarding of any federal contract; the making of any federal grant; the making of any federal loan; the entering into of any cooperative agreement; or the modification of any federal contract, grant, loan, or cooperative agreement.

(2) The Act also requires contractors to furnish a disclosure if any funds other than federal appropriated funds (including profit or fee received under a covered federal transaction) have been paid, or will be paid, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with a federal contract, grant, loan, or cooperative agreement.

(3) The prohibitions of the Act do not apply under the following conditions:

(i) Agency and legislative liaison by own employees.

(A) The prohibition on the use of appropriated funds, in subparagraph (b)(1) above, does not apply in the case of a payment of reasonable compensation made to an officer or employee of a person requesting or receiving a covered federal action if the payment is for agency and legislative liaison activities not directly related to a covered federal action.

(B) For purposes of subparagraph (b)(3)(i)(A) above, providing any information specifically requested by an agency or Congress is permitted at any time.

(C) The following agency and legislative liaison activities are permitted at any time where they are not related to a specific solicitation for any covered federal action:

1. Discussing with an agency the qualities and characteristics (including individual demonstrations) of the person's products or services, conditions or terms of sale, and service capabilities.

2. Technical discussions and other activities regarding the application or adaptation of the person's products or services for an agency's use.

(D) The following agency and legislative liaison activities are permitted where they are prior to formal solicitation of any covered federal action--

1. Providing any information not specifically requested but necessary for an agency to make an informed decision about initiation of a covered federal action;

2. Technical discussions regarding the preparation of an unsolicited proposal prior to its official submission; and

3. Capability presentations by persons seeking awards from an agency pursuant to the provisions of the Small Business Act, as amended by Pub. L. 95-507, and subsequent amendments.

(E) Only those services expressly authorized by subparagraph (b)(3)(i) above are permitted under this clause.

(ii) Professional and technical services.

(A) The prohibition on the use of appropriated funds, in subparagraph (b)(1) above, does not apply in the case of--

1. A payment of reasonable compensation made to an officer or employee of a person requesting or receiving a covered federal action or an extension, continuation, renewal, amendment, or modification of a covered federal action, if payment is for professional or technical services rendered directly in the preparation, submission, or negotiation of any bid, proposal, or application for that federal action or for meeting requirements imposed by or pursuant to law as a condition for receiving that federal action.

2. Any reasonable payment to a person, other than an officer or employee of a person requesting or receiving a covered federal action or an extension, continuation, renewal, amendment, or modification of a covered federal action if the payment is for professional or technical services rendered directly in the preparation, submission, or negotiation of any bid, proposal, or application for that federal action or for meeting requirements imposed by or pursuant to law as a condition for receiving that federal action. Persons other than officers or employees of a person requesting or receiving a covered federal action include consultants and trade associations.

(B) For purposes of subparagraph (b)(3)(ii)(A) above, "professional and technical services" shall be limited to advice and analysis directly applying any professional or technical discipline. For example, drafting of a legal document accompanying a bid or proposal by a lawyer is allowable. Similarly, technical advice provided by an engineer on the performance or operational capability of a piece of equipment rendered directly in the negotiation of a contract is allowable. However, communications with the intent to influence made by a professional (such as a licensed

lawyer) or a technical person (such as a licensed accountant) are not allowable under this section unless they provide advice and analysis directly applying their professional or technical expertise and unless the advice or analysis is rendered directly and solely in the preparation, submission or negotiation of a covered federal action. Thus, for example, communications with the intent to influence made by a lawyer that do not provide legal advice or analysis directly and solely related to the legal aspects of his or her client's proposal, but generally advocate one proposal over another are not allowable under this section because the lawyer is not providing professional legal services. Similarly, communications with the intent to influence made by an engineer providing an engineering analysis prior to the preparation or submission of a bid or proposal are not allowable under this clause since the engineer is providing technical services but not directly in the preparation, submission or negotiation of a covered federal action.

(C) Requirements imposed by or pursuant to law as a condition for receiving a covered federal award include those required by law or regulation and any other requirements in the actual award documents.

(D) Only those services expressly authorized by subparagraphs (b)(3)(ii)(A)(1) and (2) above are permitted under this clause.

(E) The reporting requirements of FAR 3.803(a) shall not apply with respect to payments of reasonable compensation made to regularly employed officers or employees of a person.

(c) Disclosure.

(1) The Contractor shall file with DOE a disclosure form, OMB Standard Form LLL, Disclosure of Lobbying Activities, if the Contractor has made or has agreed to make any payment using nonappropriated funds (to include profits from any covered federal action), which would be prohibited under subparagraph (b)(1) above, if paid for with appropriated funds.

(2) The Contractor shall file a disclosure form at the end of each calendar quarter in which there occurs any event that materially affects the accuracy of the information contained in any disclosure form previously filed by such person under subparagraph (c)(1) above. An event that materially affects the accuracy of the information reported includes—

(i) A cumulative increase of \$25,000 or more in the amount paid or expected for influencing or attempting to influence a covered federal action; or

(ii) A change in the person(s) or individual(s) influencing or attempting to influence a covered federal action; or

(iii) A change in the officer(s), employee(s), or Member(s) contacted to influence or attempt to influence a covered federal action.

(3) The Contractor shall require the submittal of a certification, and if required, a disclosure form by any person who requests or receives any subcontract exceeding \$100,000 under this contract.

(4) All subcontractor disclosure forms (but not certifications) shall be forwarded from tier to tier until received by the Contractor. The Contractor shall submit all disclosures to the Contracting Officer at the end of the calendar quarter in which the disclosure form is submitted by the subcontractor. Each subcontractor certification shall be retained in the subcontract file of the Contractor.

(d) Agreement. The Contractor agrees not to make any payment prohibited by this clause.

(e) Penalties.

(1) Any person who makes an expenditure prohibited under paragraph (b) above or who fails to file or amend the disclosure form to be filed or amended by paragraph (c) above shall be subject to civil penalties as provided for by 31 U.S.C. §1352. An imposition of a civil penalty does not prevent the Government from seeking any other remedy that may be applicable.

(2) Contractors may rely without liability on the representation made by their subcontractors in the certification and disclosure form.

(f) Cost allowability. Nothing in this clause makes allowable or reasonable any costs which would otherwise be unallowable or unreasonable. Conversely, costs made specifically unallowable by the requirements in this clause will not be made allowable under any other provision.

13.0 TERM OF CONTRACT/ TERMINATION

CLAUSE 13.1 - DEAR 970.5204-74 OPTION TO EXTEND THE TERM OF THE CONTRACT (JUN 1996) (MODIFIED)

(a) DOE may unilaterally extend the term of this performance-based management contract for an additional five years by written notice to the Contractor within 45 days before the contract expires; provided, that DOE shall give the Contractor a preliminary written notice of its intent to extend at least 18 months before the contract expires. The preliminary notice does not commit DOE to an extension.

(b) This option provides a mechanism for continuing a contractual relationship with a successful incumbent contractor. When deciding whether to exercise the option, the Contracting Officer will consider the quality of the Contractor's performance of all work under this contract and the requirements of applicable statutes and regulations.

CLAUSE 13.2 - DEAR 970.5204-45 TERMINATION (OCT 1995) (DEVIATION)

(a) This contract shall continue until September 30, 2002, unless sooner terminated in accordance with the provisions which follow or extended in accordance with Clause 13.1, Option to Extend the Term of the Contract:

(1) The performance of work under this contract may be terminated by the Government in whole, or from time to time in part,

(i) whenever the Contracting Officer makes a determination that the Contractor has violated:

(A) Clause 9.8, Workplace Substance Abuse Programs at DOE Sites;

(B) Clause 12.1, Organizational Conflicts of Interest; or

(C) Clause 12.3, Foreign Ownership, Control, or Influence Over Contracts;

and the Contractor fails to cure the fault or failure within such period as the Contracting Officer may allow after receipt by the Contractor of a notice from the Contracting Officer specifying the fault or failure; or

(ii) whenever the Contracting Officer determines that there has been an action which gives the Government a right to terminate under:

(A) Reserved; or

(B) Clause 12.4, Gratuities; or

(C) Clause 12.7, Damages for Illegal or Improper Activity; or

(iii) whenever, for any reason, the Contracting Officer shall determine any such termination is for the best interest of the Government.

(2) Termination of the work hereunder shall be effected by delivery of a notice of termination specifying the reason for termination, the extent to which performance of work under the contract shall be terminated, and the date upon which such termination shall become effective. Any such termination shall be without prejudice to any claim which either Party may have against the other.

(3) If, after notice of termination under the provisions of (a)(1)(i) or (ii) above, it is determined for any reason that termination was not appropriate under the above-cited provisions, such notice shall be deemed to have been issued pursuant to (a)(1)(iii) above, and the rights and obligations of the Parties hereto shall in such event be governed accordingly.

(4) Upon receipt of notice of termination, in accordance with (a)(1) above, the Contractor shall, to the extent directed, in writing, by the Contracting Officer, discontinue the terminated work and the placing of orders for materials, facilities, supplies, and services in connection therewith, and shall proceed, if, and to the extent required by the Contracting Officer, to cancel promptly and settle with the approval of the Contracting Officer, existing orders, subcontracts, and commitments insofar as such orders, subcontracts, and commitments pertain to this contract.

(b) Upon the termination of this contract, full and complete settlement of all claims of the Contractor and of DOE arising out of this contract shall be made as follows:

(1) The Government shall have the right in its discretion to assume sole responsibility for any or all obligations, commitments, and claims that the Contractor may have undertaken or incurred, the cost of which are allowable in accordance with the provisions of this contract; and the Contractor shall, as a condition of receiving the payments mentioned in this clause, execute and deliver all such papers and; take all such steps as the Contracting Officer may require for the purpose of fully vesting in the Government any rights and benefits the Contractor may have under or in connection with such obligations, commitments, or claims.

(2) The Government shall treat as allowable costs all expenditures made in accordance with and allowable under Clause 3.2, Allowable Costs (Management and Operating), not previously so allowed or otherwise credited for work performed prior to the effective date of termination, together with expenditures as may be incurred for a reasonable time thereafter with the approval of, or as directed by, the Contracting Officer.

(3) The Government shall treat as allowable costs, to the extent not included in (b)(2) above, the costs of settling and paying claims arising out of the termination of work under orders, subcontracts, and commitments as provided in (a)(2) above.

(4) The Government shall treat as allowable costs the reasonable costs of settlement, including accounting, legal, clerical, and other expenses reasonably necessary for the preparation of settlement claims and supporting data with respect to the termination of the contract and for the termination and settlement of orders and subcontracts thereunder, together with such further expenditures made by the Contractor after the date of termination for the protection or disposition of Government property as are approved or required by the Contracting Officer; provided, however, that if the termination is pursuant to (a)(1)(i) or (ii), or if at the time of termination pursuant to (a)(1)(iii) the latest aggregate Appendix F rating is less than a "good" rating, the first \$175,000 of any amount for preparation of the Contractor's settlement proposal shall be unallowable.

(5) The obligation of the Government to make any of the payments required by this clause or any other provisions of this contract shall be subject to any unsettled claims in connection with this contract which the Government may have against the Contractor.

(c) Prior to final settlement, the Contractor shall furnish a release as required in Clause 3.5, Payments and Advances, and account for Government-owned property as may be required by the Contracting Officer; provided, however, that unless the Contracting Officer requires an inventory, the maintenance and disposition of the records of Government-owned property in accordance with Clause 3.1, Accounts, Records, and Inspection, shall be accepted by the Contracting Officer as full compliance with all requirements of this contract pertaining to an accounting for such property.

CLAUSE 13.3 - CONTRACTOR'S RIGHT TO TERMINATE; SURVIVABILITY OF CERTAIN CONTRACT TERMS (SPECIAL)

This contract may be terminated for convenience by the Contractor in whole, upon delivery to the Government of a written notice 18 months prior to the effective date of such termination whenever, for any reason, the Contractor determines any such termination is in the best interests of the Contractor. Any such termination shall be without prejudice to any claim which either Party may have against the other. Upon delivery of notice of termination to the Government, the provisions of Clause 13.2, Termination, shall be put in effect as if the Government had given notice to the Contractor of termination for convenience.

CLAUSE 13.4 - FAR 52.237-3 CONTINUITY OF SERVICES (JAN 1991) (MODIFIED)

(a) The Contractor recognizes that the services under this contract are vital to the Government and must be continued without interruption and that, upon contract expiration, a successor, either the Government or another Contractor, may continue them. The Contractor agrees to (1) furnish phase-in training and (2) exercise its best efforts and cooperation to effect an orderly and efficient transition to a successor.

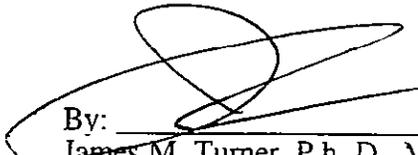
(b) The Contractor shall, upon the Contracting Officer's written notice, (1) furnish phase-in, phase-out services for up to six months after this contract expires and (2) negotiate in good faith a plan with a successor to determine the nature and extent of phase-in, phase-out services required. The plan shall specify a training program and a date for transferring responsibilities for each division of work described in the plan, and shall be subject to the Contracting Officer's approval. The Contractor shall provide sufficient experienced personnel during the phase-in, phase-out period to ensure that the services called for by this contract are maintained at the required level of proficiency.

(c) The Contractor shall allow as many personnel, as practicable, to remain on the job to help the successor maintain the continuity and consistency of the services required by this contract. Prior to the expiration of this contract, the Contractor also shall, with the consent of the affected personnel, disclose necessary personnel records and allow the successor to conduct on-site interviews with these employees. If selected employees are agreeable to the change, the Contractor shall release them at a mutually agreeable date and negotiate transfer of their earned fringe benefits to the successor.

(d) The Contractor shall be reimbursed for all reasonable phase-in, phase-out costs (*i.e.*, costs incurred within the agreed period after contract expiration that result from phase-in, phase-out operations) and a fee related to risk of performance under this clause.

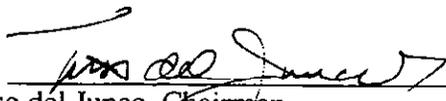
IN WITNESS HEREOF, the Parties hereby execute this document.

UNITED STATES OF AMERICA, DEPARTMENT OF ENERGY

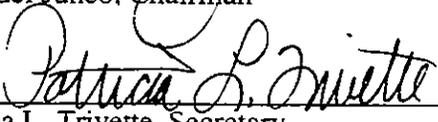
By: 
James M. Turner, P.h. D., Manager
Oakland Operations Office
Contracting Officer

Date: 9/18/97

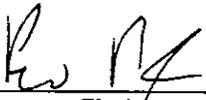
THE REGENTS OF THE UNIVERSITY OF CALIFORNIA

By: 
Tirso del Junco, Chairman

Date: 9/18/97

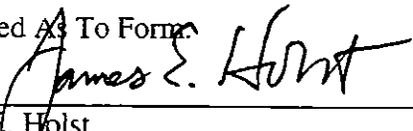
By: 
Patricia L. Trivette, Secretary

Date: 9/18/97

By: 
Peter Preuss, Chair
Committee on Oversight of the Department of Energy
Laboratories

Date: 9/18/97

Approved As To Form:

By: 
James E. Holst
General Counsel of The Regents of The University of California

Date: September 18, 1997

CORPORATE CERTIFICATE

I, Anne L. Shaw, certify that I am the Associate Secretary of The Regents of the University of California; that Tirso del Junco, who signed this Supplemental Agreement on behalf of said corporation and Patricia L. Trivette, who signed this Supplemental Agreement on behalf of said corporation, were then Chair and Secretary, respectively, of said corporation; that this Supplemental Agreement was duly signed for and on behalf of said corporation by authority of The Regents of the University of California and is within the scope of its corporate powers.

Anne L. Shaw

(SEAL)

APPENDIX A

**PERSONNEL COSTS AND
RELATED EXPENSES**

LBNL

Appendix A - Personnel Costs and Related Expenses

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Appendix A - Personnel Costs and Related Expenses

SECTION I - INTRODUCTION

(a) Appendix A is an advance understanding on allowable personnel costs and related expenses under this contract. University employees at the Laboratory are covered by University personnel policies or approved modifications thereof. "Approved modifications" are those which are approved by the University in accordance with its procedures. Any proposal that is specific to one or more laboratories which would increase costs directly beyond what is approved for University employees is subject to approval in advance by the Contracting Officer.

(b) In accordance with Clause 5.1(b), this Appendix A may be modified from time to time. Either Party may at any time request that this Appendix A be revised, and the Parties hereto agree to negotiate in good faith concerning any requested revision. Revisions to this Appendix A shall be accomplished by and reflected in Reimbursement Authorizations (RA) executed by the Contracting Officer and the University President or the President's duly authorized representative; provided, however, no revision shall in any manner modify the rights and obligations of the Parties as set forth in the contract clauses.

(c) The Laboratory Director may make exceptions to the provisions of Appendix A when such exceptions are in the best interest of contract operations or will facilitate or enhance contract performance and are approved in advance by the University and the Contracting Officer.

(d) The Parties shall appoint senior-level representatives to a joint University/Laboratory/DOE Planning and Evaluation Group (PEG), which shall meet on a regular basis for consultation on issues. For discussion by PEG, the University shall inform the Contracting Officer of proposed personnel policy changes extended to University employees at the three University-operated DOE Laboratories.

SECTION II - DEFINITIONS

(a) Within this Appendix various names, titles, and definitions as are used as follows:

(1) "Contracting Officer" means a person with the authority to enter into, administer, and/or terminate this contract and make related determinations and findings. The term includes certain authorized representatives of the Contracting Officer acting within the limits of their authority as delegated by the Contracting Officer.

(2) "DOE" means the Department of Energy.

(3) "Laboratory" means the Los Alamos National Laboratory (LANL) for Appendix A to Contract No. W-7405-ENG-36, the Lawrence Livermore National Laboratory (LLNL) for Appendix A to Contract No. W-7405-ENG-48, or the Lawrence Berkeley National Laboratory (LBNL) for Appendix A to Contract No. DE-AC03-76SF00098.

(4) "Laboratory Director" means the Director of the Laboratory, or an Acting Director, or a designated representative.

(5) "University" or "Contractor" means The Regents of the University of California.

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SECTION III - COMPENSATION

(a) General provisions.

(1) Compensation Philosophy. Consistent with compensation philosophy for the University of California, the University has adopted the following objectives for its compensation programs at the Laboratory:

(i) to provide a level of compensation which, within available funds, attracts, motivates, and retains a quality work force which is necessary for the achievement of Laboratory goals;

(ii) to recognize and reward performance and productivity while maintaining a competitive market position; and

(iii) to provide internal equity within the Laboratory.

(2) Compensation Standards. In support of achieving the above objectives, the University and DOE agree that the elements below will be included in Laboratory compensation systems and will be measured in accordance with the performance objectives, criteria, and measures established under Appendix F of this contract. The elements are:

(i) philosophy and strategy for all pay delivery programs;

(ii) method for establishing the internal value of jobs;

(iii) method for relating the internal value of jobs to the external market;

(iv) system that links individual and/or group performance to compensation decisions;

(v) method for planning and monitoring the expenditure of funds;

(vi) method for ensuring compliance with applicable laws and regulations;

(vii) system for communicating the program to employees; and

(viii) system for internal controls and self-assessment.

(3) Performance Measures and Contract Compliance. The performance measures for human resources described in Appendix F of the contract are designed to determine whether the above standards have been met. The University and the DOE will assess whether the Laboratory is in compliance with Appendix A by measuring Laboratory compensation programs and other aspects of human resources administration against these standards.

(4) Compensation Levels. In establishing or modifying compensation levels, the University will be guided by such considerations as:

(i) the Laboratory Director or designee generally recruits in the local/regional labor market area for its nonexempt personnel and in the regional and national labor market for its exempt personnel. Compensation practices will be commensurate, equitable, and competitive with comparable positions in relevant Laboratory market comparators;

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- (ii) the impact of recruitment and retention problems within occupational groups;
 - (iii) the internal relationships within/between occupational groups;
 - (iv) funding limitations; and
 - (v) the impact on occupational groups dominated by women and/or minorities.
- (b) Job evaluation process. Job classifications shall be described, assessed and placed in a structure appropriate to the occupational group. Classification descriptions and information regarding the type of job evaluation system used shall be made available for Contracting Officer review upon request. The University will discuss the establishment of new classifications with the Contracting Officer prior to implementation.

(c) Salary administration.

(1) Range minimum and maximum rates. Prior to the implementation of salary ranges for new classifications and/or increases to existing salary ranges, the University shall consult with the Contracting Officer. Salary ranges are based on prevailing rates gathered from surveys of comparable jobs in the appropriate market area and internal equity considerations. Salary grade ranges are adjusted periodically to reflect the movement of salaries for comparable positions at other organizations in the public and private sector and to maintain appropriate relationships with other salaries within the Laboratory.

(2) Salaries above and below the salary range.

(i) An employee is paid within the salary range for his/her classification. Exceptions to this provision shall require approval by the Laboratory Director. Exceptions shall be reported annually to the Contracting Officer.

(ii) For employees reassigned to new positions whose current salary exceeds the salary range maximum of the new position, the Laboratory shall establish procedures to red circle salaries until such time as the salary can be appropriately aligned within the new pay range.

(3) Hiring rates. A new employee will normally be hired at a basic salary appropriate to the level of assigned duties and commensurate with training, experience, competitive salary requirements, and internal equity. Individual starting salaries may vary at the discretion of the Laboratory Director or designee. For classified structures, the starting salary shall normally not exceed the midpoint of the salary range to which the position has been assigned. Exceptions to this provision shall be governed by University policy and shall be reported annually to the Contracting Officer.

(4) Salary increases. Any combination of salary increases for an individual in a single fiscal year, including merit increases and those resulting from reclassification and promotion, which result in a salary that is 25% greater than the employee's salary prior to the increase shall require prior approval by the Laboratory Director. Salary increases that exceed 15% shall be reported annually to the Contracting Officer.

(5) Promotions.

(i) The Laboratory Director or designee shall promote employees from one level to another as warranted and may grant a salary increase to accompany the promotion. The salary

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increase accompanying a promotion shall be based upon merit and internal alignment. For purposes of applying this provision, a promotion is defined as the reassignment or reclassification of an employee to a classification having a higher maximum salary.

(ii) Annual funding for promotions shall be included in the Salary Increase Authorization (SIA) request as a discrete line item. The request for funding for promotions will be based upon actual use for the prior year and anticipated future use, such as classification restructuring.

(6) [LLNL only] Step increases. Step increases which are part of the normal salary progression in the 0600, 0700, 0800 and 0900 series shall not be charged to the SIA. The salaries of employees in the step increase portion of their level shall not be used for purposes of SIA computation. When the basic salary associated with an employee's level and step is revised, the employee may receive a salary increase sufficient to adjust the employee's basic salary to the new basic salary for that level and step.

(7) Salary approvals. Subject to good faith efforts by the Laboratory Director or designee to achieve the compensation standards outlined in Section III(a)(2) above, and identification of appropriate objectives, criteria, and measures for performance evaluation under Appendix F, Contracting Officer approval of individual salaries shall be limited to the Laboratory Director and those employees other than joint Laboratory-faculty appointees whose salaries are at or above the Regental threshold. No later than 6 months after the effective date of this Supplemental Agreement, the DOE salary approval threshold for the Laboratory shall be the Regental threshold.

(8) Administrative stipend for temporary assignments. An administrative stipend may be paid to an employee who is temporarily assigned responsibilities of a higher level position or other significant duties not part of the employee's regular position. The sum of stipend and base salary shall not exceed the maximum salary of the higher level position. The Laboratory Director may authorize an administrative stipend up to 15 % of the appointee's annual base salary for a period not to exceed one year.

(d) Salary increase authorization.

(1) Goals.

(i) The annual Salary Increase Authorization (SIA) is intended to enable the Laboratory Director or designee to pay market rates for similar work to maintain a competitive position.

(ii) The Laboratory Director or designee shall manage salaries in a fiscally prudent manner and award merit increases in each of the Laboratory's job series merit programs on the basis of the overall value of the employee's contributions.

(2) Components and Process.

(i) Annually, the University shall submit the Laboratory SIA proposal to the Contracting Officer for the succeeding fiscal year. The proposal shall include data from the survey designated by DOE.

(ii) The University shall submit the SIA proposal 90 days prior to the beginning of the succeeding fiscal year.

(iii) In order to pay "on-market-on-average," in the calculation of market position, Laboratory salary data shall be matched to survey data as of April 1, the midpoint of the fiscal year.

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(iii) In order to pay "on-market-on-average," in the calculation of market position, Laboratory salary data shall be matched to survey data as of April 1, the midpoint of the fiscal year.

(iv) The University shall include in the SIA proposal the following supporting information for each pay structure: cost-to-market analysis; market growth projection; survey analyses including data from the DOE-designated survey source; such other survey data that the University deems appropriate; aging factors used for updating survey data and supporting information; and information regarding recruitment and retention needs, employee and labor relations issues, internal alignment, and relevant management concerns.

(v) The Contracting Officer shall take the information referenced in Section III(d)(2)(iv) above, into account in its action on the SIA proposal.

(vi) Provided a complete SIA proposal, as defined herein, is received, the Contracting Officer shall communicate a single salary increase authorization within 60 days prior to the end of the current fiscal year. The University shall implement the SIA after DOE approval has been granted.

(vii) The SIA shall be expressed as a percentage of the projected September 30 base payroll.

(viii) The Laboratory Director or designee shall endeavor to allocate the approved SIA according to its original submissions and consistent with its market analyses. However, in the event that DOE approves a lower amount than was requested, a redirection of this allocation may be required to meet critical operational needs. The University shall consult with DOE prior to implementation when redirection is required.

(ix) Authorization beyond the original SIA may be made by the Contracting Officer.

(x) Expenditures of the SIA shall be tracked and a report of expenditures shall be provided to the Contracting Officer annually.

(xi) All pay actions granted under the approved SIA are fully charged when they occur regardless of time of year in which the action transpires and whether the employee terminates before year end.

(e) Payment of university academic appointees. The salary rate for University academic appointees at the Laboratory shall be in accordance with established University policy as follows:

(1) The monthly salary rate for an individual with an eleven-month appointment is one-twelfth of the individual annual campus rate.

(2) The monthly salary rate for an individual with a nine-month appointment is one-ninth of the individual's annual rate, except for cases described in Section III(e)(3) below.

(3) The salary for an individual with a nine-month appointment as lecturer, who is also employed part-time at the Laboratory, is determined by the following formula: $(\text{nine-month salary} \times 1.16) / 12 = \text{Monthly Salary}$.

(4) Fractional month's pay for a joint appointee is based on the fraction of the month shown on the most recent authorization by the human resources organization, e.g., the employment form or Personnel Action Form.

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(5) University academic appointees who work a full summer period shall be paid for three months' service rather than under the formula above. The summer period begins the first working day after the end of the spring quarter or semester and continues through the last working day before the beginning of the fall quarter or semester at the faculty member's campus. Should the summer period contain less than 57 working days, the three months' pay shall be reduced on a prorated basis. An individual with a nine-month academic appointment who works the summer period at the Laboratory shall be compensated according to the following schedule:

Summer Period	Fraction of Annual Rate	Amount of Compensation
Full	3/9	57 days at 1/57
2/3	2/9	38 days at 1/38
1/3	1/9	19 days at 1/19

(f) University senior management. The University's personnel policies for senior managers establish personnel, compensation, and benefit provisions for senior leadership positions at the Laboratory. Salaries, benefits, and perquisites paid in accordance with the University's personnel policies for senior managers, including the salary of the Laboratory Director, are allowable costs.

(1) Benefits and perquisites. Benefits and perquisites generally parallel those available to the University's senior managers. The University shall consult the Contracting Officer regarding changes to senior managers' benefits and perquisites which generate direct costs to the contract. Any proposal that is specific to one or more laboratories which would increase costs directly beyond what is approved for University employees is subject to approval in advance by the Contracting Officer.

(2) Senior management positions. Senior management includes the following generic positions: director(s), deputy director(s), and associate director(s) at LBNL and LLNL; and director(s), deputy director(s), program director(s), and division director(s) at LANL. Additional positions may be added with the approval of the Contracting Officer.

(3) Appointment and salary authority. Subject to the conditions in Clause 5.8, Key Personnel, of the contract, the University shall appoint the Laboratory Director and Deputy Director(s). The University shall establish initial compensation and subsequent adjustments for all senior management positions, except that compensation of the Laboratory Director shall require DOE concurrence. For senior management positions, the University shall obtain DOE's concurrence, consult with DOE, or report actions to DOE, as shown below:

	Appointment	Initial Salary	Subsequent Salary Adjustments
Laboratory Director	Concurrence by DOE	Concurrence by DOE	Concurrence by DOE
Deputy Director(s)	Concurrence by DOE	Consult with DOE	Report to DOE annually
Associate Director(s) (or equivalent at LANL)	Consult with DOE	Report to DOE	Report to DOE annually

(4) Termination. Subject to the consultation required in Clause 5.8, Key Personnel, the University retains sole authority to terminate senior managers from University employment.

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(5) Senior management compensation. The Parties recognize that the following factors are considered in establishing senior management compensation:

- (i) competitive compensation rates for major private and public research and development laboratories;
- (ii) recruitment and retention experience;
- (iii) internal Laboratory salary alignments;
- (iv) Laboratory performance; and
- (v) individual performance.

(6) Annual senior management merit review. Annually the University shall propose a senior management merit pool percentage for the Laboratory based on (1) the cost-to-market percentage for scientists and engineers for each Laboratory, as derived from the scientist and engineer SIA Common Methodology, and (2) additional salary surveys, internal alignment information, recruitment and retention experience, and other relevant market conditions. The University shall provide to DOE comparison compensation survey results used by the University in proposing compensation levels. In consultation with DOE, the University shall review the performance of the Laboratory against the criteria in Appendix F. DOE shall use that review to establish a merit pool percentage for the Laboratory within a range of .75 to 1.50 of the senior management merit pool.

(7) Annual merit increases. The University shall establish annual merit increases for senior management positions within the DOE approved senior management merit pool, based on individual performance, as recommended by the Laboratory Director. Merit increases shall be effective October 1. The University shall inform DOE annually of merit increases granted.

(8) Senior management salary authorization. The Parties will utilize the process described in Clause 2.6, Performance-Based Management, and in Appendix F to evaluate the Contractor's performance in science and technology and operations and administration. This evaluation will be the basis for determining the Contractor's Laboratory Senior Management salary increase authorization multiplier.

(9) Senior management incentive compensation program. The Parties will negotiate in good faith to develop an appropriate non-base building incentive compensation program to be implemented in the fiscal year following its adoption. Until such program is developed, the Parties agree to continue the existing base-building process where DOE determines the value of the multiplier to be applied to the Laboratory Senior Management salary increase authorization, from a range of not less than .75 to not more than 1.50.

SECTION IV - ANCILLARY PAY COMPONENTS

(a) Modified work week. The Laboratory Director may designate a work week of less than five days within a pay week for selected employees, or groups of employees, when warranted. Any such modified work week shall be consistent with applicable law. Utilization of modified work weeks for groups of employees and its impact on improved productivity shall be documented. Annual reports of this activity shall be provided to the Contracting Officer.

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(b) Overtime.

(1) Overtime management control plan. The University shall report annually to the Contracting Officer on overtime expenditures. An overtime management control plan may be required under the criteria described in Clause 9.13, Overtime Management.

(2) Occasional overtime. When deemed essential to the performance of work under this contract, occasional overtime may be authorized by the University.

(3) Extended work week.

(i) An extended work week is an established work week which exceeds 40 hours each week for a period which it is anticipated will extend beyond four consecutive weeks.

(ii) When deemed essential to the performance of work under this contract, an extended work week may be established at the Laboratory or any portion thereof.

(4) Operational work week. [LBNL only]

(i) An "operational work week" is a work week established when overtime is required for field or test activities away from regular Laboratory sites. Such work weeks are normally for 54 hours per week, but may be for more.

(ii) When operational work weeks are scheduled, the Laboratory Director or designee shall notify DOE about the number of employees and the period of time involved.

(5) Computation of overtime.

(i) Exempt Employees.

(A) Exempt employees shall not be compensated for occasional overtime.

(B) An exempt employee assigned to an extended work week or an operational work week may be paid supplemental pay calculated at a prorated percentage of the monthly base salary.

(ii) Nonexempt employees other than fire fighters.

(A) Nonexempt employees (other than Fire Fighters) shall be paid at one and one-half times their straight-time hourly regular rate for all hours worked in excess of 40 hours in any one week.

(B) One and one-half times the straight-time hourly rate may be paid for hours worked in excess of a full-time work schedule in any one day when authorized for certain classifications by the University.

(C) Twice the straight-time hourly rate may be paid for each hour worked on the seventh consecutive day worked within a pay week.

(D) The "regular rate" on which overtime pay is calculated shall be determined in accordance with applicable law.

(E) The following hours shall be considered as hours worked:

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1. Hours actually worked, excluding hours spent in On-Call status under the provision of Section IV(e). below.

2. Hours allowed for compensable holidays, voting time, health checks, blood donations, search and rescue work, Civil Defense training, and Report Pay.

3. Time spent in actual work-related travel as well as travel time for program and project required travel.

(iii) Fire Fighter overtime. [LBNL/LLNL only] For the purposes of this section in paying for Fire Fighters' overtime, the University shall comply with University policy and applicable law, including Section 7(k) of the Fair Labor Standards Act (FSLA, as implemented by 29 CFR Part 553).

(c) Shift differential.

(1) [LLNL/LBNL only]

(i) A shift differential shall be paid to each nonexempt employee who is required by management to work an assigned swing or owl shift in the amount of 7.5% for swing shift and 15% for owl shift. During all leaves with pay and holidays, eligible employees are paid at the shift differential rate applicable to the shifts they would otherwise have been scheduled to work. Overtime hours worked by a nonexempt employee on a swing or owl shift are paid at the applicable shift differential rate times one and one-half.

(ii) Exempt employees are not normally eligible for shift differentials; however, the Laboratory Director may approve a shift differential for an exempt employee when programmatic requirements necessitate a regular shift assignment for an extended period and no other reasonable option is available.

(iii) The shift differential shall be included in payments for all types of paid leave, provided that the employee would have been expected to work that shift or shifts were the employee not on paid leave.

(2) [LANL only]

(i) A structured series employee who is assigned to an evening shift (normally 4 p.m. - 12 midnight) or a night shift (normally 12 midnight - 8 a.m.) shall receive, in addition to his/her basic hourly rate, or hourly equivalent, a shift premium of 12% for evening shift or 15% for night shift. The shift premium shall be based on the basic hourly rate, or hourly equivalent, for each hour worked during such scheduled shifts. Where a day shift begins early, or ends late, therefore overlapping either night or evening shifts, the applicable shift premium may be paid for hours worked during the shift only if four or more hours are worked on the shift.

(ii) A structured series employee regularly assigned to work during the sixth or seventh day of the work week may receive a 5% differential for hours worked on those days, in addition to any applicable shift premiums. This 5% differential is not applicable to sick leave, vacations, or other authorized paid leaves.

(iii) Any structured series employee who is assigned to a split shift shall be paid, in addition to his/her basic hourly rate or hourly equivalent, a shift premium for each hour worked

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during the hours of evening shift and night shift at the rate provided for in this Section, except that if the entire shift is scheduled between the hours of 7 a.m. and 6 p.m., no shift premium shall be paid.

(iv) Any structured series employee who is assigned to a rotating shift shall be paid, in addition to his/her basic hourly rate, or hourly equivalent, a shift premium for each hour worked during the hours of evening and night shifts computed at the rate provided for in this Section.

(v) A structured series employee shall also be paid the shift premium as provided for in this Section for hours in nonwork pay status if the shift assignment is for a period which extends or is expected to extend beyond eight consecutive weeks.

(3) The University shall conduct periodic surveys of shift differential practices to assure that a cost effective and market competitive position is maintained.

(d) Call-in pay. Any nonexempt employee called in for emergency work outside of his/her regularly scheduled hours shall be paid at least four hours at his/her straight-time hourly rate or for all hours worked at the applicable overtime rate, whichever is greater.

(e) On-call pay.

(1) On-call is time during which an employee is not required to be at the work location or at the employee's residence but is required to restrict activities so as to be readily contacted and be available for return to work if called.

(2) Non-exempt employees assigned to on-call duty shall be paid an amount not to exceed 14% of their hourly base rate for each on-call duty hour. Exempt employees who are assigned to on-call duty shall be paid \$40 for each 24 hour period and must be on-call for a minimum of 15 hours (or 13 hours for eligible employees on a four-day, ten hour alternate work schedule) within a 24 hour period during the employee's normal workweek.

(3) Duty officers are University employees required to remain on site outside of normally scheduled working hours so as to be promptly available. Exempt employees assigned as on-site duty officers shall be paid \$115.00 for each 24-hour weekend or holiday shift worked.

(4) [LBNL only] Employees assigned to on-call duty shall be paid \$90.00 for each 7-day assignment. Employees assigned to on-call duty for weekend or holiday shifts only shall be paid \$30.00 for each 24-hour period.

(f) Report pay. [LANL only] An employee who reports for work in accordance with the usual work schedule, and then is sent home because no work is available, shall be paid at straight-time hourly rate not to exceed four hours, unless he/she was specifically instructed in advance not to report to work. With the approval of the Laboratory Director, up to eight hours of Report Pay may be granted.

(g) Special allowances.

(1) Uniform allowance. To be eligible for a uniform allowance or allocation, an employee must be required to wear a uniform authorized for use in an official capacity only.

(i) [LLNL/LBNL only] An allowance, in accordance with University policy, for the replacement and maintenance of uniforms, shall be paid effective July 1 to each employee who has

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completed one year of service in the Police or Protective Services classifications; a full-time employee who has completed less than 12 months of service, a full-time employee who has worn a uniform less than full time, or a part-time employee shall receive an allowance prorated on the basis of the percent of time worked in uniform since the previous July 1.

(ii) [LBNL only] An allowance in accordance with University policy shall be provided to employees in the Fire Department. A full-time employee who has completed less than 12 months of service, a full-time employee who has worn a uniform less than full time, or a part-time employee shall receive an allowance prorated on the basis of the percent of time worked in uniform since the previous July 1.

(iii) [LLNL only] Rather than receiving a reimbursement allowance, permanent, full-time employees in the uniformed Fire Fighter classification series shall be furnished uniforms.

(iv) [LANL only] Regular full-time, part-time, and limited term employees in health services at LANL who are required to wear uniforms shall be provided a reasonable allowance to assist in the purchase, laundering, and maintenance of the required uniform. This allowance shall not exceed \$300 per year for health service employees.

(2) Isolation allowance. The Laboratory Director may designate an isolation allowance up to a maximum of 25% of the employee's basic salary or monthly equivalent for work performed in remote geographical areas. Extended work weeks for isolation duty posts may be established in accordance with pertinent sections of this Appendix.

(3) Dislocation allowance. Laboratory employees may be assigned to temporary duty at other locations on a change-of-station basis. With the approval of the Laboratory Director, for relocations that exceed six months, payment of actual and reasonable costs associated with the temporary assignments may be made and shall include an apartment or house rental differential in accord with University guidelines for lodging in the specific city, the shipment of household goods (or storage thereof) per the University's institutional travel expense policy, and a miscellaneous cost of living adjustment based upon accepted industry standards to be paid as a supplement to base salary. The University shall provide a semiannual report to the Contracting Officer of assignments subject to these provisions.

(h) Nevada Test Site (NTS) allowance.

(1) Permanent duty status.

(i) Employees whose permanent work assignment is at Mercury shall be paid, in addition to their regular pay, a daily allowance of \$12.50 for each day worked at Mercury.

(ii) Employees whose permanent work assignment is other than Mercury but within NTS shall be paid, in addition to their regular pay, a daily allowance of \$15 for each day worked at the assigned work place.

(iii) In addition to the daily allowance prescribed above in this paragraph, an overnight allowance of \$6.25 shall be allowed for each day worked for individuals whose work schedule requires them to remain overnight at NTS.

(iv) Round-trip travel expenses for spouses of employees, whose permanent duty station is NTS, may be reimbursed in accordance with the University Travel Policy for attendance at a pre-retirement counseling meeting conducted at the Laboratory.

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(2) Temporary Duty Status. Employees assigned to duty at the Nevada Test Site on a temporary basis shall be compensated in accordance with the Travel section of this Appendix; however, they shall not be entitled to the allowances described in subparagraph (h)(1)(i) to (iv) above.

SECTION V - RETIREMENT, INSURANCE, AND OTHER BENEFITS

(a) Retirement.

(1) Public Employees' Retirement System (PERS) of California.

(i) Coverage of employees under PERS shall be in accordance with the California Public Employees' Retirement Law, California Government Code Section 20000 *et seq.*

(ii) Costs of Laboratory contributions to PERS, including administrative expenses, shall be an allowable cost.

(iii) The University shall pay the employer's share of the tax required by the Federal law governing Old Age Survivors and Disability Insurance (OASDI) for those employees who have elected coordinated Social Security coverage in the Public Employees' Retirement System. These payments shall include administrative costs assessed under the program.

(2) University of California Retirement Plan (UCRP).

(i) Coverage of employees under UCRP shall be in accordance with eligibility requirements as defined in the UCRP plan document.

(ii) Costs of University contributions to UCRP, including administrative expenses, shall be an allowable cost under this contract.

(iii) The coordinated Social Security coverage in UCRP was effective as of April 1, 1976. All eligible University employees who elected to be covered by Social Security shall become a Member with Social Security under UCRP. Employees hired by the University after April 1, 1976, shall automatically become Members with Social Security under UCRP, except for eligible employees who on April 1, 1976 made an election to not be covered by Social Security. This election is binding upon all future periods of UCRP membership.

(iv) The costs incurred by the University for the tax required by the federal law governing Social Security for all University employees who are contributing to Social Security through University employment shall be allowable under this contract. These payments shall include any administrative costs assessed under the program.

(v) Any UCRP retirement system program proposal that is specific to one or more laboratories which would increase costs directly beyond what is approved for University employees is subject to approval in advance by the Contracting Officer.

(b) Health and welfare benefits.

(1) The University is authorized to provide to Laboratory employees, annuitants, and survivor annuitants the same type of health and welfare benefits as are provided to other University

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employees, annuitants, and survivor annuitants. Costs of such benefits, at the rate per employee, annuitant, or survivor annuitant per month as adopted by The Regents, plus administrative expenses, are allowable costs under this contract.

(2) The costs of medical plan premiums for any employee participating in a University-sponsored plan during any month in which the employee meets all of the following conditions are allowable costs under this contract:

(i) The employee receives temporary disability payments under workers' compensation law as a result of an injury or illness connected with the Laboratory work;

(ii) The employee receives no salary, vacation, sick leave or supplemental disability leave from which premium deductions can be made; and

(iii) The employee continues in an employee status.

(3) Annually, for discussion by the PEG, the University shall inform the Contracting Officer of current and proposed benefit plans extended to University employees at the Laboratory. Any proposal that is specific to one or more laboratories which would increase costs directly beyond what is approved for University employees is subject to approval in advance by the Contracting Officer.

(c) Invalidation insurance. The University may provide invalidation insurance to employees required to perform official foreign travel. The policy shall be so structured as to validate only applicable personal insurance policies where said policies specifically exclude coverage under the above conditions, including act of war exclusions.

(d) Unemployment insurance. Coverage for eligible employees shall be in accordance with the State of California Unemployment Insurance Code. Costs of such insurance for eligible employees, plus related administrative expenses, are allowable costs.

(e) Medical evacuation services/insurance. Employees required to perform official travel to foreign countries where local care is substandard (according to U.S. standards) may have coverage that pays for evacuation services to an acceptable medical facility in a proximal location on an urgent or emergency basis. The policy shall cover evacuation, expatriation of remains, and ancillary costs associated with the incident. Costs for such coverage for eligible employees are allowable.

SECTION VI - PAYMENTS ON SEPARATION

(a) Reduction in Force (RIF). When employees are terminated due to a RIF, the following costs are allowable:

(1) Pay in lieu of notice. Any employee who is laid off or terminated due to a RIF may be given pay in lieu of the required minimum written notice of termination. Accumulated vacation credit is also paid.

(2) Severance pay eligibility and definitions.

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(i) Eligibility. Regular or career status full-time and part-time employees, excluding University faculty, trainees, apprentices, and employees with short or limited term appointments with a specified ending date, are eligible for severance payments.

(ii) Definitions. [LBNL/LLNL only]

(A) Continuous service. Service is continuous if an employee is on pay status each month without a break in service. For severance pay purposes, a break in service occurs when there is a separation from employment at any University or Laboratory site for any reason, except that a separation from employment for purposes of transferring an employee to another University location, including another University-managed Laboratory, is not a break in service.

1. Periods on an approved leave without pay for military service, illness or injury compensable by workers' compensation law, assignment to another research organization at the direction of the Laboratory, or for any period of 30 days or less are counted as periods of continuous service for the purposes of severance pay, as are periods on pay status before and after any other approved leave without pay.

2. Periods of employment prior to a break in service are not counted as periods of continuous service for purposes of severance payment, nor are periods on pay status as a University Graduate Student Employee or indeterminate time employee (except that for an indeterminate time employee who has attained career status, the period on pay status which qualified the employee for career status and subsequent periods shall be counted).

3. Continuous service is reestablished when an employee is rehired from preferential rehire status.

(B) Equivalent job. An equivalent job is any career position with the University at a beginning salary at least equal to the salary paid the employee in the job from which that employee was laid off, regardless of salary range.

(C) One week's pay. One week's pay for nonexempt, hourly-rated employees is defined as the basic hourly rate (excluding shift differential and overtime) times 40 hours or, for Fire Fighters, the specifically approved work week. One week's pay for full-time exempt employees is defined as the hourly equivalent of the monthly rate times 40 hours.

(iii) Definitions. [LANL only]

(A) Length of service. Length of service shall be defined as the last period of continuous full-time or part-time permanent employment, deducting any periods of time during which the employee is in leave-without-pay status for periods in excess of 30 days. Exceptions to the length of service computation may be made for employees who, following formal notification of their selection for a RIF, accept a short-term or limited-term position because of the lack of available suitable positions without a specified termination date. For these employees only, time spent in the short-term or limited-term position may be included in the length of service calculation.

(B) Fractional years of service of six months or more shall receive a full year of credited service for that year. Fractional years of service of less than six months shall not receive credit service for that year, except for those employees whose length of service is less than six months.

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(C) One week's pay. One week's pay for nonexempt employees is defined as the basic hourly rate times 40 hours. One week's pay for exempt employees is defined as the hourly equivalent times 40 hours.

(3) Severance pay benefits. A severance payment shall be made to University employees whose employment at the Laboratory is terminated due to a RIF and shall be applied as follows:

(i) Severance pay benefit. [LLNL/LBNL only] The severance payment shall be made in an amount equal to one week's pay for each year of continuous full-time equivalent service (a fractional year of full-time equivalent service of six months or more is counted as one year of service) not to exceed a total of 26 weeks pay.

(ii) Severance pay benefit. [LANL only]

<u>Length of Service</u>	<u>Benefit Allowance</u>
Up to two years	2 week's pay
Over 2 years but less than 6 years	1 week's pay for each year of service
Over 6 years	1 week's pay for each year of service through 6 years, plus 2 weeks' pay for each year of service in excess of 6 years, not to exceed a total of 39 weeks

The severance pay benefit for employees hired prior to October 1, 1987, shall be the greater of either (1) accruals based on eligible service under the schedule in effect prior to October 1, 1987 and which were earned as of October 1, 1987, or (2) the accrual based upon the above schedule for all eligible service.

(iii) The University may pay employees a lump sum payment at the time of termination or in bi-weekly installments.

(4) Limitations on severance pay.

(i) Severance payments shall not extend the period of employment beyond the date of termination due to layoff or RIF.

(ii) Severance payments shall not include payment for any period of service for which the employee has previously received such payment.

(iii) Severance payments shall not be provided to an employee who:

(A) transfers to another Laboratory position or University career position (including a position at another University-managed Laboratory);

(B) refuses a transfer to an equivalent position within the Laboratory or the University (including a position at another University-managed Laboratory). An equivalent position is defined as a career or indefinite term position at a beginning salary at least equal to the salary paid the employee in the job from which that employee was terminated, regardless of salary range.

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- (C) is offered employment at comparable pay and benefits by a successor contractor;
- (D) resigns;
- (E) dies, except that severance pay will be provided if an individual dies after receiving notice of a RIF;
- (F) is discharged for cause; or
- (G) elects to retire normally.

(iv) Exceptions for voluntary resignations upon approval of the Laboratory Director, may be made as follows:

(A) Employees who have received a written notice of layoff or termination due to a RIF but who voluntarily resign prior to the effective date established for their termination may receive the severance payment.

(B) Employees not otherwise scheduled for layoff or RIF who voluntarily resign and thereby eliminate the need for involuntarily terminating other employees may receive the severance payment.

(5) Reemployment.

(i) Should an individual who has received severance payments be rehired by the University before the expiration of the number of weeks for which the employee has received severance payments, the amount of the balance shall be treated as an advance on earnings to the employee and credited to the Laboratory.

(ii) A return to pay status during a period of right to recall or preference for reemployment provides continuity of service, including reinstatement of all accrued sick leave in accordance with University policy, and reinstatement as an active member of the UCRP. However, benefits, seniority, and service credits, including service credit related to retirement, only accrue when on pay status. UCRP does not provide for the establishment of UCRP service credit for any period of right to recall or preferential rehire.

(b) Payments upon termination other than RIF.

(1) Pay in lieu of notice of termination. When approved by the Laboratory Director, up to 15 calendar days' pay may be paid in lieu of notice.

(2) Sick leave. Accumulated sick leave is not payable upon termination and may not be used beyond a predetermined date of termination.

(3) Vacation. Accumulated vacation is payable at termination or upon extended military leave at the rate in effect as of the date of termination, including any shift differential.

(4) Termination by death. Upon the death of an employee who has been employed for at least six months or more at 50% time or more, a sum equal to the normal salary of the deceased for one month shall be paid to the surviving spouse, or if there is no surviving spouse, to the deceased's eligible dependent(s), or if there is neither a surviving spouse nor eligible dependent(s), to the beneficiary designated in the deceased's University-paid life insurance. If there is no University-

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paid life insurance policy or no designated beneficiary of any such policy, the death payment shall be made to the estate of the deceased.

(5) [LANL only]. Under special circumstances, as determined by the Laboratory Director, and with the approval of the Contracting Officer, cost of travel and shipment of household goods may be authorized for terminating employees or the family of a deceased employee.

SECTION VII - LABOR RELATIONS

(a) Collective bargaining. Costs of fringe benefits and wages paid to employees, and all other costs and expenses pursuant to applicable collective bargaining agreements and revisions thereto, are allowable. The University shall meet with the Contracting Officer or designee(s) for the purpose of reviewing the University's bargaining objectives prior to negotiation of any collective bargaining agreement or revision. The University shall keep the Contracting Officer advised of significant developments during any negotiations.

(b) Grievance and complaint costs.

(1) The University is authorized to settle internal employee grievances up to \$60,000 without the advance approval of the Contracting Officer. Settlements of internal employee grievances in excess of \$60,000 require advance approval of the Contracting Officer.

(2) The University may pay as an allowable cost the entire costs or some portion thereof for services rendered by a non-Laboratory hearing officer in accordance with University policy.

(c) Legal defense of employees. Costs of legal defense of University employees, including employees charged with criminal violations of environmental laws, are governed by Clause 4.2, Defense and Indemnification of Employees.

SECTION VIII - LEAVES WITH PAY

(a) Holidays.

(1) All employees, except those working on a casual basis at LANL, and part-time and indeterminate time employees in pay status less than one-half of the working hours of the month at LLNL/LBNL, shall be granted time off with pay for compensable holidays.

(2) [LANL only].

New Year's Day
Martin Luther King, Jr.'s Birthday
Washington's Birthday
Memorial Day
Independence Day
Labor Day
Columbus Day
Veterans' Day
Thanksgiving Day
Friday following Thanksgiving
Christmas Day

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Energy Conservation Day (Floating Holiday)

The holiday designated "Energy Conservation Day" may be observed on an appropriate day during the year as designated by the Laboratory Director.

In addition to the holidays specified in this Section VIII, upon approval by the University, all employees, except those working on a casual basis, shall be granted time off with pay for each holiday or special observance declared or encouraged for the Nation by the President of the United States.

(3) [LLNL/LBNL only].

New Year's Day
Third Monday in January
Third Monday in February
Last Monday in May
Fourth of July
Labor Day
Thanksgiving Day
Friday following Thanksgiving Day
December 24 (or an announced equivalent)
Christmas Day
December 31 (or an announced equivalent)
One additional holiday to be selected each year by the President of the University.

(4) If a compensable holiday falls on a Sunday, the following Monday is observed as a holiday. If a compensable holiday falls on a Saturday, the preceding Friday is observed as a holiday unless an alternate day is designated by the President of the University. In the case of an extended workweek, the Saturday or Sunday itself may be observed as the holiday.

(5) Employees working irregular, full-time schedules receive pay for holidays occurring on their scheduled days(s) off, or another day off in lieu of the holiday, but shall not be granted more holidays than are granted other employees.

(6) [LANL only]. A holiday is not compensable to an employee who is absent without pay both the full scheduled workday immediately preceding and immediately following the holiday.

(7) [LLNL/LBNL only]. A continuing full-time employee who is on approved leave without pay for a period of not more than twenty calendar days, including holidays, shall receive pay for any holiday occurring during that period.

(8) Nonexempt employees who work on a holiday are paid at the rate of one and one-half for hours worked on the holiday, or four hours at the employee's straight time hourly rate, which ever is greater in addition to holiday pay. Exempt employees do not receive extra pay when required to work on a holiday.

(b) Vacation.

(1) Rates of accrual and maximum allowable credit. [LLNL/LBNL only]

(i) Full-time employees, other than fire fighters and University faculty members who are eligible for vacation with pay, accrue vacation credit in accordance with the following table:

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<u>Years of Service*</u>	<u>Vacation Credit Accrual Rate</u>	<u>Maximum Allowable Credit</u>
Less than 10	10 hours per month	240 hours
10 but less than 15	12 hours per month	288 hours
15 but less than 20	14 hours per month	336 hours
20 or more	16 hours per month	384 hours

* Years of service is defined as service at half-time or more. Employees scheduled for less than 40 but no less than 20 hours per week accrue credit at a proportionate ratio of time worked.

(ii) Fire fighters who average 56 hours of work per week accrue vacation credit in accordance with the following table:

<u>Years of Service</u>	<u>Vacation Credit Accrual Rate</u>	<u>Maximum Allowable Credit</u>
Less than 10	14 hours per month	336 hours
10 but less than 15	17 hours per month	403 hours
15 but less than 20	20 hours per month	470 hours
20 or more	22 hours per month	538 hours

(iii) Vacation credit shall accrue at the normal rate during leave with pay.

(iv) In special cases maximum accruals of vacation credit may be extended by prior approval of the Laboratory Director based on reasons of business exigency.

(2) Rates of accrual and maximum allowable credit. [LANL only]

(i) Full-time employees hired before December 1, 1992 shall accrue vacation leave at the rate of two basic workdays per month provided they are in pay status for at least half their work schedule for that month. The maximum allowable credit is 48 days.

(ii) Full-time employees who are hired on or after December 1, 1992 shall accrue vacation leave in accordance with the following table, provided they are in pay status for at least half their work schedule for that month.

<u>Years of Service</u>	<u>Vacation Credit Accrual Rate</u>	<u>Maximum Allowable Credit</u>
Less than 10*	10 hours per month	240 hours
10 but less than 15	12 hours per month	288 hours
15 but less than 20	14 hours per month	336 hours
20 or more	16 hours per month	384 hours

*At the discretion of the Laboratory Director, employees with less than ten years of service may be granted up to three additional days of paid leave during the annual Laboratory closure in December, to cover days that are not paid holidays.

(iii) The monthly vacation accrual for part-time employees shall be on a pro rata basis predicated upon actual hours worked as opposed to a full-time work schedule.

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(iv) Vacation leave accrual during an employee's first and last month of employment shall be adjusted according to the employee's starting or termination date.

(v) Nonexempt employees shall be paid at their straight-time hourly rates for vacation leave taken. Exempt employees shall be paid at their monthly pay rates for vacation leave taken.

(vi) The provisions of this section shall not apply to casual and short-term employees. Exception: short-term employees who convert to regular employee status (full-time or part-time) without a break in service shall be credited vacation accrual retroactive to the individual's date of hire as a short-term employee.

(vii) Vacation days which shall accrue to an eligible employee during the leave year may be credited to the individual's account at the beginning of or during the leave year. The leave year limitation may be waived by the Laboratory Director provided, however, that in no case shall an employee be credited for more than the vacation days which shall accrue during the next consecutive 12-month period.

(3) Scheduling vacation. [LLNL/LBNL only] Vacations shall be scheduled at the convenience of departments and may be taken in any amount up to the total of the employee's credit. Vacation credit shall not be used prior to the time it is actually earned. However, up to two days' advance use of vacation credit accruals for the months of December and January may be used to facilitate implementation of any Christmas/New Year's holiday closures. This exception applies only to new employees who have not had sufficient time to accrue adequate vacation balances and to special cases where adequate vacation balances do not exist.

(4) Vacation charges. [LLNL/LBNL only]

(i) Vacation credit is charged on the basis of the number of working days or fractions of days taken off.

(ii) For the purpose of computing vacation charges, each employee is considered to work not more than five working days per week.

(iii) Saturday and Sunday, or two equivalent days off per scheduled work week, and holidays are not charged against vacation with pay.

(iv) Fire fighters, who are on a 24-hour shift schedule, are charged vacation on an hour-for-hour basis when vacation is taken on their normal days of work.

(5) Transfer of credit.

(i) When an employee changes employment between a Laboratory and any other employing unit of the University, vacation credit is not transferred but is paid to the employee.

(ii) [LBNL only]. Employees upon reclassification from any other classification to Graduate Student Research Assistant shall be paid for vacation credit at their previous salary rate.

(c) Sick leave.

(1) Rates of accrual. [LLNL/LBNL only]

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(i) Other than fire fighters and University faculty members who are eligible for sick leave with pay, accrue sick leave at the rate of eight hours per month for basic work weeks of 40 hours. Employees scheduled for less than 40 hours but 20 hours or more per week accrue credit at proportionate rates but do not earn sick leave credit for any hours over 40 in a workweek.

(ii) Fire fighters accrue sick leave at the rate of 11 hours per month on the basis of averaging 56 hours of work per week.

(iii) University faculty members accrue sick leave at the rate of eight hours per month in approximate proportion to the percent full-time (40 hours per week) worked at the Laboratory.

(iv) Credit for sick leave shall accrue during leave with pay.

(2) Rates of accrual. [LANL only]

(i) Full-time employees hired before December 1, 1992, shall accrue sick leave at the rate of one and one-half basic workdays per month provided they are in pay status for at least half their work schedule for that month.

(ii) Full-time employees who are hired on or after December 1, 1992, shall accrue sick leave at the rate of one basic workday per month provided they are in pay status for at least half their work schedule for that month.

(iii) The monthly sick leave accrual for a part-time employee shall be in the same approximate ratio to one basic workday as the hours in pay status, excluding overtime hours, bears to the normal full-time schedule.

(iv) Sick leave accrual during an employee's first month of employment shall be adjusted according to his or her hiring date.

(v) The provisions of this section shall not apply to casual and short term employees, with the exception that as many as six days of sick leave per six months may be granted to cooperative education students.

(vi) Short-term employees who convert to regular employee status (full-time or part-time) without a break in service shall be credited sick leave accrual retroactive to their date of hire as a short-term employee.

(3) Method of charge.

(i) Sick leave is charged on the basis of the number of working days or fractions of days taken off.

(ii) Employees may charge sick leave in accordance with their scheduled hours of work, but not in excess of 40 hours per week.

(iii) Saturday and Sunday or equivalent days off and holidays are not charged against sick leave.

(iv) [LLNL/LBNL only]. Fire fighters, who are on a 24-hour shift schedule, are charged sick leave on an hour-for-hour basis for sick time on their normal days of work.

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(v) Sick leave with pay may not be taken prior to actual accrual.

(vi) Except as provided in this Section VIII(c)(3)(vii) and (viii) below, sick leave is granted only when an employee is unable to render service because of sickness, disability, quarantine, or the bearing of a child. Any employee may be required to furnish satisfactory proof of sickness or disability. Sick leave is not a part of wages or salary and is not paid on termination.

(vii) An employee shall be permitted to use not more than 30 days of accrued sick leave in any calendar year when required to be in attendance or to provide care, because of the illness of the employee's spouse, parent, child, sibling, grandparent, or grandchild. In-laws and step-relatives in the relationships listed also are covered. This provision also covers other related persons residing in the employee's household.

(viii) An employee shall be permitted to use not more than five days of sick leave when that employee's absence is required due to the death of the employee's spouse, parent, child, sibling, grandparent, or grandchild. In-laws and step-relatives in the relationships listed also are covered. This provision also covers other related persons residing in the employee's household. In addition, an employee shall be permitted to use not more than five days of sick leave in any calendar year in the event an employee has a personal obligation with regard to funeral attendance or bereavement due to the death of any other person.

(ix) In the event of sick leave taken beyond current credit, the excess is charged to vacation with pay as long as there are vacation credits or to leave without pay.

(x) Any time reported as sick leave included within a vacation period shall be acceptable as a charge against sick leave accrual, providing it is supported by a doctor's certification or other administratively acceptable evidence.

(xi) [LANL only.] Nonexempt employees shall be paid at their straight-time hourly rate for sick leave taken. Exempt employees shall be paid at their monthly pay rate for sick leave taken.

(xii) If an employee's disability extends beyond sick leave and vacation accruals, a sick-leave grant with pay, not to exceed 30 work days, may be granted by the Laboratory Director under the following conditions:

(A) A unique hardship or unusual circumstance is demonstrated;

(B) The employee does not have any other appropriate disability coverage under the University's employee and/or employer paid plans; and

(C) The employee's illness is such that he/she is expected to return to work in a reasonably short period of time after the expiration of the sick leave grant. Vacation and sick leave shall not accrue to an individual while on sick leave granted pursuant to this Section VIII(c)(3)(xii). The sick-leave grant is not an advance of accrued sick leave and does not have to be repaid.

(xiii) Illness or injury while in official travel status. Whenever an employee, while in official travel status, is not able to perform regular duties due to illness or an injury, and not because of the employee's own misconduct, a per diem or actual expense for subsistence and lodging may be paid not to exceed a total of 14 calendar days for any one illness or injury, unless in a particular case a longer period is approved by the Laboratory Director. The type of leave and duration must be shown on the travel claim. When such an employee's hospitalization is paid for under workers' compensation law, the employee shall be paid for only those subsistence and

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lodging expenses not covered by the workers' compensation and which are reasonable and justified.

(4) Reinstatement of sick leave. Except as provided in Section VI(a)(5)(ii), when a former employee of the University (including the Laboratory), or of the State of California, is employed at the Laboratory, the total sick leave accumulation from previous employment shall be reinstated if the interval between the last day of the former employment and the start date at the Laboratory is less than 15 calendar days. If the interval is 15 calendar days or more, and less than six months, reinstatement of sick leave is limited to 80 hours.

(d) Other leaves with pay.

(1) Authorized leave with pay

(i) An authorized leave of absence with pay may be granted to exempt employees in consideration of time required to be worked by an employee at the direction of his or her supervisor which substantially exceeds the employee's normal work schedule. Such leave is not to be used to compensate an employee for extra work on an hour-for-hour basis.

(A) Up to three work days a month may be granted an exempt employee by the division leader or division/program director, as appropriate.

(B) Periods in excess of three work days a month may be granted only with the approval of the Laboratory Director.

(ii) Leaves of absence with pay up to five working days may be granted by the Laboratory Director to any employee to cover unusual circumstances. Where adequate sick leave or vacation credits exist, such leave shall be charged to credits.

(2) Jury duty. Employees who have been called to be selected or to serve on a jury impaneled by a civil authority are authorized time off with pay. Any fee received by the employee for such duty may be retained by the employee.

(3) Court leave. Except where an employee is subpoenaed as an expert witness and receives a fee as such, an employee who has been subpoenaed to testify as a witness in legal proceedings (other than one in which the employee is a party to the suit) or is called to serve as a witness in a DOE administrative hearing may be authorized time off with full pay.

(4) Voting time. All employees shall be allowed not more than two hours of leave with pay for the purpose of voting in national, state, or local elections.

(5) Health checks. Employees required by the Laboratory Director or designee to take time off from work for a health check to determine if a job-incurred injury or illness has occurred or to determine the employee's physical fitness for a certain type of work assignment shall remain in pay status for the time thus spent. Such time shall not be charged to accrued leave.

(6) Blood donations. Employees who volunteer as donors of blood, without compensation, to Laboratory Director or designee -approved blood drives may be excused for the period of time necessary to accomplish this purpose and shall remain in pay status for the time thus spent. Such time shall not be charged to accrued leave.

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(7) Investigatory leave. The Laboratory Director or designee may place an employee on investigatory leave with pay when continued engagement of the employee may pose a risk to the Laboratory's normal health, safety, security, or work standards. The Contracting Officer shall be notified if a particular investigation is anticipated to require more than 30 calendar days.

(8) Community service leaves.

(i) An employee may, when approved by the Laboratory Director, be excused without loss of pay for a reasonable period to perform community service or civic duties in his or her community. An employee may also be excused without loss of pay for a reasonable period of time to serve as a member of, or consultant to, a board, commission, committee or government agency when officially appointed.

(ii) An employee who performs search and rescue or disaster control work as a member of an organized civil unit may be granted time off with pay for the time the employee is required to be away for the scheduled working hours when approved by the Laboratory Director. Leave with pay may not be granted for training, drills, or practice exercises with such organized civil units.

(iii) Civil emergency preparedness training and civil emergencies.

(A) Employees who volunteer their services and meet the following conditions may be excused without loss of pay for participation in pre-emergency Civil Emergency Preparedness training programs and test exercises.

1. The employee must be an active member of an approved Civil Emergency Preparedness organization; and

2. The Laboratory Director or designee must determine that the services of the employee would not be required by the Laboratory Director or designee during an emergency condition.

(B) Such leave with pay shall not exceed 40 hours during a calendar year for any employee.

(C) Employees who provide services during active civil emergencies shall receive pay, including overtime payments, for time worked in accordance with regular pay policies, provided:

1. The Contracting Officer declares that a civil emergency exists, and

2. The services are (or were) requested by a local Civil Emergency Preparedness Director or authorized representative.

(9) Public emergency leave. An employee may be granted time off with pay during a public emergency which effectively prevents the attendance at work or the continuance of work in a normal and orderly manner. A public emergency includes either a natural disaster, such as fire, flood, or earthquake, or a manmade disorder, such as a demonstration, riot, or act of sabotage. Authorization for time off with pay for such emergencies is made by the Laboratory Director.

(10) Professional renewal leave. The Laboratory Director may grant professional renewal leave to a limited number of Laboratory managers or scientific personnel who have made outstanding contributions in furtherance of University objectives. The purpose of professional

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renewal leave is to provide these individuals an opportunity to attach themselves to external organizations and/or programs for the purpose of professional revitalization and development. These temporary external assignments shall be approved based on technical and programmatic relevance to assure mutual benefit to both the University and the employee. General provisions:

- (i) Candidate must be either a recognized senior scientific or management series employee for whom it would not normally be practical to utilize either the advanced study program or the professional research or teaching leave.
- (ii) The period of leave shall not exceed six months.
- (iii) Salary payments, vacation, sick leave, and other benefits shall continue as if the employee were in full duty status at the University.
- (iv) The Laboratory may provide travel support in accordance with this Appendix.

SECTION IX - LEAVES WITHOUT PAY

(a) Leaves without pay may be approved by a division leader or division/program director, as appropriate, for a period not in excess of six months. Approval of the Laboratory Director is required for extension of a leave without pay for a total leave of not more than twelve months. The aggregate of all leaves without pay may not exceed six months within a twelve-month period, unless approval beyond the six-month limit has been granted by the Laboratory Director, except that an employee disabled because of pregnancy disability, childbirth, or related medical conditions is entitled to up to four months of leave for disability related to each pregnancy.

(b) In special situations, the Laboratory Director may approve leaves of absence without pay for more than one year. Approval to extend a leave beyond three years requires advance consultation with the University, Office of Laboratory Administration. The Contracting Officer shall be informed of any leaves extended beyond three years.

(c) Periods of approved leave without pay are not counted as University service except as provided in specific University personnel policies. The effect of leave without pay on retirement and group insurance plans is governed by University group insurance and retirement system regulations.

(d) Employees may be granted leave without pay including such leaves as personal leave, pregnancy disability leave, parental leave, work-incurred disability leave, or family and medical leave, as provided in the following sections.

(1) Personal leave. A career or regular employee may be granted a personal leave without pay, but in granting the leave, the best interest of the University as well as the interests of the employee shall be considered. Personal leaves may be granted for reasons including but not limited to extended illness, need to provide care for members of the family, or education or other activities which shall directly enhance job effectiveness. A personal leave for temporary employment outside the University may be approved provided that the outside work is in the interest of public service and/or will be beneficial to the Laboratory upon the employee's return.

(2) Pregnancy disability leave. An employee disabled from working because of pregnancy, childbirth, or related medical conditions, upon request, shall be granted a leave of absence for up to

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four months during the period of disability. If the period of disability continues beyond four months, a personal leave may be granted.

(3) Parental leave. Upon request, a career or regular employee shall be granted parental leave for up to six months for the care of a newborn or a newly adopted child.

(4) Work-incurred disability leave. An employee who is off pay status and receiving temporary disability payments under the workers' compensation law may be granted leave without pay for all or part of the period during which such temporary disability payments are received, except that any leave without pay which is granted shall not extend beyond a predetermined date of separation.

(5) Family and medical leave. Family and medical leave is provided for an eligible employee's serious health condition, the serious health condition of the employee's child, spouse, or parent, or to bond with the employee's newborn, adopted, or foster care child in accordance with State and Federal law in effect at the time the leave is granted. Family and medical leave is unpaid leave except when the employee is using accrued vacation or sick leave, subject to University policy.

(e) Entrepreneurial Leave. [LANL Only] Employees may be granted entrepreneurial leave as provided for in Appendix M, Technology Commercialization.

SECTION X - WORKERS' COMPENSATION AND INJURY LEAVE

(a) General.

(1) An employee suffering a job-incurred injury or disability may be paid the straight-time hourly rate or monthly pay rate during the waiting period before workers' compensation begins, or the difference between the workers' compensation payment and such rate if the employee later becomes eligible for workers' compensation during the waiting period.

(2) An employee entitled to receive workers' compensation may be paid injury leave, which is the difference between the workers' compensation payments and the straight-time hourly rate or monthly pay rate for the period such compensation is payable, not to exceed a period of 26 weeks. The total amount of all payments received shall not exceed 80% of the employee's regular rate of pay for the period such compensation is payable.

(3) [LLNL/LBNL only]. Injury leave constitutes an advance against permanent disability payments.

(b) Fire and protective services. [LLNL/LBNL only]

(1) An employee who is a member of the Laboratory Fire Department in the active "fire fighting and prevention service" class and who becomes entitled to leave with full salary for a period not exceeding one year, as provided in California Labor Code Section 4804.1, shall not have such leave charged to accrued sick leave, vacation, or injury leave.

(2) An employee who is a "law enforcement" member of the Laboratory Protective Services Department and who becomes entitled to leave with full salary for a period not exceeding one year, as provided in California Labor Code Section 4806, shall not have such leave charged to accrued sick leave, vacation, or injury leave.

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SECTION XI - MILITARY LEAVE

(a) [LANL only]. Temporary or extended military leave pay shall be authorized only for employees who have been employed by the University for one full year prior to the date on which such military leave begins. Prior full-time (active duty) military service shall be included in calculating the one year employment requirement. Temporary or extended military leave pay shall not be paid to short-term employees or visiting staff members (long-term).

(1) Temporary military leave for training. Temporary leave in pay status up to 15 calendar days in any calendar year may be granted to employees who, as members of the National Guard or Reserves of the Army, Navy, Coast Guard, Marine Corps, Air Force, or the Commissioned Corps of the U.S. Public Health Service, are called to temporary duty when necessary to satisfy training requirements of their branch of service or when the National Guard is ordered to temporary duty by order of the Governor of the State. Pay for such leave shall not exceed the employee's straight-time hourly rate for nonexempt employees or basic salary for exempt employees for the period of leave.

(2) Extended military leave. An employee who enters into extended active duty with the National Guard when federalized, or with the Army, Navy, Coast Guard, Marine Corps, Air Force, or the Commissioned Corps of the U.S. Public Health Service, directly from the Laboratory may be granted extended military leave until 90 days after the employee's date of honorable discharge or separation from such service or until the date of the employee's return to the Laboratory as an employee, whichever is sooner. Employees entering into extended military leave service may be paid a sum equal to a month's pay at their basic salary for exempt employees or monthly equivalent for nonexempt employees.

(3) Benefits. An employee may be granted reasonable time off in pay status, regardless of the employee's length of employment with the Laboratory, when required to register for the draft or to report for any ordered physical examination to determine the employee's eligibility for service in the Armed Forces.

(b) [LBNL/LLNL only].

(1) Temporary military leave for active-duty training.

(i) Temporary military leave for active-duty training shall be granted to any employee who as a member of a reserve component of the United States Armed Forces (the federally recognized National Guard, the federally recognized Air National Guard, the Officer's Reserve Corps, the Regular Army Reserve, the Air Force Reserve, the Enlisted Reserve Corps, the Naval Reserve, the Marine Corps Reserve, the Coast Guard Reserve, and the Public Health Reserve when serving with the Armed Forces) is ordered to full-time active military duty for training for a period not to exceed 180 calendar days, including time spent traveling to and from such duty. Such leave is not granted for inactive duty such as regular weekly or monthly meetings or drills required to maintain reserve status.

(ii) Eligibility for pay. An employee granted temporary military leave for active duty training is entitled to receive regular pay for up to 30 calendar days, but not to exceed the actual period of active-duty training, provided:

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(A) the employee has at least twelve months of continuous University service immediately prior to the granting of the leave (any prior full-time military service shall be included in calculating this University service requirement); and

(B) such payment, in addition to payment for extended military leave and for military leave for physical examinations, does not exceed 30 calendar days' pay in any one fiscal year.

(iii) Part-time employee. An eligible part-time employee shall receive pay in proportion to the average percent of full-time worked during the three completed monthly pay periods immediately preceding the leave.

(iv) Benefits. An employee on temporary military leave for active-duty training who is not on pay status shall receive length of service credit provided that the employee returns to Laboratory service at the expiration of the leave in accordance with employment rights under applicable law, but shall not accrue vacation or sick leave or receive holiday pay. If on pay status, the employee shall receive regular benefits.

(2) Extended military leave.

(i) Extended military leave shall be granted to an employee who enlists or is ordered into active duty in the United States Armed Forces or a reserve component or who is ordered into active Federal military duty as a member of the National Guard or Naval Militia. Such leave shall be granted for active-duty service of any length or for active-duty training in excess of 180 days.

(ii) Period of leave.

(A) An employee shall be granted extended military leave for the initial period of enlistment, service, or tour of duty for a period not to exceed four years.

(B) Eligibility for Pay. An employee granted extended military leave is entitled to receive regular pay for the first 30 calendar days of leave provided:

1. the employee has at least twelve months of continuous University service immediately prior to the leave (any prior full-time military service shall be included in calculating this University service requirement); and

2. such payment, in addition to payment for temporary military leave for active-duty training and for military leave for physical examinations, does not exceed 30 calendar days' pay in any one fiscal year.

(iii) Benefits. An employee granted extended military leave shall receive a lump-sum payment for earned salary, accrued vacation, and accrued overtime. Upon written request, an employee may elect to retain accrued vacation on the records for a period not to exceed 180 days. Vacation credits retained on the records for the entire 180 day period shall be paid out at the pay rate in effect at the time of payment, taking into account any salary increases that may have occurred in the previous 180-day period.

(iv) Sick leave credit shall be retained on the records.

(v) Retirement benefits and service credit shall be in accord with the provisions of the applicable retirement system.

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(vi) An employee shall receive other length-of-service credits related to employment that would have been granted had the employee not been absent, but shall not accrue vacation or sick leave or receive holiday pay.

(vii) Upon reinstatement, an employee shall receive salary range adjustments applicable to the employee's position during the military leave.

(3) Emergency national guard leave.

(i) Military leave shall be granted to an employee who as a member of the National Guard is called to active duty by proclamation of the Governor during a state of emergency. An employee who as a member of the National Guard is called to active Federal military duty at the request of the President of the United States is not eligible for emergency National Guard leave, but shall be granted extended military leave as set forth in Section XI(b).

(ii) Eligibility for pay. An employee granted military leave for emergency National Guard duty is entitled to receive regular pay for a period not to exceed 30 calendar days in any one fiscal year. An employee is eligible for pay regardless of the length of University service, and such pay is in addition to any payment for temporary military leave for active-duty training, extended military leave, and military leave for physical examinations.

(iii) Benefits. An employee on military leave with pay for emergency National Guard duty shall receive all benefits related to employment which are granted when an employee is on pay status. If not on pay status, the employee shall receive length of service credit, provided that the employee returns to Laboratory service immediately after the emergency is over, but shall not accrue vacation or sick leave or receive holiday pay.

(4) Physical examination. Military leave with pay shall be granted to an employee, regardless of length of service, when the employee is required to take a pre-induction or pre-enlistment physical examination to fulfill a commitment under a Selective Service or comparable law, or during a period of war or comparable national emergency.

(5) Defense work. Upon approval of the Laboratory Director, military leave without pay may be granted to an employee who is called or volunteers to serve in scientific research and development under the auspices of the federal government during a war or comparable period of national emergency. Such an employee shall not be eligible for 30 calendar days' pay for military leave.

SECTION XII - SECURITY LEAVE

(a) Wages or salaries paid to employees when access authorization is suspended by DOE will be allowable costs under the following conditions:

(1) Transfer. An employee who is transferred to an available position not requiring access authorization may continue to receive the employee's base compensation applicable to the position from which the employee was transferred until final disposition of the case.

(2) Leave. If a position which does not require access authorization is not available, the Laboratory Director or designee may place the employee on leave with pay at his or her base

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compensation until final disposition of the case. Leave with pay requires the Contracting Officer's concurrence that no position is available to which the employee might reasonably be transferred.

(3) Reinstatement. If access authorization is reinstated during or at the conclusion of the administrative review process, the employee shall be reinstated to the same or a comparable position to the one held prior to suspension of access authorization. The employee shall be reimbursed for net loss of base earnings during the period of suspension.

(b) This Section XII does not apply to applicants who have not entered on duty or any employee discharged or suspended for cause under the Laboratory Director's policies.

SECTION XIII - TRAINING AND EDUCATION

(a) General provisions.

(1) The purpose of training and education programs shall be to increase employee skills and efficiency, develop techniques for the solution of operating problems, to prepare participants for additional responsibilities and to enhance opportunities for career advancement.

(2) The objective of training shall be to enhance employee development within a reasonable period of time. Training must be relevant to the goals of the Laboratory Director or designee, and shall be provided only when there is a reasonable expectation that the employee shall remain in the employ of the University performing DOE related work for a sufficient period of time to provide a fair return for the training costs.

(3) The Laboratory Director or designee shall establish written procedures outlining the goals and objectives of the training program.

(4) The Laboratory Director or designee shall send an annual report to the Contracting Officer providing the number of employees participating in training and education programs and the dollars spent.

(b) Training. Employees, including those who are faced with layoffs or contemplated layoffs, may be trained to learn skills necessary for their current jobs or for jobs in the facility which may be vacant or for which employees have transfer rights.

(1) In-house training. Costs of in-house training including necessary equipment, materials and instructor personnel are allowable.

(2) Outside training programs. Employees may be selected by the Laboratory Director or designee to participate in appropriate training courses away from the Laboratory facilities. Allowable expenses for such programs shall include travel and subsistence expenses in accordance with this Appendix, the costs of tuition, fees, course materials, and the salary of the employee during such assignments.

(c) Education. The Laboratory may select employees to participate in educational programs which are directly related to the employee's current position or to another position to which the employee may reasonably be moved.

(1) Educational assistance reimbursement. Tuition assistance and other charges billed by the institution, books, and paid release time, may be provided by the Laboratory Director or designee

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for job-related courses whether or not they lead directly to a degree. The Laboratory Director or designee may provide cooperative education programs whereby students may alternate between working and attending classes. In no event may paid release time for any given period exceed 20 hours per week.

(2) Advanced study program. The Laboratory Director may assign selected employees for study to be undertaken at recognized colleges or universities where such assignment will enhance Laboratory mission objectives. The Laboratory Director or designee may pay the costs assessed by the institution, tuition, and books, as well as a dislocation allowance and transportation in accordance with this Appendix, and salary and benefit costs of the employee during such assignments.

(3) Graduate Student Research Assistants (GSRA) fee remission program. [LBNL/LLNL only] GSRA (214.1-214.6) receive tuition, fee remission, and health insurance benefits as determined by University policies for graduate student researchers.

(4) Professional research or teaching leave. To promote the continuing professional growth and competence of employees, the Laboratory Director may grant partially subsidized leave, as described below, to a limited number of exempt employees. Such leave, to be known as professional research or teaching leave, may be spent at appropriate institutions within the United States or abroad.

(i) The candidate must be one of professional ability, with a firm plan of study, teaching or research which is clearly relevant to the interests of the University and individual's competence.

(ii) The candidate must have been employed by the University for a period of four or more years.

(iii) University faculty members with appointments at the Laboratory of more than 50% time during the academic year are eligible to participate.

(iv) The period of leave may not exceed twelve months.

(v) Salary payments to an employee on professional research or teaching leave may not exceed the following schedule:

<u>Years Since Last PR or T Leave</u>	<u>Years of Service or Up to Six months</u>	<u>6-12 Months</u>
4 years	.89 salary	or .44 salary
4 1/2 years	Regular salary	or .50 salary
5 years	.56 salary	
5 1/2 years	.61 salary	
6 years	.67 salary	
7 years	.78 salary	
8 years	.89 salary	
9 years	Regular salary	

(vi) Cost of travel shall not be reimbursed by the University.

(vii) Vacation and sick leave shall not accrue to the individual while on professional research or teaching leave.

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(viii) In the case of a University faculty member with less than 50% campus appointment, professional research or teaching leave payments may be approved to the extent necessary to offset sabbatical privileges for which the faculty member is ineligible.

(d) Conferences and meetings. The University may pay travel and/or other costs incurred for attendance at meetings and conferences of professional, educational, administrative, and technical organizations, as well as meetings called by the University, when such attendance is deemed by the University to be in the interests of the Laboratory. Payment of expenses incurred incidental to conferences or meetings held at the employee's duty station shall require authorization by the Laboratory Director.

SECTION XIV - EMPLOYEE PROGRAMS

(a) Service and retirement awards. The University may recognize employees' service and retirement. The cost of awards for this program is not to exceed \$160,000 per fiscal year for LANL and LLNL, or \$50,000 per fiscal year for LBNL, without prior approval of the Contracting Officer.

(b) Performance award programs.

(1) The University may recognize employees or groups of employees who have distinguished themselves by their significant contributions and outstanding performance in the course of their work. Awards may be provided to employees or groups of employees in the form of cash. Additionally, noteworthy achievements and special efforts may be recognized by the presentation of plaques, certificates, and memorabilia.

(2) Up to 0.15% for LANL and LLNL, and up to 0.2% for LBNL, of the total salary base may be spent to fund performance award programs. Costs in excess of the authorized amounts shall require advance approval of the Contracting Officer. Annually the University shall provide the Contracting Officer with appropriate reports on the individual award program expenditures.

(3) The following are examples of performance award programs covered by these funds:

(i) Distinguished Performance Award Program. [LANL/LLNL only] The Laboratory Director may recognize employees or groups of employees who have distinguished themselves by their significant contributions and outstanding performance in the course of their work in the fields of science, technology, management, administration, or work in support of such programs. The award payment shall not exceed \$2,000 to an employee or \$5,000 to a group of employees. The total cost of the Distinguished Awards Program shall not exceed \$60,000 per fiscal year without prior approval of the Contracting Officer.

(ii) Outstanding Performance Award Program. [LBNL only]. The objectives of this award program are to recognize and reward one-time achievements of a significant nature made by individuals and teams and to encourage development/achievement in specific areas such as environment, safety and health (ES&H), technology transfer, cost containment, and affirmative action. The amount of the award should reflect the level of performance and accomplishments being recognized. The minimum award amount is \$1,000 and the maximum is \$5,000 per award.

(iii) Inventor Award Program. [LANL only] The Laboratory Director may recognize scientific or technological contributions by a monetary award of not more than \$300 per employee. In addition, the University may issue an award not to exceed \$2,000 to such employees giving rise

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to such inventions, innovations, or other outstanding scientific or technological contributions which the University deems to be the most distinguished during the preceding fiscal year. The cost of awards for this program is not to exceed \$20,000 per year without prior approval of the Contracting Officer.

(iv) Pollution Prevention Award Program. [LANL only] The Laboratory Director may recognize employees who have conceived or developed plans, programs, or ideas for reducing any form of waste generated by Laboratory operations. Monetary awards must be at least \$50 per individual and may not exceed \$2,000 per individual.

(v) Environment, Safety and Health Award Program. [LANL only] The Laboratory Director may recognize employees who have made contributions in the area of environment, safety and health.

(vi) Fellows Prize. [LANL only] Fellows Prizes are awarded to recognize outstanding research first published within the previous ten years which has had a significant impact on the relevant discipline or program.

(c) Employee assistance programs. Costs of an employee assistance program, providing counseling and referral for outside assistance in dealing with personal problems of various kinds, including substance abuse, are allowable.

(d) Other.

(1) The University may develop, administer and support a variety of employee programs. These programs may include athletic, cultural, and family activities. Participant fees may be collected to partially offset the cost of some or all of these activities.

(2) The University may provide reasonable support for the operation of employee programs. This may include administrative oversight and support. Appropriate facilities, utilities, and maintenance may be provided by the Laboratory.

(3) Employee morale activities. The Laboratory may develop, administer, and support a variety of employee programs that will enhance employee morale. The level of Laboratory financial support for this program is not to exceed \$16 per employee (full-time or part-time), per fiscal year. Expenditures under this program shall require the approval of the Laboratory Director.

(4) Employee Store. (LLNL only) The Laboratory Director may operate or contract for the operation of a small on-site store for the convenience shopping of employees. Indirect support costs are allowable under this contract. The direct support cost of the store will be covered by income from the operation or through offsetting reductions of allowable costs.

(5) Wellness program. Costs of a Wellness Program to promote employee health and fitness are allowable. This program shall be limited to activities related to stress management, smoking cessation, exercise, nutrition, and weight loss.

(6) Child care. The Laboratory Director is authorized to operate a child care center program, in accordance with applicable DOE orders.

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SECTION XV - TRAVEL

(a) Lodging, meals, and incidental expenses. Costs incurred by University personnel (or Laboratory Affiliates in accordance with Section XVIII(c)) for lodging, meals and incidental expenses shall be considered reasonable and allowable to the extent such costs do not exceed the costs normally allowed and reimbursed by the University in its regular operations in accordance with the University's institutional travel expense policy.

(b) Commercial air travel.

(1) Airfare costs in excess of the lowest customary standard, coach, or equivalent airfare offered during normal business hours are unallowable except when such accommodations require circuitous routing, require travel during unreasonable hours, excessively prolong travel, result in increased cost that would offset transportation savings, are not reasonably adequate for the physical or medical needs of the traveler, or are not reasonably available to meet mission requirements. However, in order for airfare costs in excess of the above standard airfare to be allowable, the applicable condition(s) set forth above must be documented and justified.

(2) Where the University can reasonably demonstrate to DOE either the nonavailability of discount airfare or Government contract airfare for individual trips or, on an overall basis, that it is the University's practice to make routine use of such airfare, specific determinations of nonavailability will generally not be questioned by DOE, unless a pattern of avoidance is detected. However, in order for airfare costs in excess of the customary standard commercial airfare to be allowable, e.g., use of first-class airfare, the University shall comply with the applicable condition(s) set forth above on a case-by-case basis.

(c) Travel policy and procedures. The University shall prepare and publish official travel policies and procedures for allowable moving expenses and for allowable travel expenses of University personnel which are consistent with this Section XV. Implementation of these travel policies and procedures and any subsequent revisions which result in increased costs, except those increases resulting from changes in the University's institutional travel expense policy relating to lodging, meals, and incidental expenses, shall be approved by the Contracting Officer. The University has furnished the Contracting Officer a copy of the University's institutional travel expense policy and shall furnish to the Contracting Officer any future revisions to that policy.

SECTION XVI - COSTS OF RECRUITING PERSONNEL

(a) The University may incur costs for the recruitment of personnel, as follows:

(1) Costs of advertising and agency and consultant fees shall not exceed \$1,000,000 annually without prior Contracting Officer approval.

(2) Travel and subsistence for interviewee, interviewer, and recruiting contact paid in accordance with this Appendix. As approved by the Laboratory Director, expenses for round-trip travel and subsistence for the interviewee's spouse may be reimbursed. Meal expense for interviewer's spouse may be reimbursed.

(3) New or prospective employees who have been offered and have accepted a position, and who are required to take a pre-placement physical examination, shall be reimbursed for costs of the physical examination.

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(4) Costs associated with pre-employment screening shall be allowable.

(5) For the purpose of house-hunting, and with the approval of the cognizant division leader or division/program director, as appropriate, the Laboratory Director may authorize the expenses for round-trip travel and subsistence for both the selected new hire and the new hire's spouse. A maximum stay of six days including five nights to be charged against the maximum 30 day housing allowance may be permitted. Travel and subsistence costs shall be reimbursed for the applicant and spouse in accordance with this Appendix.

(6) New employees, or transferees, shall be reimbursed for costs of travel and shipment of household goods in accordance with this Appendix. A relocation service provider may be used to assist with the transition.

SECTION XVII - SPECIAL PROGRAMS

(a) Academic cooperation program. [This provision does not apply to Graduate Student Research Assistants at LBNL.] The Laboratory Director may approve the assignment of certain selected individuals at the graduate or undergraduate level, who are currently enrolled in recognized colleges or universities, to projects proposed by the college or university and approved by the University. Such assignments are to be made primarily to further the individual's training, experience and education. The training the individual receives will be credited by the academic institution. Individuals approved by the Laboratory Director under this program may be reimbursed a daily subsistence allowance in accordance with this Appendix for each day of Laboratory attendance.

(b) Special employment programs. The Laboratory Director may authorize the administration of special employment programs for students at the postgraduate, graduate, undergraduate, and pre-college levels. The Laboratory Director may also authorize the administration of special employment programs for school teachers to advance science curriculum development in the schools. These programs will enhance normal recruitment by providing a broader base for support of Laboratory programs while facilitating educational cooperation between institutions. Costs associated with salaries, transportation, and relocations shall be in accordance with University policies and this Appendix and shall be reported annually to the Contracting Officer. Internship or membership fees associated with nationally recognized programs that are paid to other institutions in support of these programs are allowable. A description of the University's special employment programs shall be provided to the Contracting Officer annually.

(c) Fellowship programs. The University may incur costs associated with participation in programs (e.g., consortium arrangements such as the National Physical Sciences Consortium for Graduate Degrees for Minorities and Women and the National Consortium for Graduate Degrees for Minorities in Engineering, DOE/Contractor academy/leadership programs, Laboratory science education initiatives) to provide graduate fellowships to students in science and engineering. Costs associated with employment of students shall include salaries, transportation, and relocation. A description of these programs shall be provided annually to the Contracting Officer.

(d) Lectures - honoraria - travel and subsistence.

(1) The Laboratory Director may approve the payment of either a stipend, or an honorarium and costs of travel and subsistence, for a person chosen to give a lecture to or discuss problems of interest with Laboratory employees.

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(2) When payment of travel, subsistence, and honorarium is authorized, an honorarium in excess of \$1,500 shall require the University Business and Finance Office approval. When payment of a stipend, in lieu of transportation, subsistence, and honorarium, is authorized, payment in excess of \$2,000 shall require the University Business and Finance Office approval. Travel and subsistence reimbursement shall be in accordance with this Appendix.

(e) Service academy research program. The University may participate in a cooperative summer program with military academies by assigning members of the faculty (officers) and cadets/midshipmen to work in various Laboratory programs. During these periods of assignment the individuals shall continue to receive their military salary. The University may reimburse the individuals for their round trip transportation costs and subsistence during their period of assignment at the Laboratory.

(f) University of New Mexico/National Laboratory professorship program. [LANL only] The University may participate in a cooperative program with the University of New Mexico (UNM) by permitting Laboratory staff members to serve as part-time UNM faculty members, teaching an average of one course per year. During semesters in which they teach, the involvement of Laboratory participants will amount to approximately 20% of their full-time work schedules; accordingly, UNM shall reimburse the Laboratory for 20% of the salary and fringe benefit costs of participants during teaching periods. Travel costs shall be paid by UNM according to its policies. Appointments are made by UNM for a term of three years. With the approval of the Laboratory Director, an appointment may be extended for one additional three-year term.

(g) Long-term visiting staff member. [LANL only] When found necessary by the University for a visiting staff member to render continuous service of six months or more at Los Alamos, such individual shall be employed as a long-term visiting staff member and shall be eligible for benefits as defined in the UCRP and the University group insurance regulations. Salary approval requirements of Section III(c)(7). of this Appendix shall apply to long-term visiting staff members. With the approval of the Laboratory Director, round-trip costs of travel for a long-term visiting staff member and his/her dependents and cost of his/her household goods shipments may be authorized in accordance with this Appendix. Should a long-term visiting staff member convert to a regular appointment, this commitment to reimburse return travel and household goods shipment is no longer applicable.

SECTION XVIII - LABORATORY AFFILIATES [LANL ONLY]

(a) General. An individual shall not render services under this contract in an affiliate capacity if such individual is an employee of another organization and concurrently performing work on a full-time annual basis for that organization under a cost-type contract with the DOE, provided the University may rely upon the written statement of the individual involved that he or she is not so employed by another organization. Costs of these services are unallowable under Clause 3.2, subparagraph (e)(34). The foregoing shall not be deemed to prevent the borrowing of an individual from another DOE cost-type contractor where any reimbursement is made to such other contractor and not to the individual.

(b) Coverage.

(1) The provisions of this Section shall apply to all laboratory affiliate categories, which include official visitors, guest scientists, industrial staff members, service academy research associates, military research associates, consortia appointees, Associated Western Universities

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(AWU), Northwest College and University Association for Science (NORCUS), and Educational Institutional Agreement (EIA) appointees.

(2) A laboratory affiliate is an individual who renders personal services to the Laboratory on a short-term or infrequent basis. Laboratory affiliates are not University employees.

(c) Affiliate agreements.

(1) The University may enter into affiliate agreements providing for daily fees up to and including \$500. Agreements providing for daily fees in excess of this amount are subject to prior written approval by the Contracting Officer.

(2) When found necessary by the University for an affiliate to render continuous service of six months or more at Los Alamos, the University may enter into an agreement with such affiliate providing for travel of his/her dependents and shipment of his/her household goods from the individual's business address and return to a point of no greater distance in accordance with this Appendix. Such agreement shall not be entered into by the University when the affiliate shall render continuous service of less than six months except with the prior written approval of the Contracting Officer.

(3) Where the University has agreed to pay travel and transportation of the entire household goods of an affiliate, the University shall not pay any prescribed per diem or actual expenses of such affiliate after the arrival of his/her dependents in Los Alamos. The University may resume payment of the per diem or payment of actual expenses during the return travel of such affiliate, or when ordered on official travel by the University.

(4) An affiliate may be compensated while at his/her home duty station in accordance with this Appendix.

(5) Each type of agreement used for affiliates shall be as mutually agreed by the Contracting Officer and the University.

(d) Payment.

(1) All affiliates shall be paid in accordance with the applicable agreement with the University.

(2) Travel and subsistence costs are authorized to be paid to affiliates in accordance with this Appendix, except where otherwise provided for in the specific affiliate agreement. In case of illness or injury, subsistence allowance may be paid.

APPENDIX B

**SPECIAL FINANCIAL INSTITUTIONAL
ACCOUNT AGREEMENT**

Appendix B - Special Financial Institution Account Agreement

**SPECIAL DEMAND DEPOSIT ACCOUNT AGREEMENT FOR USE WITH THE
PAYMENTS CLEARED FINANCING ARRANGEMENT**

This Agreement is entered into this 22nd day of September 1997 between the UNITED STATES OF AMERICA, represented by the Department of Energy (hereinafter referred to as DOE Oakland Operations Office), and The Regents of the University of California (for performance at the Lawrence Berkeley National Laboratory), a corporation/legal entity existing under the laws of the State of California (hereinafter referred to as the Recipient), and Bank of America, a financial institution existing under the laws of the State of California, located at 555 California Street, San Francisco, CA 94104 (hereinafter referred to as the Financial Institution).

RECITALS

- (a) On the effective date of October 1, 1997, DOE Oakland Operations Office and the Recipient entered into Contract No. DE-AC03-76SF00098 or a Supplemental Contract thereto (hereinafter referred to as the Contract), providing for a payments cleared financing arrangement.
- (b) DOE Oakland Operations Office requires that amounts transferred to the Recipient thereunder be deposited in a Special Demand Deposit Account at a financial institution covered by Department of the Treasury-approved Government deposit insurance organizations that are identified in I TFM 6-9000 (see Fig. IX-10).
- (c) The "Special Demand Deposit Account" shall contain "Controlled Disbursement Subaccounts" which shall be designated:

"Lawrence Berkeley National Laboratory Payroll Account"

and

"Lawrence Berkeley National Laboratory Accounts Payable Account"

COVENANTS

In consideration of the foregoing, and for other good and valuable consideration, it is agreed that:

- (1) DOE Oakland Operations Office shall have title to the credit balance in said account(s) to secure the repayment of all advance payments made to the Recipient and said title shall be superior to any other title, lien, or claim with respect to such account(s).
- (2) The Financial Institution shall be bound by the provisions of said Contract between DOE Oakland Operations Office and the Recipient relating to the deposit and withdrawal of funds in the above "Special Demand Deposit Account" and "Controlled Disbursement Subaccounts", which are hereby incorporated into this Agreement by reference, but the Financial Institution shall not be responsible for the application of funds withdrawn from said account(s). After receipt by the Financial Institution of written directions from the DOE Oakland Operations Office Contracting Officer, the Financial Institution shall act thereon and shall be under no liability to any party hereto for any action taken in accordance with the said written directions. Any written directions received by the Financial Institution from the Government Contracting Officer upon DOE stationery and purporting to be signed by, or signed at the written direction of, the Government may, insofar as the rights, duties, and

Appendix B - Special Financial Institution Account Agreement

liabilities of the Financial Institution are concerned, be considered as having been properly issued and filed with the Financial Institution by DOE Oakland Operations Office.

- (3) DOE Oakland Operations Office, or its authorized representatives, shall have access to the books and records maintained by the Financial Institution with respect to such "Special Demand Deposit Account" and "Controlled Disbursement Subaccounts" at all reasonable times and for all reasonable purposes, including, without limitation, the inspection or copying of such books and records and any or all memoranda, checks, payments requests, correspondence, or documents pertaining thereto. Such books and records shall be preserved by the Financial Institution for a period of six (6) years after the final payment under the Agreement.
- (4) In the event of the service of any writ of section, levy of execution, or commencement of garnishment proceedings with respect to the "Special Demand Deposit Account" and "Controlled Disbursement Subaccounts", the Financial Institution shall promptly notify the DOE Oakland Operations Office Contracting Officer.
- (5) DOE Oakland Operations Office shall authorize funds, which shall be irrevocable to the extent that obligations have been incurred in good faith under said contract by the Recipient, to the Financial Institution for the benefit of the Special Demand Deposit Account and Controlled Disbursement Subaccounts. The Financial Institution agrees to honor upon presentation for payment all payments issued by the Recipient and to restrict all withdrawals against the funds authorized to an amount sufficient to maintain the average daily balance in the Special Demand Deposit Account in a net positive and as close to zero as administratively possible.

The Financial Institution agrees to service the accounts in this manner based on the requirements and specifications contained in DOE Solicitation No. DE-RP03-97SF21386, dated May 12, 1997. The Financial Institution agrees that per-item costs, detailed in the "Schedule of Services and Charges," contained in the Financial Institution's aforesaid bid will remain constant during the term of this Agreement. The Financial Institution shall calculate the monthly fees based on services rendered and invoice the Recipient. The Recipient shall issue a check or automated clearing house authorization transfer to the Financial Institution in payment thereof.

- (6) The Financial Institution shall post collateral, acceptable under Department of the Treasury Department Circular 176, with the Federal Reserve Bank (FRB) in an amount equal to the net balances in all of the accounts included in this Agreement, less the Department of the Treasury-approved deposit insurance.
- (7) This Agreement, with all its provisions and covenants, shall be in effect for a term of five (5) years, beginning on the 1st day of October 1997, and ending on the 30th day of September 2002. The specific provisions for operating the accounts after expiration are contained in Covenant (11).
- (8) DOE Oakland Operations Office, the Recipient, or the Financial Institution may terminate this Agreement at any time within the five (5) year agreement period upon submitting written notification to the other parties one hundred and eighty (180) days prior to the desired termination date. The specific provisions for operating the accounts after the termination date are contained in Covenant (11).

Appendix B - Special Financial Institution Account Agreement

- (9) DOE Oakland Operations Office and the Recipient may terminate this Agreement at any time upon thirty (30) days written notice to the Financial Institution if DOE Oakland Operations Office and/or Recipient find that the Financial Institution has failed to substantially perform its obligations under this Agreement, or that the Financial Institution is performing its obligations in a manner which precludes the administering of the Recipient's program in an effective and efficient manner or that precludes the effective utilization of the Government's cash resources.
- (10) Notwithstanding the provisions of Covenants (8) and (9), in the event the Contract (referenced in Recital (a)) between DOE Oakland Operations Office and the Recipient) is not renewed or is terminated, this Agreement between DOE Oakland Operations Office, the Recipient, and the Financial Institution shall be terminated upon the delivery to the Financial Institution of a written notice signed by the Contracting Officer.
- (11) In the event of termination or expiration, the Financial Institution agrees to retain the Recipient's "Special Demand Deposit Account" and "Controlled Disbursement Subaccounts" for an additional 90-day period following the term end date to allow for clearance of outstanding checks. During this 90-day period, DOE Oakland Operations Office will ensure that the Special Demand Deposit Account shall have sufficient funds to cover all outstanding checks presented for payment.
- (a) During this 90-day period, if the amount of checks paid daily is less than \$5,000, the Financial Institution is authorized to draw down the minimum \$5,000 from the FRB; however, any excess balance of funds resulting shall not be subject to the payment of interest to DOE Oakland Operations Office. After the balance is depleted, the Financial Institution is also authorized to draw down funds in \$5,000 increments to preclude overdrafts up to the end of the 90-day period.
- (b) After all checks have been paid, the Financial Institution shall forward the balance of the ending daily ledger balance by check made payable to the U.S. Department of Energy and mailed to the DOE Oakland Operations Office, Finance and Accounting Division.
- (c) During the 90-day period, the Financial Institution shall bill the Recipient for the actual service charges rendered in accordance with the "Schedule of Services and Charges."
- (d) During the entire 90-day period, it is further understood that:
- (1) The Financial Institution shall maintain sufficient collateral to cover Government funds in all DOE accounts, less Federal Deposit Insurance Corporation coverage on the accounts.
 - (2) All service charges shall be consistent with the amounts reflected in this Agreement.
 - (3) All terms and conditions of the proposal submitted by the Financial Institution that are not inconsistent with this 90 day additional term shall remain in effect.
 - (4) This Agreement shall continue in effect, with exception of the following covenants:
 - (i) The term of this Agreement (Covenant 7)

Appendix B - Special Financial Institution Account Agreement

(ii) Termination of Agreement (Covenant 8 and 9)

- (12) The Financial Institution has completed and submitted the following documents: (1) "Commercial Bank's Representations and Certifications", including "Questions Regarding Bank Fiscal and General Operating Information", (2) "Schedule of Services and Charges", and (3) "U.S. Department of Energy Representations, Certifications, and Other Statements of Bidders/Offerors". These documents have been accepted by the Recipient and the DOE Oakland Operations Office Contracting Officer and are incorporated herein with the document entitled, "Commercial Bank's Information on the Payments Cleared Financing Arrangement", as an integral part of this Agreement.

Appendix B - Special Financial Institution Account Agreement

IN WITNESS THEREOF the parties hereto have caused this Agreement, DE-AC03-97SF21386, which consists of eight pages including the signature pages, to be executed as of the day and year first above written.

ORIGINAL SIGNATURES LOCATED IN THE CONTRACT FILE DE-AC03-97SF21386/M000

THE UNITED STATES OF AMERICA
Oakland Operations Office

By Ronna Promani
(Typed Name of Contracting Officer)

(Signature of Contracting Officer)

9/22/97
(Date of Signature)

THE REGENTS OF THE UNIVERSITY OF CALIFORNIA

By Patricia A. Small
(Typed Name of Recipient's Representative)

(Signature of Recipient's Representative)

Treasurer
(Title)

9/18/97
(Date of Signature)

BANK OF AMERICA

By Abdul Premji
(Typed Name of Financial Institution Representative)

(Signature of Financial Institution Representative)

Vice President
(Title)

(Address)

9/16/97
(Date of Signature)

Appendix B - Special Financial Institution Account Agreement

NOTE--Recipient, if a corporation, should cause the following Certificate to be executed under its corporate seal, provided that the same Officer shall not execute both the Agreement and the Certificate.

CERTIFICATE

I, Patricia L. Trivette, certify that I am the Secretary of the Regents of the University of California named as Recipient herein that Patricia A. Small, who signed this agreement on behalf of the Recipient was then Treasurer of the Regents of the University of California that said Agreement was duly signed for and on behalf of said corporation by authority of its governing body, and is within the scope of its corporate powers.

(Signature) (Corporate Seal)

NOTE--Financial Institution, if a corporation, should cause the following Certificate to be executed under its corporate seal, provided that the same officer shall not execute both the Agreement and the Certificate.

CERTIFICATE

I, _____ certify that I am the _____ of the Bank of America named as Financial Institution herein that _____, who signed this agreement on behalf of the Financial Institution was then _____ of the Bank of America that said Agreement was duly signed for and on behalf of said corporation by authority of its governing body, and is within the scope of its corporate powers.

(Signature) (Corporate Seal)

Appendix B - Special Financial Institution Account Agreement

SCHEDULE OF SERVICES AND CHARGES LAWRENCE BERKELEY NATIONAL LABORATORY

TMA Code	Service Description	Years 1-5 Price Per Unit
010000	Account Maintenance	\$16.000
010329	Manually prepared invoice	—
010329	Checks Paid Report-Original	\$10.000
010400	Monthly consolidated/detail acct analysis	—
100000	Branch Processed Deposit	\$1.350
100015	Branch Currency Deposited/\$100	\$0.120
100153	Courier Svcs (Daily deposit pick-up)	\$150.000
100220	Checks Deposited—local	\$0.095
100229	Checks Deposited—non local	\$0.095
100229	Foreign Checks Deposited	\$1.000
100400	Deposited Item Returned	\$3.250
100402	Deposited Item Recleared	\$1.150
150000	<i>Controlled Disbursement Service (2 accts)</i>	—
150001	CCD Account Maintenance	\$145.000
150110	CCD Checks Paid Against Account	\$0.120
150120	Positive Pay Service (2 accts)	—
150410	On-line Stop Pay-12 Mo. Stop	\$8.000
150410	On-line Stop Pay-Check Inquiry	\$0.500
150410	On-line Stop Pay-Stop Cancel	\$1.000
150420	Manual Stop Pay 6-month	\$10.000
150511	Official Checks	\$1.350
151100	Check Sorting—Fine	\$0.036
200019	<i>Full Account Reconciliation (2 accts)</i>	—
200019	Maintenance On-Call	\$60.000
200110	Input File Rejects	\$50.000
200110	A/R - Floppy Input Per Item	\$0.095
200110	Transmission Input Per Item	\$0.095
200324	CD ROM of Paid Items (per item)	\$0.060
209999	A/R Minimum Maintenance	\$150.000
250101	Direct Deposit Items—3 file/month	\$0.050
250101	Outgoing ACH Credits	\$2.500
250201	Incoming ACH Credits	\$0.080
350100	Funds Transfer Advice - Mail - Dr	\$2.000
350202	Domestic Fed Wire—Outgoing	\$7.500
350212	US\$ Foreign Wires—Outgoing	\$7.500
350300	Domestic Fed Wire—Incoming	\$8.000
350310	US\$ Foreign Wires—Incoming	\$8.000
350401	Funds Transfer Advice - Mail - Cr	\$2.000

Appendix B - Special Financial Institution Account Agreement

SCHEDULE OF SERVICES AND CHARGES LAWRENCE BERKELEY NATIONAL LABORATORY

TMA Code	Service Description	Years 1-5 Price Per Unit
350521	Drawdown Request Fedwire Tran	\$7.500
350600	Windows based system access	\$50.000
400000	On-Line - Prev Day Balance Rpt (3 accts)	\$65.000
400001	On-Line - Prev Day Detail Rpt (3 accts)	\$65.000
400004	On-Line Curr Day Detail Rpt (3 accts)	\$50.000
400221	Prev Day Detail Report-Per Item	\$0.150
600100	Int'l Collection Charge	\$75.000
600110	Collection Charges	\$12.000
600210	Foreign Drafts Issued	\$10.000
999999	PC Based ACH Tax Pymnt Softwr Lease	\$5.000
999999	PC Based ACH Tax Payments	\$2.500
999999	Mailed receipt for tax payments	\$3.000
999999	Faxed receipt for tax payments	\$3.000
999999	Checks Cashed Against Account	\$0.120
999999	Direct Deposit Data Transmission	\$25.000

ONLY CHARGES LESS THAN OR EQUAL TO THOSE DESCRIBED IN THE ABOVE SCHEDULE SHALL BE USED FOR BILLING AND PAYMENT PURPOSES. NO OTHER CHARGES WILL BE HONORED, UNLESS OTHERWISE AGREED TO IN WRITING BY ALL PARTIES.

APPENDIX C

**TREATIES AND INTERNATIONAL
AGREEMENTS/WAIVED
INVENTIONS**

Appendix C - Treaties and International Agreements/Waived Inventions

DEPARTMENT OF ENERGY RESEARCH AND DEVELOPMENT BILATERAL AGREEMENTS
 ALL ACTIVE AGREEMENTS

Index	Start/EndDates	Country	Type	Principal Subjects
18	12/20/74 6/31/91 Extending	Germany	Umbrella	Radioactive Waste Management
	6/3/75 6/1/92 Renegotiating	Italy		Geothermal Research and Development
31	9/29/77 None	Germany	Letter	Nuclear Materials Safeguards/Physical Security
38	1/31/79 None	China	Project	High Energy Physics
41	2/16/79 None	Mexico	Intergovernmental	Science and Technology
42	5/2/79 2/1/00	Japan	Intergovernmental	Energy and Related Fields
48	8/24/79 2/1/95	Japan	Project Under #42	Fusion Energy/Coordinating Committee
50	8/28/79 8/28/96	Japan (JAERI)	Project Under #42/48	Fusion Energy/Doublet III
58	11/11/79 2/1/95	Japan	Project Under #42	High Energy Physics
64	3/6/80 9/8/98	Venezuela	Umbrella	Energy R&D
73	7/10/80 9/8/98	Venezuela	Project I Under #64	Heavy Crude Characterization
74	7/10/80 9/8/98	Venezuela	Project II Under #64	Enhanced Oil Recovery Supporting Research
75	7/10/80 9/8/98	Venezuela	Project III Under #64	Enhanced Oil Recovery Evaluation
81	9/9/80 9/9/00 Renegotiating to extend + 5 years	Sweden	Umbrella	Radioactive Waste Management
82	9/29/80 9/8/98	Venezuela	Project IV Under #64	Enhanced Oil Recovery Thermal Processes
86	12/16/96 12/15/00	Finland	Umbrella	Energy R&D
90	9/30/81 2/1/95	Japan	Project Under #42	Photosynthesis
94	11/6/81 10/25/99	South Korea	Umbrella (A)	Conservation
95	11/6/81 10/25/99	South Korea	Umbrella (B)	Solar Energy
96	11/6/81 6/13/99	South Korea	Umbrella (C)	Coal R&D
97	1/28/82 1/6/00 Renegotiating as	European Union	Umbrella	Nuclear Materials Safeguards

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	to IPR			
100	2/5/82 9/8/98	Venezuela	Project VIII Under #64	Coal Preparation and Combustion
	3/00/82 3/00/00	Mexico	Umbrella	Sister lab arrangement
107	8/25/82 8/25/96 Renegotiating	Canada	Umbrella	Radioactive Waste Management
110	10/6/82 10/6/92 Renegotiating	European Union	Umbrella	Radioactive Waste Management
113	12/17/82 / /	Commission of the Euratom	Letters of Cooperation	Renewable Energy Sources
114	1/24/83 2/1/95	Japan	Intergovernmental Under #42	Fusion Energy
123	5/11/83 4/30/96 ongoing	China	Project	Nuclear Physics and Magnetic Fusion
134	11/8/83 2/1/95	Japan (JAERI)	Project Under #114	Fusion Energy
137	3/14/84 9/8/98	Venezuela	Project X Under #64	Training of Petroleum Engineers
140	4/26/84 6/20/98	Japan	Project Under #249	Electric Field Effects
157	4/16/85 5/22/96 ongoing	China	Project	Fossil Energy R&D
158	4/19/85 9/23/96 Renegotiating	Switzerland	Umbrella	Radioactive Waste Management
159	5/14/85 6/11/00	United Kingdom	Project Under #278	Energy-Related Information
171	12/12/85 None	Spain	Umbrella	Science and Technology
176	3/13/86 4/30/96	China	Project Under #123	IPR/Nuclear Physics and Magnetic Fusion
182	5/19/86 2/1/95	Japan	Project Under #42	Coal R&D
187	07/07/86 07/07/91 Renegotiating	European Union	Umbrella	Health & Environmental Effects of Radiation
195	12/3/86 12/3/96 Renegotiating	Japan	Umbrella	Radioactive Waste Management
196	12/4/86 12/4/96 Renegotiating	Canada	Umbrella	Energy R&D

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197	12/15/86 12/15/96 Renegotiating	Commission of the Euratom	Umbrella	Magnetic Fusion Power System
198	12/24/86 12/24/96 Renegotiating	Canada	Project I Under #196	IPR/Information/Personnel Exchange
	00/00/87 00/00/02	Mexico	Umbrella	Exchange of technical information of the cooperation in the field of air quality research
199	2/4/87 2/13/95 Renegotiating	Saudi Arabia	Umbrella	Renewable Energy R&D
203	5/5/87 12/31/91 Renegotiating	European Union	Project Under #197	JET Pellet Fueling
204	5/6/87 5/7/97	Commission of the Euratom	Project Under #197	Fusion Research and Development: Tore Supra (CEA)
216	8/14/87 9/8/98	Venezuela	Project XII Under #64	Geochemistry
217	8/19/87 4/30/96	China	Project Under #157	Atmospheric Trace Gases
222	9/24/87 9/24/97	Individually with: Denmark, Finland, Noway, Sweden	Project	Exchange of Informatin
224	9/28/87 9/28/97	Poland	Umbrella	Science and Technology
226	10/13/87 4/30/96	China	Project IV Under #157	Coal Preparation and Waste Stream Utilization
227	10/13/87 4/30/96	China	Project V Under #157	Atmospheric Fluidized Bed Combustion Information Exchange
228	10/16/87 2/1/95	Japan	Project Under #42	Coal R&D
231	11/19/87 11/19/92 Renegotiating	Canada	Umbrella	Magnetic Fusion
236	2/16/88 2/16/98	Canada	Project II Under #196	Natural Gas Hydrates
239	2/29/88 9/8/98	Venezuela	Project XIII Under #64	Microbial Enhanced Oil Recovery
242	4/11/88 4/11/98	Australia	Umbrella	Energy R&D
243	4/14/88 12/31/91 Renegotiating	European Union	Project Under #197	Collaborative Particle Control Program
247	6/10/88 4/11/98	Australia	Project Under #242	Alternative Fuels

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Index	Start/EndDates	Country	Type	Principal Subjects
249	6/20/88 6/20/98	Japan	Intergovernmental	Research and Development in Science and Technology
250	09/16/96 09/16/01	Russian Federation	Umbrella	Russian Nuclear Reactor Design and Safety
	09/16/96 09/16/01	Russian Federation	Umbrella	Russian-American fuel cell consortium
253	8/26/88 8/26/98	United Kingdom	Project	Gas Cooled Reactor Graphite Technology
257	12/19/88 9/19/04	France	Umbrella	High Energy Laser Matter Physics R&D
258	12/21/88 12/21/98	Japan (Monbusho)	Project Under #115	Data Link and Data Link Projects for Fusion
260	1/13/89 4/11/98	Australia	Project Under #242	Research-in-Progress
261	1/31/89 12/15/96	European Union	Project Under #197	Fusion - Fuel Processing
264	2/16/89 9/8/98	Venezuela	Project XIV Under #64	Exchange of Energy Related Personnel
265	5/11/86 4/11/98	Australia	Project Under #242	Oil Shale Research
266	6/1/89 None	Costa Rica	Project	Clean Coal Technologies
270	1/11/90 1/11/95	Japan (JAERI)	Project IX Under #134	Fusion R&D Collaborative Program on the Data Link
272	3/15/90 3/15/95 Renegotiating	Poland	Project	Clean Coal Technology at Powerplant in Cracow
273	3/30/90 9/15/98	Japan (PNC)	Project (SMA-1) Under #249	NDA for Feed Pu Storage in Auto Production of MOX
274	3/30/90 9/15/98	Japan (PNC)	Project (SMA-2) Under #249	Authentication and Identification of MOX Fuel
275	3/31/90 9/15/98	Japan (PNC)	Project (SMA) Under #240	Pu Isotopic and Concentration for Chemical Process
276	3/31/90 09/15/98	Japan	Project	Fissile Inventory Verification Isotope Dilution
277	6/1/90 6/1/97	Russia	Umbrella	S&T Cooperation Peaceful Uses of Atomic Energy
278	6/11/90 6/11/00	United Kingdom	Umbrella	Energy R&D
279	6/25/90 / /	Chile	Protocol of Intent	Deployment of Clean Coal Technologies
280	7/2/90 7/2/95 Ongoing	Japan (JAERI)	Project	Nuclear Materials Control Accountancy . . . Protection

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281	7/23/90 9/15/98	Japan (PNC)	Project (SMA) Under #249	NDA Tech Process Holdup Pu Conversion Development
286	9/16/96 9/16/01	Russian Federation	Umbrella - MOC	Environmental Restoration and Waste Management
287	12/8/90 12/8/00	Venezuela	Umbrella	Science and Technology
288	1/25/91 9/15/98	Japan (PNC)	Project (SMA) Under #249	Safeguards Techniques for Monitors -- JOYO Reactor
289	1/31/91 9/15/98	Japan (PNC)	Project (SMA) Under #249	Safeguards Techniques for Monitors -- MONJU Reactor
292	3/01/91 12/15/96	European Union	Project Under #197	Fast Ions and Alpha Particles
293	3/26/91 9/15/98	Japan (PNC)	Project (SMA) Under #249	Pu Storage by Passive Gamma Spectroscopy
294	9/16/96 9/16/01	Russian Federation	Umbrella - MOU/MOC	Magnetic Confinement Fusion
295	02/07/97 02/07/02	Russian Federation	Umbrella	Fundamental Properties of Matter
296	9/23/91 9/23/96	Switzerland	Project III Under #158	Site Characterization, Repository Performance, Validation
299	10/16/91 10/16/96 Renegotiating	Poland	Umbrella	Krakov Clean Fossil Fuels and Energy Efficiency
300	10/22/91 10/22/00	Czech	Intergovern- mental: S&T	Fusion Energy
	10/22/91 10/22/00	Slovak	Intergovern- mental: S&T	Fusion Energy
	1/15/92 / /	Indonesia	Intergovern- mental	Scientific Research and Technology Development
303	4/16/92 4/16/97	Japan (JAERI)	Project (XI) Under #134	Test Negative Ion Sources Accelerators . . . Injectors
	5/7/92 5/7/97 Self- Renewing Every Five Years	Ukraine		Environmental Protection
305	6/17/92 6/17/97	Russia	Umbrella	Fuels and Energy
306	6/29/92 / /	Brazil (Ceara)	Protocol of Intent	Solar Energy Based Rural Electrification Program
307	6/29/92 / /	Brazil (Pernambuco)	Protocol of Intent	Solar Energy Based Rural Electrification Program
310	10/1/92 10/1/97	Australia	Umbrella	Nuclear Material Control Safeguards Application
312	12/16/92 12/16/97	Spain	Umbrella	Radioactive Waste Management

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Index	Start/EndDates	Country	Type	Principal Subjects
313	12/16/92 12/16/97	Sweden	Project Under #81	Site Characterization and Repository Performance
315	2/18/93 / /	Russia	Umbrella	Disposition HEU Extracted from Nuclear Weapons
317	7/21/93 7/21/97	Saudi Arabia	Annex II Under #199	Annex II: Assessment of Solar Radiation Resources
301	07/29/93 07/29/98	South Korea	Intergovernmental	Science and Technology
318	8/4/93 8/4/95	Japan (PNC)	Project (SMA-13) Under #249	SMA 13: Fuel Pin . . . MOX Fuel Fabrication Facility
319	9/2/93 9/2/95	Japan (PNC)	Project (SMA-14) Under #249	Video Motion Detection . . . PFPF Product Storage
321	9/15/93 9/15/98	Japan (PNC)	Umbrella	R&D Nuclear Materials Control and Accounting for Safeguards
322	10/1/93 10/1/98	Russia	Umbrella	Energy Efficiency and Renewable Energy
323	10/4/93 10/4/98	Italy	Intergovernmental	Science and Technology
324	1/14/94 1/14/99	Russia	Umbrella	Radioactive Contamination Health and Environment
325	1/27/94 12/31/97	Japan (PNC)	Project Under #249	Waste Measurement System Glove Box Accounting Systems
326	1/27/94 None	Japan (PNC)	Project Under #249	Upgraded Glove Box Accounting Systems
327	2/9/94 2/9/96	Saudi Arabia	Annex III Under #199	Assessment of Geothermal Energy Resources
330	4/8/94 / /	Ukraine	Statement of Intent	Shutdown Chernobyl Nuclear Power Plant
	04/12/94 04/12/99	China	Project	Clean Coal technology utilization
331	4/18/94 4/18/99	Argentina	Umbrella	International Safeguards Applications
332	4/18/94 4/18/99	Brazil	Umbrella	International Safeguards Applications
333	4/26/94 9/7/98	Venezuela	Project XV Under #64	Oil Recovery Information and Technology Transfer
334	5/12/94 4/11/98	Australia	Project Under #242	Bio-Electromagnetic Research
335	6/13/94 6/13/99	South Korea	Project Under #96	Fossil Energy Technology
336	6/27/94 6/27/99	China	Project Under #157	Coal-Fired Magnetohydro-Dynamic Power Generation
	7/6/94 7/6/99	Estonia	Intergovernmental	Science and Technology
	7/6/94 7/6/99	Latvia	Intergovernmental	Science and Technology

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Index	Start/EndDates	Country	Type	Principal Subjects
	7/6/94 7/6/99	Lithuania	Intergovernmental	Science and Technology
337	9/18/94 / /	Austria	Umbrella	Energy Efficiency/Conservation and Climate Change
338	9/24/94 / /	Pakistan	Statement of Intent 1	Fossil Fuel and New and Renewable Energy
339	9/24/94 / /	Pakistan	Statement of Intent 2	Climate Change
340	9/24/94 / /	Pakistan	Statement of Intent 3	Fossil Fuel and New and Renewable Energy
341	11/18/94 / /	Canada	Statment of Intent Under #196	Biennial Biomass Conference of the Americas
342	11/19/94 None	France	Project #1 Under #257	Megajoule-Class Solid State Lasers
343	11/19/94 8/9/04	France	Project #2 Under #257	Megajoule-class Solid State Laser Technology
344	12/13/94 / /	Chile	Statement of Intent	Renewable and Energy Efficiency Technologies
	02/10/95 02/10/00	Slovenia	Intergovernmental	S&T
345	2/23/95 / /	China	Umbrella	Bilateral Energy Consultations
346	2/23/95 / /	China	Statement of Intent A	Energy Information Exchange
347	2/23/95 / /	China	Statement of Intent B	Research Reactor Fuel
348	2/23/95 2/23/00	China	Project XII Under #157	Regional Climate Research
349	2/23/95 2/23/00	China	Project XI Under #157	Coal Bed Methane Recovery and Utilization
350	2/23/95 / /	China	Letter of Intent	Renewable Energy
352	3/7/95 / /	Chile	Statement of Intent	Control Emissions of Greenhouse Gases
353	3/13/95 3/13/00	Estonia	Umbrella	Technical Cooperation Clean-up Paldiski Site
357	4/26/95 4/26/05	France	Umbrella	Accelerator Driven Technology
358	5/26/95 5/26/00	Italy	Umbrella	Energy R&D
359	6/15/95 / /	Russia	Project	Weapons Expertise for the Globus-M Project
360	6/16/95 / /	Russia	Project	Nonproliferation of Weapons/Weapons Expertise
362	7/17/95 7/17/05	Japan (JAERI)	Project	Nuclear Research and Development

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Index	Start/EndDates	Country	Type	Principal Subjects
363	7/21/95 / /	Canada	Statement of Intent Under #196	Building Energy Simulation Tools
364	7/25/95 / /	United Kingdom	Statement of Intent	Nuclear Clean-Up
365	7/31/95 1/31/97	Japan (PNC)	Project (19) Under #321	Measuring Vitrified High Level Waste Canisters
367	8/21/95 8/21/00	Poland	Project	Environmental Restoration Hazardous Waste Management
368	8/25/95 8/25/20	South Africa	Umbrella	Peaceful Uses of Nuclear Energy
371	8/25/95 / /	South Africa	Umbrella	Sustainable Development Resource Center
372	8/25/95 / /	South Africa	Umbrella (2)	Renewable and Energy Efficiency Technologies
373	8/25/95 / /	South Africa	Statement of Intent 1	Renewable Energy (Guguletu Township)
374	8/25/95 / /	South Africa	Umbrella (3)	Electrification of Rural Clinics (Cape Town)
375	8/25/95 / /	South Africa	Statement of Intent 3	Renewable Energy (The Csir, South Africa)
376	9/19/95 9/19/00	Brazil	Umbrella	International Safeguards Applications
377	9/20/95 9/20/00	France	Umbrella	Radioactive Waste Management
379	10/8/95 10/8/00	France	Umbrella	Radioactive Waste Management
380	10/30/95 / /	Ghana	Statement of Intent	Peaceful Uses of Nuclear Energy
	11/01/95 11/01/00	Croatia	Intergovernmental	Science and Technology
381	12/05/95 12/05/00	South Africa	Umbrella	Energy Policy - S&T development
382	12/05/95 / /	South Africa	Statement of intent	Cooperative agreement with provincial governments
383	12/05/95 / /	South Africa	Statement of intent	Mitigation of greenhouse gases
384	02/01/96 02/01/01	Israel	Umbrella	Framework for collaboration in energy R&D
316	3/26/96 3/26/97	Japan (PNC)	Project Under #195	Characterization and Predictive Technologies
355	4/11/96 1/31/00	Japan (PNC)	Project	Nuclear Technologies
385	05/03/96 05/03/01	Japan	Umbrella	Science and Technology
386	05/07/96 05/07/01	Mexico	Umbrella	Energy Cooperation

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Index	Start/EndDates	Country	Type	Principal Subjects
387	05/24/96 05/24/06	Argentina	Umbrella	Radioactive and mixed waste management
388	06/14/96 06/14/01	South Korea	Umbrella - MOU	Cooperative lab relationship
389	06/14/96 06/14/01	South Korea	Project	Fusion energy research
	08/01/96 08/01/06	Argentina	Umbrella	Energy Technology
390	09/05/96 / /	United Kingdom	Statement of intent	Environmental restoration and waste management
391	09/30/96 / /	Brazil	Stament of intent	Clean Coal Technologies
392	10/01/96 10/01/01	Ghana	Umbrella	Energy policy and S&T development
	10/25/96 10/25/01	China	Project	Renewable energy/business development
	10/25/96 10/25/01	China	Project	Energy efficiency
	11/01/96 11/01/01	Macedonia	Intergovern mental	S&T
	12/11/96 7/3/01	Japan (NUPEC)	Implementing Arrangement	Light Water Reactor (LWR) Associated Technologies

Appendix C - Treaties and International Agreements/Waived Inventions

DEPARTMENT OF ENERGY RESEARCH AND DEVELOPMENT MULTILATERAL AGREEMENTS

Term of Agreement	Countries	Type of Agreement	Agreement Subject Area	DOE Record#
3/20/74 9/16/96 Renegotiating	Australia, Austria, Belgium, Canada, Denmark, Commission of the Euratom, Finland, France, Germany (unified), Greece, Italy, Japan, Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, United Kingdom	Umbrella	Nuclear data and computer programs	90
11/18/74 Indefinite	Australia, Austria, Belgium, Canada, Denmark, France, Germany, Greece, Ireland, Italy, Japan, Luxembourg, Netherlands, New Zealand, Spain, Sweden, Switzerland, Turkey, United Kingdom	Umbrella/annex	Establishment of International Energy Program through implementation of an International Energy Agency	
1/1/75 1/1/2050	Australia, Austria, Belgium, Canada, Denmark, Commission of the Euratom, Finland, Germany (unified), Italy, Japan, Netherlands, Spain, Sweden, United Kingdom	Implementing/ project	Coal research	154
7/28/75 1/1/2050	Australia, Belgium, Canada, Denmark, Finland, Germany (unified), Greece, Italy, Japan, Netherlands, New Zealand, Norway, Sweden, Switzerland, Turkey, United Kingdom	Implementing/ project	Energy conservation in buildings and community systems	49
11/20/75 1/1/2050	Austria, Belgium, Germany, Italy, Netherlands, Spain, Sweden, Turkey, United Kingdom	Implementing/ project, annex	Establishment of the Coal Technical Information Service	154
12/31/75 1/1/2050	Australia, Austria, Belgium, Canada, Denmark, Finland, Germany, Ireland, Italy, Japan, Netherlands, New Zealand, Spain, Sweden, United Kingdom (DOI/USGS, DOE and BLM)	Establishment of Coal Research Service Center Project	This Agreement incorporates four previous implementing agreements on: Mining Technology Clearinghouse (DOI/BLM), Coal Economic Assessment Services (DOE), Coal Technical Information Services (DOE, DOI/USGS), and World Coal Resources and Reserves Data Bank (DOI/USGS)	154
12/20/76 1/00/2050	Australia, Austria, Belgium, Canada, Commission of the Euratom, Denmark, Finland, Germany (unified), Greece, Italy, Japan, Netherlands, New Zealand, Norway, Spain, Sweden, Switzerland, United Kingdom	Implementing/ project, annexes	Solar heating and cooling systems	11

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DEPARTMENT OF ENERGY RESEARCH AND DEVELOPMENT MULTILATERAL AGREEMENTS

Term of Agreement	Countries	Type of Agreement	Agreement Subject Area	DOE Record#
3/16/77 Indefinite	Belgium, Canada, France, Germany, Italy, Japan, Netherlands, Norway, Sweden, Switzerland, United Kingdom	Implementing/ project, annex	Energy conservation/ emissions reduction in combustion	
3/16/77 Indefinite	Austria, Germany, Sweden, Switzerland	Implementing/ project, annex	Energy conservation through energy cascading	
3/16/77 1/1/2050	Canada, Germany (unified), Italy, Japan, Norway, Sweden, Switzerland, United Kingdom	Annex	Combustion system modeling and diagnostics	33
6/28/77 1/1/2050	Germany, Netherlands, Norway, Sweden, Switzerland, United Kingdom	Implementing/ project, annex	Energy conservation in heat transfer and heat exchangers	26
6/28/77 1/1/2050	Austria, Canada, Denmark, Germany (unified), Ireland, Italy, Japan, Netherlands, New Zealand, Norway, Spain, Sweden, Switzerland, United Kingdom	Implementing/ project, annexes	Wind turbine systems	30
10/6/77 12/31/96	Germany, Israel, Spain, Switzerland	Implementing/ project, annexes	Solar power and chemical energy systems	
10/6/77 12/30/02	Canada, Commission of the Euratom, Japan, Switzerland, Turkey	Implementing/ project, annex	Fusion energy, plasma wall interaction in Textor	110
10/6/77 Indefinite	Germany, Japan, Sweden, Switzerland, United Kingdom	Implementing/ project, annex	Man-made geothermal energy systems	
10/6/77 1/1/2050	Germany (unified), Japan, Switzerland	Implementing/ project, annex	Superconducting magnets for fusion power	107
10/6/77 1/00/2050	Belgium, Canada, EEC, Germany, Italy, Japan, Netherlands, Sweden, Switzerland, United Kingdom	Implementing/ project, annexes	Production of hydrogen from water	18
2/18/78 1/1/2050	Belgium, Canada, Finland, Japan, Netherlands, New Zealand, Norway, Spain, Sweden, United Kingdom	Implementing/ project, annexes	Energy conservation in the pulp and paper industry	53
4/00/78 Indefinite	Belgium, Canada, Ireland, Sweden	Implementing/ project, annex	Forestry energy	
4/13/78 Indefinite	Canada, Ireland, Japan, United Kingdom	Implementing/ project, annex	Wave power R&D	
5/24/78 Indefinite	Austria, Belgium, Canada, EEC, Finland, Germany, Ireland, Italy, Japan, New Zealand, Norway, Portugal, Sweden, Switzerland, United Kingdom	Implementing/ project	Biomass conversion technical information service	58
7/27/78 Indefinite	Germany, New Zealand, Sweden, United Kingdom	Implementing/ project, annex	Energy conservation in cement manufacture	
7/27/78 Indefinite	Austria, Belgium, Canada, Denmark, Finland, France, Germany (unified), Italy, Ireland, Japan, Netherlands, New	Implementing/ project, annex	Advanced heat pump systems for energy conservation	39

Appendix C - Treaties and International Agreements/Waived Inventions

DEPARTMENT OF ENERGY RESEARCH AND DEVELOPMENT MULTILATERAL AGREEMENTS

Term of Agreement	Countries	Type of Agreement	Agreement Subject Area	DOE Record#
	Zealand, Norway, Spain, Sweden, Switzerland, United Kingdom			
9/22/78 Indefinite	Belgium, EEC, Denmark, Germany, Netherlands, Sweden, Switzerland	Implementing/ project, annexes	Energy conservation through energy storage	60
1/1/79 1/1/2050	Canada, Venezuela	Other	Heavy crude and tar sands	160
5/22/79 1/1/2050	Germany, Japan, Sweden	Implementing/ project, annexes	High temperature materials for automotive engines	45
5/22/79 1/1/2050	Australia, Austria, Canada, Denmark, Egypt, France, Germany, Japan, Norway, United Kingdom	Implementing/ project, annex	Enhanced recovery of oil	159
5/22/79 Indefinite	Italy, Mexico, New Zealand	Implementing/ project, annex	Geothermal equip-ment	
10/21/80 10/21/94 ongoing agreement	Canada, EEC, Japan, Switzerland	Implementing/ project, annex	Radiation Damage in Fusion Materials	115
11/13/80 Indefinite	Australia, Belgium, Denmark, EEC, Germany, Italy, Norway, Sweden, Switzerland	Implementing/ project, annexes	Energy technology systems analysis	268
1/1/81 1/1/2049	Canada, Japan, Netherlands, Spain, Sweden, United Kingdom	Implementing/ project, annex	Coal/oil liquid mixtures	181
5/21/84 1/1/2050	Belgium, Canada, Finland, France, Italy, Japan, Netherlands, New Zealand, Norway, Sweden, United Kingdom	Implementing/ project, annexes	Alternative motor fuels	55
3/27/85 Indefinite	Australia, Canada, Denmark, Finland, Germany, Italy, Netherlands, Sweden, United Kingdom		Coal Combustion Sciences	136
1/26/87 Indefinite	Canada, Denmark, Finland, France, Germany, Italy, Japan, Netherlands, Norway, Spain, Sweden, Switzerland, United Kingdom		Energy technology data exchange	3
3/15/87 3/15/93 ongoing agreement	Canada, Norway, United Kingdom		Fossil Fuel Multiphase Flow Sciences	174
3/18/88 3/18/98	Australia, Belgium, Canada, Denmark, Finland, Italy, Japan, Korea, Netherlands, New Zealand, Norway, Sweden, Switzerland, United Kingdom	Implementing/ project, annexes	Information Center for the Analysis and Dissemination of Demonstrated Energy Technologies (CADDET)	44
1/1/89 1/1/2050	Austria, Belgium, Canada, Denmark, Finland, Ireland, Italy, Japan, New Zealand, Norway, Sweden, United Kingdom	Implementing/ project, annex	Bioenergy research and development	58
4/3/90	Commission of the Euratom, Japan	Implementing/	Fusion Energy/	123

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Term of Agreement	Countries	Type of Agreement	Agreement Subject Area	DOE Record#
4/2/00		project	Reversed Field Pinches (RFP)	
4/3/90 4/2/00	Commission of the Euratom, Japan	Annex 1	Fusion Energy/ Reversed Field Pinches (RFP)	124
4/3/90 4/2/00	Commission of the Euratom, Japan	Annex 2	Fusion Energy/ Reversed Field Pinches (RFP)	119
10/20/91 10/19/01	Canada, Denmark, Commission of the Euratom, Finland, Italy, Japan, Netherlands, Norway, Spain, Sweden, United Kingdom	Implementing/ project, annex	Greenhouse gases derived from fossil fuel use	231
7/6/92 7/6/97	Canada, Commission of the Euratom, Japan	Implementing/ project, annexes	Environmental, safety and economic aspects of fusion power	232
7/6/92 7/6/97	Canada, Commission of the Euratom, Japan	Umbrella	Environmental and economic aspects of fusion power	266
7/21/92 7/21/98	Commission of the Euratom, Germany, Japan, the former Soviet Union	Umbrella	International Thermonuclear Experimental Reactor (ITER)	233
11/24/92 11/11/98	Austria, Canada, Denmark, EEC, Finland, France, Germany, Israel, Italy, Japan, Korea, Netherlands, Portugal, Sweden, Switzerland, Turkey, United Kingdom	Implementing/ project, annexes	Photovoltaic power systems	
3/21/94 7/21/98	Commission of the Euratom, Germany, Japan, the former Soviet Union	Project under #233	ITER Engineering Design Activities	329
6/13/94 6/13/99	Canada, Japan	Implementing/ project, annex	Nuclear technology of fusion reactors	
7/12/94 7/12/99	Austria, Canada, France, Italy, Japan, Netherlands, Sweden, Switzerland, United Kingdom	Implementing/ project, annexes	Electric vehicle (EV) technologies	
9/16/96 9/16/01	Former Soviet Union, Russian Federation	MOU/MOC	Magnetic confinement fusion	91
9/16/96 9/16/01	Russian Federation, Ukraine	Umbrella	Russian Nuclear Reactor Design and Safety	250
2/7/97 2/7/02	Former Soviet Union, Russian Federation	Umbrella	Fundamental Properties of Matter	126

APPENDIX D

**SMALL, SMALL DISADVANTAGED, AND
WOMEN-OWNED SMALL BUSINESS
SUBCONTRACTING PLAN**

Appendix D - Small, Small Disadvantaged, And Women-Owned Small Business Subcontracting Plan

**SMALL, SMALL DISADVANTAGED, AND WOMEN-OWNED SMALL
BUSINESS SUBCONTRACTING PLAN**

(a) This subcontracting plan will be used by the Contractor for performance of work under this contract.

(b) The Contractor is committed to award a fair share of subcontracts and purchase orders to small business concerns (SB), small business concerns owned and controlled by socially and economically disadvantaged individuals (SDB), and women-owned small business (WOB) concerns to the maximum extent practicable. The Contractor will use good faith efforts in carrying out this commitment. Goals and objectives will be established consistent with federal regulations, including the Energy Policy Act requirements in DEAR 970.2601, Contractor's purchasing practices, and best commercial practices. Definitions contained in FAR Part 19 shall be used to define small, small disadvantaged, and women-owned small business concerns.

(c) The Contractor will follow the procedures listed below in its efforts to achieve the goals and objectives of Public Law 95-507, Public Law 100-656, and DOE Acquisition Regulations.

(1) The Contractor shall designate and furnish to the Contracting Officer, in writing, the name of the current or any successor individual, who will administer the SB, SDB, and WOB program at the Laboratory. The designated individual shall act as the liaison officer and will:

- (i) maintain communication with the DOE concerning SB, SDB, and WOB concerns;
- (ii) locate and contact SB, SDB, and WOB sources; and maintain qualified SB, SDB, and WOB source lists for use by the Laboratory in proposed procurements;
- (iii) review and evaluate SB, SDB, and WOB subcontracting plan(s) submitted to the Contractor in connection with supply and/or service awards of \$500,000 or greater (or \$1,000,000 or greater for construction), and assure that such plans are similar to and support the objectives of the subcontracting plan agreed to by the Contractor under this contract;
- (iv) screen proposed requisitions for subcontracting opportunities, and implement appropriate procurement policy and procedures to improve and increase the opportunities for SB, SDB, and WOB concerns; and
- (v) maintain an active role in establishing contacts with minority and small business trade associations, business development organizations, and attend SB, SDB, and WOB procurement conferences and trade fairs.

(2) The Contractor shall assure that SB, SDB, and WOB concerns will have an equitable opportunity to compete for subcontracts.

(3) The Contractor shall maintain records supporting internal activities provided to buyers through workshops, seminars, training programs, and periodic review of purchasing activity to evaluate compliance with the program's requirements.

(4) The Contractor shall maintain records specifying whether each prospective subcontractor is a SB, SDB, or WOB concern; procedures adopted to comply with the requirements set forth in

Appendix D - Small, Small Disadvantaged, And Women-Owned Small Business Subcontracting Plan

this subcontracting plan; and awards of any subcontract or purchase order exceeding \$100,000. Records regarding such awards shall include the following information:

(i) whether the award went to a SB, SDB, WOB, or a large business, including the name, address, and business size;

(ii) whether SB, SDB, or WOB concerns were solicited;

(iii) the reason for nonsolicitation of SB, SDB, and WOB concerns if such firms were not solicited; and

(iv) the reason for award to firms other than SB, SDB, or WOB if such firms were solicited.

(5) The Contractor shall assure that SB, SDB, and WOB clauses required under this contract are included in applicable subcontracts and purchase orders.

(6) The Contractor shall cooperate with the Government in any requested studies and surveys of the Contractor's subcontracting procedures and practices under this contract.

(7) The Contractor shall submit quarterly reports with respect to subcontracting with SB, SDB, and WOB concerns as may be required by Appendix F and this plan.

(8) The Contractor shall maintain and use source information on SB, SDB, and WOB concerns developed from other DOE sources, which may include the Procurement Automated Source System (PASS), to locate SB, SDB, and WOB concerns.

(9) The Contractor shall counsel and discuss subcontracting opportunities with representatives of SB, SDB, and WOB concerns who desire to explain their capabilities, products, and services. The Contractor will provide an explanation of its business requirements and subcontracting processes.

(10) The Contractor shall determine categories of procurements for SB "set-asides" participation provided that there are sufficient qualified firms to quote on the needed product or service and to assure reasonable prices, quality, and acceptable delivery.

(11) The Contractor shall include the clause entitled "Utilization of Small, Small Disadvantaged, and Women-Owned Small Business Concerns" in all subcontracts that offer further subcontracting opportunities; and shall include the clause entitled "Small, Small Disadvantaged, and Women-Owned Small Business Subcontracting Plan" in all subcontracts in excess of \$500,000 (\$1,000,000 for construction) requiring subcontractors to adopt a plan similar to the Contractor's plan.

(d) The Contractor shall perform the following functions:

(1) Assist SB, SDB, and WOB concerns by arranging solicitations, time for the preparation of bids, quantities, specifications, and delivery schedules so as to facilitate the participation of these business concerns. Reasonable efforts shall be made to give all such types of concerns an opportunity to compete over a period of time;

Appendix D - Small, Small Disadvantaged, And Women-Owned Small Business Subcontracting Plan

(2) Establish realistic and attainable goals, and measure progress toward reaching the goals. The SB, SDB, and WOB goals shall be stated as a percentage and as an amount of total subcontracting dollars actually awarded, as may be specified in Appendix F;

(3) Provide adequate and timely consideration of the potentialities of SB, SDB, and WOB concerns in all "make-or-buy" decisions; and

(4) Provide notice to subcontractors concerning penalties and remedies for misrepresentations of business status as SB, SDB, and WOB concerns for the purpose of obtaining a subcontract that is to be included as part of or all of a goal contained in this subcontracting plan.

(e) The Contractor shall submit Standard Form (SF) 294, Subcontracting Report for Individual Contracts, and SF 295, Summary Subcontract Report, to the Contracting Officer in accordance with DEAR 919.708 and the instructions on the forms; and ensure that its subcontractors agree to and submit a SF 294 and 295. Reports on SB, SDB, and WOB activities shall also be furnished to the appropriate Contractor management staff.

(f) (1) The Contractor's proposed SB, SDB, and WOB goals shall be submitted in writing each fiscal year as requested by the Contracting Officer during the term of this contract; and the Contractor and the Contracting Officer shall use their good faith efforts to agree on an acceptable statement of goals. The goal package submitted by the Contractor shall identify the negotiated goal categories and shall include:

(i) a description of principal types of supplies and services to be subcontracted, subcontracts under the Energy Policy Act, and an identification of the types planned for subcontracting with SB, SDB, and WOB concerns;

(ii) a description of the method(s) used to develop the subcontracting goals and identify any new programs to pursue, such as mentor-protégé;

(iii) a description of the method used to identify potential sources for solicitation purposes;

(iv) a statement whether indirect costs are included, and, if so, a description of the method used to determine the proportionate share of indirect costs to be incurred with SB, SDB, and WOB concerns; and

(v) the name of the individual who will administer the SB, SDB, and WOB program at the Laboratory, if different from subparagraph (c)(1) above.

(2) Goals will be negotiated and established once each fiscal year and will be set forth by letter as agreed to by the Contractor and the Contracting Officer. Such goals upon agreement will be deemed a part of Appendix D.

(3) Goals may be changed within the first six months of the fiscal year by agreement of the Contracting Officer and the Contractor if there is a cancellation or an addition of programs or projects.

APPENDIX E

STATEMENT OF WORK

Appendix E - Statement of Work

STATEMENT OF WORK

1.0 General.

The Regents of the University of California (the Contractor) shall, in accordance with the provisions of this contract, provide the intellectual leadership and management expertise necessary and appropriate to manage, operate, and staff the Lawrence Berkeley National Laboratory (the Laboratory); to accomplish the missions assigned by the Department of Energy (DOE) to the Laboratory; and to perform the work described in this Statement of Work (SOW). DOE missions are assigned through strategic planning, program coordination, and cooperation between the Contractor and DOE.

Inasmuch as the assigned missions of the Laboratory are dynamic, this SOW is not intended to be all inclusive or restrictive, but is intended to provide a broad framework and general scope of the work to be performed at the Laboratory. This SOW does not represent a commitment to, or imply funding for, specific projects or programs. All projects and programs will be authorized individually by DOE and/or other work sponsors in accordance with the provisions of this contract.

Work under this contract shall be conducted in a manner that will protect the environment and assure the safety and health of employees and the public. In performing the contract work, the Contractor shall implement appropriate program and project management systems to track progress and increase cost effectiveness of work activities; develop integrated plans and schedules to achieve program objectives, incorporating input from DOE and stakeholders; maintain sufficient technical depth to manage activities and projects throughout the life of a program; utilize appropriate technologies to reduce costs and improve performance; and maintain Laboratory facilities as necessary to accomplish assigned missions.

2.0 Mission and Major Programs.

2.1 Laboratory Mission. The Laboratory's mission statement is documented annually and updated as necessary in the Institutional Plan. In support of major DOE sponsor organizations, the central mission of the Laboratory is to provide national scientific leadership and technological innovation to support DOE's objectives and programs. The Laboratory's mission addresses four distinct goals:

- To perform multi-disciplinary research in the energy sciences, general sciences, biosciences and computational sciences in a manner that ensures employee and public safety and protection of the environment;
- To develop and operate unique national experimental facilities that are available to qualified investigators;
- To educate and train future generations of scientists and engineers to promote national science and education goals; and

Appendix E - Statement of Work

- To transfer knowledge and technological innovations and foster productive relationships among Laboratory research programs, universities, and industry to promote national economic competitiveness.

2.2 Primary Program Sponsors. Work under this contract includes scientific and technical programs sponsored by major DOE organizations. Primary DOE sponsors include:

- Energy Research,
- Energy Efficiency and Renewable Energy,
- Fossil Energy, and
- Environmental Management.

Additionally, the Contractor will engage in other DOE and non-DOE missions (most notably those of the National Institutes of Health) that derive from the Laboratory's missions and utilize the Laboratory's core competencies which are supported by the Laboratory.

A summary of current Laboratory programs follows. Descriptions of major programs are updated annually in the Institutional Plan.

2.3 Energy Research Programs.

2.3.1 Basic Energy Sciences. The Contractor shall conduct research in materials sciences and the chemistry and physics of materials, in geosciences, in biological energy research, in applied mathematics and in other areas of chemical sciences. Programs in materials sciences emphasize new and forefront research projects for the synthesis, processing, and characterization of advanced materials. Programs in chemical sciences emphasize chemical physics, dynamics and mechanisms of chemical reactions, catalysis, electron spectroscopy, atomic physics, photochemistry, theoretical chemistry, chemistry of the actinide elements, and combustion modeling mechanisms and processes. In geosciences, a multi-disciplinary program supports the scientific basis for development of hydrocarbon and strategic-mineral resources, remediation of toxic waste sites, safe disposal of radioactive and toxic chemical wastes, and exploitation of geothermal energy. A program in energy biosciences studies the unique features of photosynthetic organisms for collecting light energy and storing it as chemical energy.

2.3.2 Computational and Technology Research. The Contractor shall conduct computational research including the management and operation of the National Energy Research Scientific Computing (NERSC) Center; The Energy Sciences Network (ESnet); and The Center for Computational Science and Engineering (CCSE). The NERSC Center provides high-performance computing, information, and communications services for researchers. ESnet supports national and international access to the NERSC Center and, more generally, the needs of DOE scientists and collaborators for access to other DOE scientific facilities, information dissemination among scientific collaborators and widespread access to existing supercomputer facilities. Computational research at the Laboratory includes studies into new discretization techniques and adaptive numerical methods. Other programs include the development of advanced numerical and analytical methods and their application to the most challenging problems in physics and engineering, investigation of congestion on high-speed networks, collaborative efforts to monitor complex experimental devices by electronic means, and an effort to combine state-of-the art computer

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equipment and scientific visualization software to provide research scientists with tools for exploring their data in new and innovative ways. In technology research the Laboratory also supports focused research projects between industry and the national laboratories.

2.3.3 Nuclear Physics. The Contractor shall conduct experimental and theoretical investigations of the structure and properties of nuclei, emphasizing studies of nuclei under extreme conditions (temperature, isospin, angular momentum, and energy density). The Contractor shall conduct programs to educate and train young scientists, to develop technology in advanced nuclear instrumentation and to define the challenges of relativistic heavy-ion physics.

2.3.4 High-Energy Physics. The Contractor shall conduct a program of experimental and theoretical research, including the development and operation of innovative detectors and research on advanced accelerator components and concepts. Experimental programs in high-energy physics focus on the properties of quarks and leptons and their interactions. The astrophysics effort at the Laboratory has three components: cosmic microwave background measurements, a search for dark matter, and a search for distant supernovas. The Contractor shall also conduct studies on highly theoretical topics of interest; data compilation of high-energy physics particle properties; advanced detector development for use in proposed hadron colliders; and accelerator physics and engineering for the application of particle beams for high-energy physics facilities.

2.3.5 Health and Environmental Research. The Contractor shall conduct life sciences research in six program areas: gene expression and genome mapping; structural biology; nuclear medicine and functional imaging; carcinogenesis, mutagenesis, and radiation biology; environmental and health-effects research; and measurement technology. Studies on human genome structure and regulation of gene expression at the Human Genome Center include generation of physical and genetic maps, identification and localization of expressed genes on human chromosomes, and development of techniques for efficient sequencing of human DNA.

2.3.6 Fusion Energy. The contractor shall conduct research on accelerator systems supporting the nation's inertial-confinement fusion energy programs. Heavy-ion fusion accelerator research focuses on the physics and technology of induction acceleration as the means for producing high-current, heavy-ion beams as drivers for inertial-confinement systems.

2.4 Energy Efficiency and Renewable Energy Programs. The Contractor shall conduct research and technology development in the furtherance of national goals to reduce energy demand and cost to consumers, balance environmental concerns with economic development, and enhance energy security. The Laboratory's programs are principally in electrical-energy storage and distribution, buildings, industry, transportation, utility systems, and geothermal systems.

2.5 Fossil Energy Programs. The Contractor shall conduct research directed toward making coal more usable, including studies on conversion to gaseous and liquid fuels and reduction of emissions. The Contractor shall also develop advanced characterization methods for oil and gas reservoirs.

2.6 Environmental Restoration and Waste Management Programs. The Contractor shall conduct projects on environmental restoration and waste management issues consistent with DOE's National Environmental Management Program including facilities and operating programs for corrective actions, environmental restoration, and waste management.

2.7 Civilian Radioactive Waste Programs. The Contractor shall conduct a program of interrelated geoscience and geological engineering research supporting the underground storage of high-level

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nuclear wastes; including characterization of deep geologic formations, determination of the physical and chemical processes occurring in the repository rocks, analysis of hydrologic and chemical transport mechanisms, and development of predictive techniques for repository performance.

2.8 Policy, Planning, and Analysis Support. The Contractor shall conduct analysis activities in support of energy policy issues of concern to DOE, data and model development for projecting energy demand and evaluation of policy impacts as input to DOE's assessment of United States energy strategies.

2.9 Laboratory-Directed Research and Development (LDRD). The Contractor shall conduct a LDRD program that leverages the Laboratory's scientific expertise and key technologies toward innovations that are applicable to Laboratory missions and contributes to scientific staff capability and vitality through the support of new research programs of merit and potential.

2.10 Health Programs. The Contractor shall conduct programs on genome sequencing, molecular medicine, biotechnology, and structural biology that build on the unique facilities and expertise available at Laboratory.

2.11 University and Science Education Programs. The Contractor shall develop and implement programs that utilize Laboratory resources, staff, technological expertise, collaborative and cooperative relationships with other academic and research institutions and the unique proximity and integral partnership of the Laboratory with the University of California's Berkeley campus in order to advance science education opportunities and to improve the quality of mathematics, science, and technology education in the United States.

2.12 User Facilities Operations. The Contractor shall manage and operate major DOE user facilities: Advanced Light Source, Biomedical Isotope Facility, National Energy Research Scientific Computing Center and Energy Sciences Network, 88-Inch Cyclotron, and National Center for Electron Microscopy.

2.13 Engineering. The Contractor shall maintain an engineering capability that supports the focus on state-of-the-art research and development to enhance Laboratory technical strengths and to meet the needs of current and future Laboratory programs.

3.0 Administration and Operation of the Laboratory. The Contractor shall manage, operate, protect, maintain and enhance the Laboratory's ability to function as a DOE multi-program laboratory, provide the infrastructure and support activities, support the accomplishment of the Laboratory's missions, and assure the accountability to the DOE under the results-oriented, performance-based provisions of this Contract.

3.1 Strategic and Institutional Planning. The Contractor shall conduct a strategic planning process and develop Institutional Plans in consideration of DOE provided planning guidance and strategic planning material to assure consistency with DOE missions and goals and with due regard for Environment, Safety, and Health (ES&H) issues.

3.2 Environment, Safety, and Health (ES&H). The Contractor shall conduct a Laboratory integrated safety management (ES&H) programs, in cooperation with regulatory agencies, including ES&H oversight for Laboratory subcontractor operations.

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3.2.1 Environmental and Cultural Resource Compliance and Protection. The Contractor shall conduct environmental and cultural resource compliance and protection programs including monitoring, surveillance, and reporting with respect to all environmental media and natural and cultural resources; waste management; obtaining and maintaining required permits and licenses from regulatory agencies; and certification and training programs.

3.2.2 Safety Management Program. The Contractor shall conduct a risk based safety management program including accident prevention, criticality safety, nuclear safety, explosives and firearms safety, electrical, industrial, construction, and aviation safety; hazards identification, safety analysis and risk management; fire prevention and protection/suppression; hazardous material and nuclear explosive packaging and transportation operations; and safety training.

3.2.3 Health Programs. The Contractor shall conduct a risk based health program including industrial hygiene, health physics, radiological protection, and occupational medicine; health auditing and surveys; and training. The Contractor shall cooperate with worker health studies conducted by other federal agencies and their contract researchers under DOE sponsorship.

3.3 Environmental Restoration and Waste Management. The Contractor shall conduct compliant environmental restoration activities; shall provide for the management of waste necessary to support Laboratory missions including storage, treatment, and disposal of hazardous, mixed, and radioactive wastes; characterize soil and groundwater and remediate contamination; decontaminate and decommission facilities and sites; and coordinate and implement waste minimization and pollution prevention initiatives.

3.4 Laboratory Facilities. The Contractor shall manage Government-owned facilities, both provided and acquired, to further national interests and to perform DOE statutory missions. Recognizing that these facilities are a national resource, these facilities may also be made available, with appropriate agreements, to private and public sector entities including universities, industry, and local, state, and other government agencies.

3.4.1 Facilities Management. The Contractor shall perform overall integrated planning, acquisition, upgrades, and management of Government-owned, leased or controlled facilities and real property located on the site.

3.4.2 Maintenance and Operation of the Laboratory Facilities. The Contractor shall provide all maintenance and operations of facilities at the Laboratory. The Contractor shall conduct a maintenance management program, that will maintain Government property in a manner which: (1) promotes operational safety, environmental protection and compliance, property preservation and cost effectiveness, (2) ensures continuity of operation, fulfillment of program requirements and protection of life and property from potential hazards, and (3) ensures the property will satisfy the requirements of current use

3.5 Business Management. The Contractor shall manage the business and administrative operations of the Laboratory.

3.5.1 Human Resources Management. The Contractor shall maintain a human resources management system to attract and retain a world class workforce and promote workforce diversity.

3.5.2 Financial Management. The Contractor shall maintain a financial management system responsive to the obligations of sound financial stewardship and public accountability. The overall system shall include an integrated accounting system suitable to collect, record, and report all

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financial activities; a budgeting system which includes the formulation and execution of all resource requirements needed to accomplish projected missions and formulate short- and long-range budgets; an internal control system for all financial and other business management processes; and a disbursements system for both employee payroll and supplier payments.

3.5.3 Purchasing Management. The Contractor shall have a DOE-approved purchasing system to provide purchasing support and subcontract administration. The Contractor shall, when directed by DOE and may, but only when authorized by DOE, enter into subcontracts for the performance of any part of the work under this Contract.

3.5.4 Personal Property Management. The Contractor shall have a DOE-approved personal property management system for acquisition, accountability, utilization, and disposal of Government personal property.

3.5.5 Communications and Public Affairs. The Contractor shall conduct communications, information, and public affairs programs including internal and external communications; community involvement and outreach; interactions with the media, businesses, and the scientific and technical community; and liaison with local, state, and federal agencies.

3.5.6 Audits and Assessments. The Contractor shall conduct an internal audit program and shall coordinate all external audits, reviews, and appraisals.

3.5.7 Other Administrative Services. The Contractor shall provide other administrative services including logistics support to the DOE Berkeley Site Office and other University-operated Laboratories.

3.6 Safeguards and Security. The Contractor shall conduct safeguards and security programs including physical security, safeguarding, and protection of Government property and information; classification and declassification of information and materials; nuclear materials control and accountability; and, personnel security and access control for Laboratory staff and visitors.

3.7 Legal Affairs. The Contractor shall maintain a legal program to support contract activities including those related to patents, licenses, and other intellectual property rights; subcontracts; technology transfer; environmental compliance and protection; labor relations; and litigation and claims.

3.8 Emergency Management. The Contractor shall conduct an emergency management system to include emergency preparedness plans and procedures, an occurrence notification and reporting system, operation of an Emergency Operations Center, and emergency response capabilities for local, regional, and national missions to include a Radiological Assistance Program, an Accident Response Group, and a Nuclear Emergency Search Team.

3.9 Information Resources Management. The Contractor shall maintain information systems for organizational operations and for activities involving general purpose programming, data collection, data processing, report generation, software, electronic and telephone communications, and computer security. The Contractor shall provide computer resource capacity and capability sufficient to support Laboratory-wide information management requirements. The Contractor shall also conduct a records management program.

Appendix E - Statement of Work

3.10 Self-Assessment Program. The Contractor shall conduct an ongoing self-assessment process to assess performance in Laboratory operations and administration, and in science and technology programs.

4.0 Reports and Other Deliverables. The Contractor shall prepare, submit, disseminate, or otherwise publish financial, schedule, scientific, and technical performance plans and reports; and other information and deliverables consistent with the needs of the various programmatic sponsors and other customers or as required elsewhere in this Contract or as specifically required by the Contracting Officer.

APPENDIX F

**PERFORMANCE OBJECTIVES,
CRITERIA, AND MEASURES**

Section A - Science And Technology Self-Assessment

- Annually on a date established by UC, each Laboratory presents results of self-assessment to UC and proposes corrective action plans.
- President's Council on the National Laboratories evaluates quality of science and technology at each Laboratory. The council uses input from peer review committees which base their evaluations on the following four criteria:
 - Quality of Science— Review committees will consider recognized indicators of excellence, including impact of scientific contributions, leadership in the scientific community, innovativeness, and sustained achievement. As appropriate, they may also evaluate other performance measures such as publications, citations, and awards.
 - Relevance to National Needs and Agency Missions—Committees will consider the impact of Laboratory research and development on the mission needs of the Department of Energy and other agencies funding the programs. Such considerations include national security, energy policy, economic competitiveness, and national environmental goals, as well as the goals of DOE and other Laboratory funding agencies in advancing fundamental science and strengthening science education. Committees will assess the impact of Laboratory programs on industrial competitiveness and national technology needs. In this assessment, committees will assess characteristics that are not easily measured, including relevance of research programs to national technology needs and effectiveness of outreach efforts to industry. As appropriate, they may also consider such performance measures as licenses and patents, collaborative agreements with industry, and the value of commercial spin-offs.
 - Performance in the Construction and Operation of Major Research Facilities—Quantifiable performance measures include success in meeting construction schedules and cost objectives, facility performance specifications, and user availability goals. Other considerations may include the quality of the science performed, extent of user participation and user satisfaction, operational reliability and efficiency, and effectiveness of planning for future improvements.
 - Programmatic Performance and Planning—The review should focus on the achievement of broad programmatic goals, including meeting established technical mile-stones, carrying out work within budget and on schedule, satisfying the sponsors, providing cost-effective performance, and planning for the orderly completion or continuation of the programs. In assessing the effectiveness of programmatic and strategic planning, the reviewers may consider the ability to execute projects in concert with overall mission objectives, programmatic responsiveness to changes in scope or technical perspective, and strategic responsiveness to new research missions and emerging national needs. In the evaluation of the effectiveness of programmatic management, considerations may include morale, quality of leadership, effectiveness in managing scientific resources (including effectiveness in mobilizing interdisciplinary teams), effectiveness of organization, and efficiency of facility operations.
- Management team (UC) evaluates administrative systems for each Laboratory in each functional area (Laboratory Management, Environment, Safety & Health, Facilities Management, Financial Management, Human Resources, Information Management, Procurement, Property Management, and Safeguards and Security) on the basis of established performance measures. Weighting of points for each area is established at the beginning of each annual evaluation cycle. Numerical scores expressed as percentages are assigned to each functional area based upon the performance assessment ratings listed below. These percentages multiplied by the maximum points allocated for each functional area result in the total points for that area.
- UC establishes a aggregate "rating" for each Laboratory based on evaluation of each functional area - ratings for Science and Technology and Administrative Systems are averaged together.

Section B - Performance Objectives, Criteria and Measures for Operations & Administration

Part I - Laboratory Management

Performance Objective #1 Laboratory Leadership

Laboratory leadership, in support of Laboratory missions, ensures the stewardship and viability of the institution. (Weight = LANL 70% LBNL/LLNL100%)

Criteria:

Performance Measures:

1.1 Institutional Stewardship and Viability

Evaluation of Laboratory senior management's approach, deployment and results for ensuring that the institution is capable of executing its current and future missions.

Weight = 100%

1.1.a

Planning:

Evaluation of management's approach for strategic planning that aligns Laboratory missions, core competencies, strategic direction, and funding sources with DOE strategic plans and objectives. The assessment will focus on achievement of the key objectives contained in the Laboratory's plans and how this information is reviewed with DOE.

(Weight = 16.6%)

Weighting for Approach/Deployment and Results:

A/D = 40%

R = 60%

Gradients (see attachment)

Agreement: LANL specific - Evaluation to include relevant aspects of this measure to the transition of the new Laboratory Director (A/D only)

1.1.b

Establishing and Communicating Performance Expectations

Evaluation of management's effectiveness in establishing and communicating performance expectations.

Assessment will focus on communication with Laboratory line management and senior management at the DOE Headquarters, Operations Office, and UC that reinforces performance goals. **(Weight = 16.6%)**

The Success Criteria Gradient is calculated using the following formula:

$$\text{Score} = \frac{\sum \text{Waste Type Matrix Points}}{\text{Total \# of Waste Types}} \times 100\%$$

Basis:

1. The rating of Outstanding or Excellent can be attained only if each element of the summation is greater than or equal to 60%, excluding TRU waste.

Waste Type Matrix Points are assigned from the table below by calculating for each applicable waste type the Performance Improvement (PI) :

$$\text{PI} = \frac{\text{Baseline Year Factor} - \text{Performance Year Factor}}{\text{Baseline Year Factor}} \times 100\%$$

Where:

$$\text{Performance Year Factor} = \frac{\text{Total Operations Funding for Performance Year}}{\text{m}^3 \text{ Waste Type Disposed}}$$

$$\text{Baseline Year Factor} = \frac{\text{Total Operations Funding for Baseline Year}}{\text{m}^3 \text{ Waste Type Disposed}}$$

Waste Type Matrix

Waste Type	PI ≤ -5%	-5% < PI ≤ 5%	5% < PI ≤ 10%	10% < PI ≤ 15%	PI > 15%
HW	0	1	1	1	1
LLW	0	0.25	0.5	0.75	1
MW	0	0.25	0.5	0.75	1
TRU	0	0.25	0.5	0.75	1
Other	0	1	1	1	1

Criteria:

Performance Measures:

1.1.b

The Laboratory will reduce low-level and mixed waste inventories through treatment and disposal activities. Treatment and disposal volumes will be tracked and compared to the EM Management Commitments.
(Weight = 15%)

Assumptions:

1. The performance period is for a single fiscal year.
2. EM Management Commitments obtained from site-specific Ten Year Plan (TYP) submittal.
LLNL: treatment 141 m³ MW, 43 m³ LLW; disposal 141 m³ MW, 531 m³ LLW
LBNL: treatment 1 m³ MW, 7.9 m³ LLW; disposal 1 m³ MW, 18.8 m³ LLW
3. The EM Management Commitments in Assumption 2 above contain significant amounts of newly generated wastes. Newly generated wastes will be considered to be EM Management Commitment waste minus Site Treatment Plan (STP) waste for MW and EM Management Commitment waste minus Legacy Waste Plan waste for LLW. Actual waste generation rates will be tracked and compared to the EM Management Commitments on a quarterly basis. The EM Management Commitments may be adjusted with DOE approval after July to match actual generation rates.
4. Treatment and disposal activities are defined by the Facility Operations and Maintenance (FO&M) Activity Data Sheet (ADS).
5. Waste volumes shall be limited to those funded and tracked by EM-30.
6. "Road Ready" waste volumes are wastes that have an intended disposal/treatment site and are certified to that site's waste acceptance criteria (WAC), but have yet to be shipped due to circumstances beyond the site's control.
7. Waste identified as "road ready" will be considered disposed. Credit for shipped "road ready" waste volumes is not allowed in subsequent performance period(s).
8. Wastewater discharged to sewer will be classified as low-level waste (LLW) and mixed waste (MW) for tracking purposes, as appropriate.
9. Total wastewater inventory received is treated and then disposed (LLNL only).
10. Conversion factor of the specific density of water (1.0) will be used to convert the weight of wastewaters to volumetric measurements.
11. LLW with CA-only constituents will be managed and tracked as LLW.
12. MW is defined by the Federal Facilities Compliance Act (FFCA).
13. Legacy waste is defined as the backlog of stored waste for which a permanent disposition determination needs to be made or where insufficient characterization information exists to allow proper disposition.
14. Legacy waste volumes are determined by such inventory at the end of FY96, and will be classified as LLW and MW for tracking purposes, as appropriate.
15. If sites do not receive funds that are within +/- 5% of the approved Current Year Work Plan (CYWP), then the EM Treatment and Disposal Commitments will be renegotiated.

Success Criteria will be renegotiated before the fiscal year performance period to account for any significant programmatic, regulatory, and/or fiscal changes.

Gradient

The score for this performance measure will be based on the following table:

Success Criteria	
Rating	Range
Outstanding	>95%
Excellent	90-95 %
Good	78-89%
Marginal/Unsatisfactory	<78%

The Success Criteria Gradient is calculated using the following formula:

$$\text{Score} = \frac{1}{4} \left[\frac{\text{Amount LLW Treated}}{\text{LLW EM Treatment Commitment}} + \frac{\text{Amount MW Treated}}{\text{MW EM Treatment Commitment}} - \frac{\text{Amount LLW Disposed}}{\text{LLW EM Disposal Commitment}} - \frac{\text{Amount MW Disposed}}{\text{MW EM Disposal Commitment}} \right] \times 100$$

Basis:

1. Each element of the formula is less than or equal to 1.2. That is, the highest individual treatment/disposal versus treatment/disposal commitment ratio that can be attained is 1.2.

The rating of Outstanding or Excellent can be received only if each element of the formula is greater than or equal to 78%.

Criteria:

Performance Measures:

1.2 **EM Program Innovation**

The Laboratory will develop innovative solutions to advance the Environmental Management Program. The EM Program includes Environmental Restoration, Waste Management, and Technology Development.
(Weight = 25%)

1.2.a **Advancement of the EM Program**

The Laboratory will advance the state of the art technologies by implementing their usage; participate in the corporate advancement of the EM Program by providing solutions or assistance to other DOE/OAK sites; and identify and implement innovative technological solutions or business practices that result in savings.
(Weight = 25%)

Assumptions:

- The performance period will be a single DOE fiscal year.
- It is recognized that actions may result in cost savings that extend for more than one year. Credit for cost savings (Category 3) may be taken in each year in which cost savings are realized, up to a total of five years.
- In general, accomplishments are expected using existing resources. In some cases, additional funding may be required to undertake specific innovative solutions. With the agreement of both parties, DOE-HQ(EM) may provide additional funds and/or allow the Laboratory to use cost savings realized to meet this performance measure.

Gradient:

The degree of innovation achieved will be measured by a point system. Points will be awarded in each of several performance categories, with a total score from all categories being the final score for the performance measure. Projects which receive credit in one performance indicator category may also receive credit for any costs savings realized (Category 3), but may not receive credits in all three categories. The performance indicators and associated award points will be as follows:

Category 1

Advance the state of the art technologies by implementing the usage of Laboratory technologies at DOE or other Government sites, or utilize other EM technologies at the Laboratory.

- | | |
|---|--------------------------|
| - Use of non-LLNL EM developed technology at the Laboratory | 1 point each technology |
| - Use of LLNL developed technology at other sites | 1 point each technology |
| - Use of LLNL developed technology at any DOE site | 2 points each technology |

Category 2

The Laboratory participates in the corporate advancement of the EM program by providing solutions or assistance on projects at other DOE sites. Projects should result in at least one of the following:

- Cost savings
 - Efficiency improvement (i.e., quicker, better quality, etc.)
 - Liability or risk reduction
 - Use of laboratory resources and/or facilities to aid others
- (1 point will be awarded for each project that meets one or more of the criteria listed.)

Appendix F - Objective Standards of Performance

Category 3

Provide cost savings by identifying and/or implementing innovative technological solutions or business practices. Innovative technological solutions or business practices are defined as those that represent a significant change from current solutions or existing practices (technological or regulatory). They can not simply be refinements of existing technological or business practices, nor be cost savings due to a simple reduction in scope of work or deliverables.

- LLNL will be awarded 1 point for every \$250,000 saved
- LBNL will be awarded 1 point for every \$100,000 saved

Rating	Range (LLNL)	Range (LBNL)
Excellent	>12	>6
Good	6-11	3-5
Marginal/Unsatisfactory	0-5	0-2

Criteria:

Performance Measures:

- 1.3 **Environmental Restoration - LLNL**
 LLNL will target a percentage increase in the total contaminant mass removed from ground water per total environmental restoration budget as compared to the previous baseline year.
(Weight = 25%)

- 1.3.a **Environmental Restoration - LLNL**
 The Performance Indicator is the ratio of the total contaminant mass removed divided by total DOE-HQ(ER) dollars to the baseline total contaminant mass removed divided by baseline total DOE-HQ(ER) dollars.
(Weight = 25%)

Assumptions:

- The baseline is the previous year's performance ratio of total contaminant mass removed from ground water at the Livermore Site and Site 300 divided by the previous year's total LLNL DOE-HQ(ER) budget relative to **BL96**, where **BL96** is the ratio the total contaminant mass removed from ground water at the Livermore Site and Site 300 in FY96 divided by the FY96 total LLNL DOE-HQ(ER) budget.
- Total DOE-HQ(ER) budget is the total DOE-HQ(EM-40) funding to the Environmental Restoration Program.
- Contaminants will include VOCs (volatile organic compounds) and non-VOCs (e.g., tritium, uranium, hexavalent chrome) where the non-VOC component is converted to VOCs equivalents by dividing the concentration or activity by the drinking water maximum contaminant level and multiplying that unitless result by 5 ppb (parts per billion), the nominal mcl (maximum contaminate level) for VOCs.
- Credit will be given for "no further actions" (NFAs) cleanup alternatives, such as
 - no further action (NFA)
 - capping
 - closures
 - material removal (M&T)
 - containment zone status
- The NFA contribution to contaminant mass will be developed by calculating the fraction of the site contaminant mass in ground water that the NFA area contains divided by the estimate of the site's total mass of contaminants in ground water. This ratio is then added to the overall fractional score for one year. Contaminant mass "removed" by NFA would not be incorporated in the baseline against which the next year's performance would be calculated. *(For example, if one assumed the contaminant mass removed for FY98 was 100 kg and that was equal to 1.24 BL96 and the FY97 performance was 1.11 BL96. And one further assumed that the NFA closure in FY98 resulted in no further action required for 40 kg out of the overall site contaminant inventory of 1000 kg, then the score for FY98 would be equal to $[(1.24/1.11) + (40/1000)]$ which is 1.16. And the baseline for FY99 would be 1.24 BL96.)*
- The ACI (Accelerated Site Cleanup Initiative) will be figured-in during the year of application. A new baseline will be established at the end of the fielding of the ACI.
- Standard *Force Majeure* items (including but not limited to acts of God, nonreceipt of the President's Target Level Funding, funding rescissions, scope redirection by DOE, discovery of new, high risk site conditions that warrant immediate action and change to the CYWP (Current Year Work Plans), programmatic impediments) will apply and will require special considerations up to and including re-baselining.
- Performance measuring will begin in FY97.

Gradient:

Rating:	Range:
Outstanding	The ratio of total contaminant mass removed divided by total DOE-HQ(ER) dollars to the baseline total contaminant mass removed divided by baseline total DOE-HQ(ER) dollars is greater than or equal to 1.25.
Excellent	The ratio of total contaminant mass removed divided by total ER dollars to the baseline total contaminant mass removed divided by baseline total DOE-HQ(ER) dollars is greater than or equal to 1.15 and less than 1.25.
Good	The ratio of total contaminant mass removed divided by total DOE-HQ(ER) dollars to the baseline total contaminant mass removed divided by baseline total DOE-HQ(ER) dollars is greater than or equal to 1.05 and less than 1.15.
Marginal/Unsatisfactory	The ratio of total contaminant mass removed divided by total DOE-HQ(ER) dollars to the baseline total contaminant mass removed divided by baseline total DOE-HQ(ER) dollars is less than 1.05.

Criteria:

Performance Measures:

1.3 Environmental Restoration - LBNL

The Laboratory will strive for continuous improvement (increase) in the number of potential release sites (Solid Waste Management Units and Areas of Concern) completed per total ER dollars spent.
(Weight = 25%)

1.3.a Environmental Restoration - LBNL

This measure will track increases in the Site Completion Index, where:

$$\frac{[(\# \text{ of active sites in previous fiscal year}) (S DR_i)]}{[(\# \text{ of active sites in current fiscal year})(\text{total ER project dollars in millions})]}$$
 = Site Completion Index, where DR_i is the difficulty rating for site i completed in the current fiscal year
(Weight = 25%)

Assumptions:

- Potential release sites are considered completed when the lead RCRA regulator approves "No Further Action" for the site.
- Potential release sites will be weighted in accordance with their difficulty to complete, ranging from 1 for easiest to 10 for most difficult sites to complete. These difficulty ratings will be included in the Current Year Work Plans developed by LBNL and approved by DOE at least annually. Revisions to the difficulty ratings will be managed through the existing Baseline Change Control procedures.
- The Site Completion Index is measured per fiscal year. Data from FY96 accomplishments will be used to develop the performance baseline. The factor (# of active sites in previous fiscal year)/(# of active sites in current fiscal year) has been included to make the calculation statistically consistent. This factor for the base year is considered to be unity.
- It's currently anticipated that the majority of sites which can be completed in a short time frame will be completed by the end of FY98. At that time, this measure will be revised to reflect the future character of the program.

Gradient:

Percentage increase in Site Completion Index *

Rating:	Range:
Outstanding	Index Increased >20%
Excellent	10% < Index Increased < 20%
Good	-10% ≤ Index Increased < 10%
Marginal/Unsatisfactory	Index Increased ≤ -10%

* Where the percentage increase in the Site Completion Index (SCI) is calculated as follows:

$$SCI = \frac{(\text{Site Completion Index current FY} - \text{Site Completion Index previous FY}) (100)}{(\text{Site Completion Index FY96})}$$

Criteria:

Performance Measures:

1.4 **Cost and Schedule Variances**
 The Laboratory's Environmental Management Program will be managed to improve project/program performance. The Laboratory measures its performance of projects/programs against schedule and cost baselines.
(Weight = 25%)

1.4.a
 The cost measure will track Laboratories' performance in executing projects in accordance with an approved and validated project cost baseline. The schedule measure will track the Laboratories' performance in executing projects in accordance with an approved overall schedule.
(Weight = 25%)

Assumptions:

- Cumulative percent cost variance (%CV) and cumulative percent schedule variance (%SV) will be obtained from the September Project Tracking System (PTS). The Cumulative CV, SV and BCWP values will be only for the fiscal year being evaluated.
- Baseline change proposals are reviewed and made, if approved, by DOE in 30 days.
- If the FIS Report contains an accounting error, CV, SV and ACWP values provided by LBNL and/or LLNL and verified by the respective DOE Site Representative may be used.
- Includes the following DOE-HQ(EM)-funded activities by ADS No.
- LBNL: SF148211, SF148231, SF148212, SF3914, and SF3931.
- LLNL: SF3941, SF3943, SF3944, SF3948, SF3946, and SF148101 - SF148130 (as one ADS).
- These DOE-HQ(EM)-funded activities do not include ADSs measured in the other Performance Measures.

Gradient:

Rating:	Range (LLNL):	Range (LBNL):
Outstanding	$(CV+SV) > 5\%$	$CV, SV > 5\%$
Excellent	$0\% < (CV+SV) \leq 5\%$	$0\% < CV \leq 5\%$ $0\% < SV \leq 5\%$
Good	$-5\% < (CV+SV) \leq 0\%$	$-5\% < CV \leq 0\%$ $-5\% < SV \leq 0\%$
Marginal/Unsatisfactory	$(CV + SV) \leq -5\%$	$CV, SV \leq -5\%$

1. (A) **Cost.** The cost measure will track the Laboratories' performance in executing projects in accordance with an approved and validated project cost baseline.

$$CV = \frac{\text{Cumulative CV}}{\text{Cumulative BCWP}} \times 100\%$$

Given: $CV = BCWP - ACWP$
 $CV = \text{Cost Variance}$
 $BCWP = \text{Budgeted Cost of Work Performed}$
 $ACWP = \text{Actual Cost of Work Performed}$

Appendix F - Objective Standards of Performance

(B) Schedule. The schedule measure will track the Laboratories' performance in executing projects in accordance with an approved overall schedule.

$$SV = \frac{\text{Cumulative SV}}{\text{Cumulative BCWS}} \times 100\%$$

Given: $SV = BCWP - BCWS$
 $SV = \text{Schedule Variance}$
 $BCWS = \text{Budgeted Cost of Work Scheduled}$
 $BCWP = \text{Budgeted Cost of Work Performed}$

Status

Section B - Performance Objectives, Criteria and Measures for Operations & Administration

Part II - Operations

II - 2 Environment, Safety & Health

Preamble

The Laboratory's goal is to accomplish its mission cost-effectively while striving for an injury-free workplace, minimizing waste streams and avoiding adverse impacts to the environment from its operations.

The following Performance Objective, Criteria and Measures are linked to the Guiding Principles and Key Functions of Integrated Safety Management. They include process oriented measures that are intended to assess key elements of the Laboratory's integrated safety management system. They also include total system outcome measures which are intended to be key indicators of the performance of the Laboratory's integrated safety management system as a whole.

Performance Objective #1

Do work safely - The Laboratory systematically integrates ES&H into management and work practice at all levels so that missions are accomplished while protecting the worker, the public and the environment.

Process Performance Measures

(Weight = 40%)

Criteria:

- 1.1 **Management Defines the Scope of Work Such That (ISMS Core Function #1):**
- Line management is responsible for the protection of the public, the workers, and the environment (ISMS Principle #1)
 - Clear and unambiguous lines of authority and responsibility for ensuring ES&H are established and maintained at all organizational levels within the Laboratory. (ISMS Principle #2)
Resources are effectively allocated to balance programmatic, operational, and ES&H considerations.
Protecting the public, the workers, and the environment is a priority whenever activities are planned and performed. (ISMS Principle #4)
- (Weight = 8%)

Performance Measures:

1.1.a **Radiation Protection Of The Public And The Worker:**

The Lab uses 10 LBNL ISMS (7 ISMS and 3 LBL developed) principles. These are used to develop and improve processes to maintain or improve excellence in protecting the public and the worker from all radiological hazards arising from Lab operations and research activities.

Radiation doses to the maximally exposed individual (member of the public) and the worker, from all Lab operations, will be managed to assure that all applicable regulatory limits are not exceeded.

Unplanned exposures to radioactive material and ORPS reportable occurrences of skin or personal clothing contamination are minimized. Radioactive material is managed so that it does not leave controlled areas in an uncontrolled fashion.

Radiological public and worker protection processes are linked to select system outcomes; outcome information is used in ensuring public and worker safety from all radiological hazards arising from the Lab operations and research activities

Assumptions:

- The performance period for this measure is July 1, 1997 to June 30 1998
- The severity of events is to be considered in the evaluation. The weighting from high to low severity is: doses greater than 100 mrem, skin contamination, and clothing contamination.
- DOE and the Lab agree by 12/31/97 on the processes outcome linkage.
- Peer reviews, existing procedures, implementing memoranda, Lab tracking system data and other work process products shall serve as demonstrable evidence in contribution to satisfaction of measure gradients. It is not the intention of this measure to foster the generation of supportive or demonstrable documents other than those needed or are necessary to perform the work.
- The intent of the process measure is to drive the Lab ES&H programs toward the Integrated Safety Management System. Its gradients are deliberately linked to the Lab's 10 ISMS principles. It is recognized that success is measured on a sliding subjective scale and that satisfaction of a level of excellence does not necessarily mean that all gradients are completely met. Overall Performance is based upon evaluation many factors including but not limited to the ones listed below.

Gradient:

Good:

At least the first 3 of the following conditions are met through a mutual agreement between the Berkeley Lab and the DOE.

- The Lab shall provide evidence that outcome and processes are linked and effective.
- The Lab shall demonstrate that outcome is used to drive improvement and maintain the current level of excellence.
- The Lab shall demonstrate that criteria 1.1 has been used, that all 10 LBNL Integrated Safety Management System principles and that the five core work functions have been addressed in processes aimed at protecting the worker and public from all applicable radiological workplace hazards.
- The Lab and the local DOE office shall agree on a set of measures for best in class benchmarking. The Lab shall compare current performance with best in class benchmark data and if necessary develop a strategy to meet best in class benchmark data.

Excellent/Outstanding:

Documented evidence exists for criteria 1.1. but below the thresholds for Far Exceeds; to qualify for Far Exceeds at least 6 of the following conditions are satisfied at the 90% level and the benchmarking condition has been satisfied.

- There is documented evidence that management defines the scope of work for at least 90% of work activities where there are lesser workplace radiological hazards and 100% activities where there are significant workplace radiological hazards.
- The Lab provides documented evidence that there is line management responsibility for protection of the public and worker and that resources are effectively allocated (in balance with programmatic, operational and ES&H considerations) for at least 90% of work activities where there are lesser radiological hazards and 100% where there are significant radiological hazards.
- The Lab provides documented evidence that at least 90% of the lesser radiological hazards have been identified and 100% of the significant or major radiological hazards are analyzed and that appropriate (i.e. tailored to the operation) administrative and engineering controls have been developed and implemented.
- The Lab provides documented evidence that for at least 90% of work activities where there are lesser radiological hazards (not likely to cause significant harm to the public or worker) and 100% of the work activities where there are identified significant radiological workplace hazards, conditions and requirements for safe operation, are identified, and work is conducted in accordance with these conditions and requirements.

Appendix F - Objective Standards of Performance

- The Lab provides documented evidence that at least 90% of all personnel working where there are lesser radiological workplace hazards and 100% of the applicable personnel working where there are significant workplace radiological hazards, possess sufficient knowledge and skills to execute their duties safely and with due regard for the radiological safety of the public.
- The Lab provides documented evidence that continuous improvement through self assessment, corrective actions, lessons learned and collaboration and peer review, in public and worker radiological safety is implemented for at least 90% of the workplace areas where there are lesser radiological hazards and 100% of the work activities where there are significant radiological hazards.
- The Lab and the local DOE office shall agree on a set of processes for best in class benchmarking. The Lab shall use best in class benchmark data in implementing strategies that move the Lab's performance toward best in class benchmark levels. Excellence is achieved when the Labs performance meets or exceeds best in class benchmark level.

Performance Measures:

1.1.b Safety Hazard Prevention And Protection Of The Worker

This Performance Measure encompasses the areas of Safety, Industrial Hygiene, Occupational Medicine, Natural Phenomena and Fire Prevention. Unless otherwise specified, the term "Safety" shall represent prevention and protection in all the above disciplines.

The Lab uses 10 LBNL ISMS (7 ISMS and 3 LBL developed) principles. These are used to develop and improve excellence in protecting the worker from all safety hazards arising from Lab operations and research activities.

The Safety disciplines (including Health Physics) work together in an integrated manner to help prevent injury and illness. This integrated approach is extended into Line Management functions such that safety hazard prevention and protection is seamless.

Worker protection processes are linked to select system outcomes; outcome information is used in ensuring worker safety from all hazards arising from the Lab operations and research activities.

Assumptions:

- The performance period for this measure is July 1, 1997 to June 30 1998.
- The severity of events is to be considered in the evaluation. Higher severity events include (but are not limited to): imminent danger situations (as defined by the Occupational Safety and Health Administration (OSHA)), worker exposures above OSHA Permissible Exposure Limits, biological exposures above the OSHA medical removal levels, and substantial property damage or personal injury due to fire.
- DOE and the Lab agree by 12/31/97 on the processes/outcome linkage.
- Subcontractor operations/personnel are included in any corrective actions if the subcontractor is performing part of the Laboratory's operations. Subcontractor statistics are gathered separately for those subcontractors that report their hours to the Laboratory. Subcontractors are excluded if they are "servicing" the Laboratory (e.g., copy machine vendors or other transient workers).
- Peer reviews, existing procedures, implementing memoranda, Lab tracking system data and other work process products shall serve as demonstrable evidence in contribution to satisfaction of measure gradients. It is not the intention of this measure to foster the generation of supportive or demonstrable documents other than those needed or are necessary to perform the work.
- Safety Management System. Its gradients are deliberately linked to the 10 LBNL ISMS principles. It is recognized that success is measured on a sliding subjective scale and that satisfaction of a level of excellence does not necessarily mean that all gradients are completely met. Overall Performance is based upon evaluation many factors including but not limited to the ones listed below.

Gradient:

Good:

At least 5 of the following conditions are met as judged by Berkeley Lab and DOE staff.

- The Lab shall provide evidence that outcome and processes are linked and effective.
- The Lab shall demonstrate that outcome is used to drive improvement or maintain the current level of excellence.
- The Lab shall demonstrate that all criteria 1.1 have been used, that all Integrated Safety Management System principles and that the five core work functions have been addressed in processes aimed at protecting the worker from all applicable workplace safety hazards.
- There is appropriate and documented follow-up or response to injuries and illnesses, and exposures above the appropriate and applicable nationally recognized standard (such as OSHA PEL and ACGIH TLV)
- The subcontractor work force (as defined in the assumptions) is included in accident prevention programs.
- The Lab provides documented evidence of emergency planning response and property protection.

Excellent:

- Continuous quality improvement of the interaction between Occupational Medicine and the Safety disciplines and Line Management will be based on the Annual Interdisciplinary Peer Review and Improvement Process.
- The Laboratory has identified areas for injury reduction and is applying appropriate resources and attention to accident prevention in those areas.
- The Lab and the local DOE office shall agree on a set of processes for best in class benchmarking. The Lab shall compare current performance with best in class benchmark data and if necessary develop a strategy to meet best in class benchmark data.

Outstanding:

The first 6 and one additional of the following conditions are met or exceeded as judged by Berkeley Lab and DOE staff.

- The Lab provides documented evidence that an effective process exists for the elimination of workplace hazards, while ensuring that the lab mission continues to be met cost effectively.
- There is documented evidence that Lab management defines the scope of work for all activities where there are significant workplace safety hazards.
- The Lab provides documented evidence that there is line management responsibility for protection of the worker and that resources are effectively allocated (in balance with programmatic, operational and ES&H considerations) for all work activities where there are significant safety hazards (this would be defined by the need for activity authorizations such as AHD's OSR's or SAD's).
- The Lab provides documented evidence that there is a process for regular periodic review and assessment of hazards and that all the significant or major safety hazards are analyzed and that appropriate (i.e. tailored to the operation) administrative and engineering controls have been developed and implemented, while ensuring that the Lab mission continues to be met cost effectively.
- The Lab provides documented evidence that for all of the work activities where there are identified significant workplace safety hazards, conditions and requirements for safe operation are identified, and work is conducted in accordance with these conditions and requirements.
- The Lab provides documented evidence that all personnel working where there are significant workplace safety hazards, possess sufficient knowledge and skills to execute their duties safely.
- The Lab provides documented evidence that continuous improvement through self assessment, corrective actions, lessons learned and collaboration and peer review, in worker safety is implemented for all of the work activities where there are significant safety hazards.

Appendix F - Objective Standards of Performance

- The Lab and the local DOE office shall agree on a set of processes for best in class benchmarking. The Lab shall use best in class benchmark data in implementing strategies that move the Lab's performance toward best in class benchmark levels. Excellence is achieved when the Labs performance meets or exceeds best in class benchmark level.
- The Lab demonstrates that there is optimal two way communication between occupational medicine and all other applicable ES&H disciplines.
- The safety record of subcontractor companies is evaluated and considered in contracting.

Performance Measures:

1.1.c Waste Minimization, Pollution Prevention and Protection of the Environment

The Lab uses 10 LBNL ISMS (7 ISMS and 3 LBL developed) principles. These are used to develop and improve processes that maintain and enhance performance in environmental protection, waste minimization and pollution prevention associated with Lab operations and research activities.

Environmental concerns will be managed to assure that all applicable regulatory limits are not exceeded, unplanned releases are minimized, and regulatory standards of operation are followed.

The system for managing environmental protection, waste minimization and pollution prevention concerns will define environmental protection activities for establishing organization goals and policies, developing strategies for achievement, allocating resources for carrying out those strategies, providing structure and delineating roles, responsibilities, authorities, and accountabilities for accomplishing tasks, providing initiating mechanisms to produce the work effort, measuring, evaluating and correcting/improving performance.

Assumptions:

- Performance period for this measure is July 1, 1997 to June 30, 1998.
- Berkeley Lab and DOE agree by December 31, 1997 on the set of processes that are linked to the outcome measures.
- Performance will consider all aspects of the program that enhance and promote program objectives and overall compliance.
- The Laboratory has in place a system to evaluate new projects and activities for waste generation and pollution prevention opportunities.
- Peer reviews, existing procedures, implementing memoranda, Lab tracking system data and other work process products shall serve as demonstrable evidence in contribution to satisfaction of measure gradients. It is not the intention of this measure to foster the generation of supportive or demonstrable documents other than those needed or are necessary to perform the work.
- The intent of the process measure is to drive the Lab ES&H programs toward the Integrated Safety Management System. Its gradients are deliberately linked to the 10 LBNL ISMS principles. It is recognized that success is measured on a sliding subjective scale and that satisfaction of a level of excellence does not necessarily mean that all gradients are completely met. Overall performance evaluation is based on not just the gradients but the effectiveness of the complete Environmental Protection, and Waste Minimization & Pollution Prevention program.

Gradient:

Good:

- At least 8 of the following conditions are met as judged by Berkeley Lab and DOE staff.
 1. The Laboratory has linked process and outcome measures.
 2. The Laboratory has outcome results to drive improvement in programs where additional improvement is technically possible, or to maintain the current level of excellence in programs where further improvement is not cost-effective.
 3. Individuals throughout the organization recognize the environmental aspects of their job responsibilities and take responsibility for protecting the environment, minimizing waste and preventing pollution.
 4. Environmental protection, waste minimization and pollution Prevention roles and responsibilities are well defined, clearly communicated, applicable to the work being performed and understood by all personnel whose activities may impact environmental performance.
 5. Top management demonstrates its commitment to environmental protection, waste minimization and pollution prevention through personnel and managerial actions.
 6. Formal programs are in place and kept up-to-date for the proper identification, management and control of hazardous materials and wastes to prevent or minimize their release into the environment.
 7. Environmental risks are assessed and used to select the appropriate level of control to prevent or mitigate releases to the environment.
 8. Environmental protection training needs are identified for all applicable Lab staff and tracked effectively.
 9. Source operating requirements are established and communicated to source operators.
 10. Formal programs are in place and kept up-to-date to effectively evaluate environmental protection, waste minimization and pollution prevention activities and communicate concerns and accomplishments within the Lab and to DOE.
 11. The Lab and the local DOE office shall agree on a set of measures for best in class benchmarking. The Lab shall compare current performance with best in class benchmark data and if necessary develop a strategy to meet best in class benchmark data.

Excellent:

- All of the conditions for meets are satisfied and one is judged as superior by Berkeley Lab and DOE staff.
- The Lab and the local DOE office shall agree on a set of processes for best in class benchmarking. The Lab shall compare current performance with best in class benchmark data and if necessary develop and implement a strategy to meet best in class benchmark data.
- The Laboratory shall demonstrate that outcome is used to drive improvement or maintain the current level of excellence (for those programs where no further cost effective improvement is possible)

Outstanding:

- All of the conditions for meets are satisfied and two or more are judged as superior by Berkeley Lab and DOE staff. Some of the Laboratory's pollution prevention projects address the transuranic, low level and low level mixed waste streams that are costly and difficult to manage.
- The Lab and the local DOE office shall agree on a set of processes for best in class benchmarking. The Lab shall use best in class benchmark data in implementing strategies that move the Lab's performance toward best in class benchmark levels. Excellence is achieved when the Labs performance meets or exceeds best in class benchmark level.

Criteria:

Performance Measures:

1.2 **Protection & Prevention Involves Analyzing the Hazards and Developing and Implementing Controls Such That** (ISMS Core Work Functions #2 and #3):

- Laboratory administrative and engineering controls are established to provide adequate assurance that the workers, the public and the environment are protected from adverse consequences (ISMS Principle #5).
- The controls to prevent and mitigate hazards are tailored to the hazards and the work being performed (ISMS Principle #6).

(Weight = 10 %)

1.2.a **Radiation Protection of the Public and the Worker:**

The Lab uses 10 LBNL ISMS (7 ISMS and 3 LBNL developed) principles. These are used to develop and improve processes to maintain or improve excellence in protecting the public and the worker from all radiological hazards arising from Lab operations and research activities.

Radiation doses to the maximally exposed individual (member of the public) and the worker, from all Lab operations, will be managed to assure that all applicable regulatory limits are not exceeded. Unplanned exposures to radioactive material and ORPS reportable occurrences of skin or personal clothing contamination are minimized. Radioactive material is managed so that it does not leave controlled areas in an uncontrolled fashion.

Radiological public and worker protection processes are linked to select system outcomes; outcome information is used in ensuring public and worker safety from all radiological hazards arising from the Lab operations and research activities.

Assumptions:

- The performance period for this measure is July 1, 1997 to June 30 1998
- The severity of events is to be considered in the evaluation. The weighting from high to low severity is: doses greater than 100 mrem, skin contamination, and clothing contamination.
- DOE and the Lab agree by 12/31/97 on the processes outcome linkage.
- Peer reviews, existing procedures, implementing memoranda, Lab tracking system data and other work process products shall serve as demonstrable evidence in contribution to satisfaction of measure gradients. It is not the intention of this measure to foster the generation of supportive or demonstrable documents other than those needed or are necessary to perform the work.
- The intent of the process measure is to drive the Lab ES&H programs toward the Integrated Safety Management System. Its gradients are deliberately linked to the Lab's 10 ISMS principles. It is recognized that success is measured on a sliding subjective scale and that satisfaction of a level of excellence does not necessarily mean that all gradients are completely met. Overall Performance is based upon evaluation many factors including but not limited to the ones listed below.

Gradient:

Good:

- The plans have been reviewed on an annual basis as required.
- Organizational elements and facilities to be included in the assessment are stated in the plan.
- A summary of the hazards are identified and listed for each facility and operation for that assessment period
- At least 80% of the formal self-assessments scheduled during the performance period have been completed and reports issued.
- At least 80% of the corrective actions have been completed on schedule.

Excellent/Outstanding:

Documented evidence exists for criteria 1.2. but below the thresholds for Far Exceeds; to qualify for Far Exceeds at least 6 of the following conditions are satisfied at the 90% level and the benchmarking condition has been satisfied.

- There is documented evidence that management defines the scope of work for at least 90% of work activities where there are lesser workplace radiological hazards and 100% activities where there are significant workplace radiological hazards.
- The Lab provides documented evidence that there is line management responsibility for protection of the public and worker and that resources are effectively allocated (in balance with programmatic, operational and ES&H considerations) for at least 90% of work activities where there are lesser radiological hazards and 100% where there are significant radiological hazards.
- The Lab provides documented evidence that at least 90% of the lesser radiological hazards have been identified and 100% of the significant or major radiological hazards are analyzed and that appropriate (i.e. tailored to the operation) administrative and engineering controls have been developed and implemented.
- The Lab provides documented evidence that for at least 90% of work activities where there are lesser radiological hazards (not likely to cause significant harm to the public or worker) and 100% of the work activities where there are identified significant radiological workplace hazards, conditions and requirements for safe operation, are identified, and work is conducted in accordance with these conditions and requirements.
- The Lab provides documented evidence that at least 90% of all personnel working where there are lesser radiological workplace hazards and 100% of the applicable personnel working where there are significant workplace radiological hazards, possess sufficient knowledge and skills to execute their duties safely and with due regard for the radiological safety of the public.
- The Lab provides documented evidence that continuous improvement through self assessment, corrective actions, lessons learned and collaboration and peer review, in public and worker radiological safety is implemented for at least 90% of the workplace areas where there are lesser radiological hazards and 100% of the work activities where there are significant radiological hazards.
- The Lab and the local DOE office shall agree on a set of processes for best in class benchmarking. The Lab shall use best in class benchmark data in implementing strategies that move the Lab's performance toward best in class benchmark levels. Excellence is achieved when the Labs performance meets or exceeds best in class benchmark level

Performance Measures:

1.2.b **Safety Hazard Prevention and Protection of the Worker**

This Performance Measure encompasses the areas of Safety, Industrial Hygiene, Occupational Medicine, Natural Phenomena and Fire Prevention. Unless otherwise specified, the term "Safety" shall represent prevention and protection in all the above disciplines.

The Lab uses 10 LBNL ISMS (7 ISMS and 3 LBL developed) principles. These are used to develop and improve processes to maintain or improve excellence in protecting the worker from all safety hazards arising from Lab operations and research activities.

The Safety disciplines (including Health Physics) work together in an integrated manner to help prevent injury and illness. This integrated approach is extended into Line Management functions such that safety hazard prevention and protection is seamless.

Worker protection processes are linked to select system outcomes; outcome information is used in ensuring worker safety from all hazards arising from the Lab operations and research activities.

Assumptions:

- The performance period for this measure is July 1, 1997 to June 30 1998.
- The severity of events is to be considered in the evaluation. Higher severity events include (but are not limited to): imminent danger situations (as defined by the Occupational Safety and Health Administration (OSHA)), worker exposures above OSHA Permissible Exposure Limits, biological exposures above the OSHA medical removal levels, and substantial property damage or personal injury due to fire.
- DOE and the Lab agree by 12/31/97 on the processes/outcome linkage.
- Subcontractor operations/personnel are included in any corrective actions if the subcontractor is performing part of the Laboratory's operations. Subcontractor statistics are gathered separately for those subcontractors that report their hours to the Laboratory. Subcontractors are excluded if they are "servicing" the Laboratory (e.g., copy machine vendors or other transient workers).
- Peer reviews, existing procedures, implementing memoranda, Lab tracking system data and other work process products shall serve as demonstrable evidence in contribution to satisfaction of measure gradients. It is not the intention of this measure to foster the generation of supportive or demonstrable documents other than those needed or are necessary to perform the work.
- The intent of the process measure is to drive the Lab ES&H programs toward the Integrated Safety Management System. Its gradients are deliberately linked to the 10 LBNL ISMS principles. It is recognized that success is measured on a sliding subjective scale and that satisfaction of a level of excellence does not necessarily mean that all gradients are completely met. Overall Performance is based upon evaluation many factors including but not limited to the ones listed below.

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Objective Standards Of Performance

Introduction

This Appendix contains the performance objectives, criteria, and measures (POCMs) which are the components of the performance-based management system that the University and DOE will utilize for Laboratory oversight as described in Clause 2.6, Performance-Based Management. The POCMs will be clear and reasonable objective standards against which the University's overall compliance with obligations under this contract will be assessed.

The POCMs will be subject to annual review and may be modified by the agreement of the Parties in accordance with the procedures set forth in Clause 2.6, Performance-Based Management, Clause 5.1, Contract Modifications, and Clause 5.3, Program Performance Fee. It is understood that the changes in the POCMs may be proposed based on cost/risk/benefit analysis.

This Appendix contains a description of the process to be used by the University and DOE to evaluate the Contractor's performance of administration, operations, science, and technology at the Laboratory.

Business systems may require modification as POCMs are revised in accordance with Clause 2.6, Performance-Based Management. Where systems are so modified in the course of a review period, DOE agrees to take such modification into account in the appraisal.

Weighting for Approach/Deployment and Results:
A/D = 40%
R = 60%
Gradients (see attachment)

Agreement: LANL specific - Evaluation to include relevant aspects of this measure to the transition of the new Laboratory Director (A/D only)

Performance Measures:

- 1.1.c **Stewardship of Assets**
Evaluation of Laboratory management systems for making decisions that address stewardship of programmatic and institutional assets. Assessment will include the impact of planning on decision making, the use of prioritization processes, asset management, resource allocation, etc.
(Weight = 16.6%)

Weighting for Approach/Deployment and Results:
A/D = 40%
R = 60%
Gradients (see attachment)

- 1.1.d **Effective Resource Management**
Evaluation of management's efforts to effectively manage funding and staff resources consistent with DOE and Laboratory goals. Assessment will focus on performance results which may include improvements in cost effectiveness such as the ratio of S&T to A&O staff, and other productivity or re-engineering indicators.
(Weight = 16.6%)

Weighting for Approach/Deployment and Results:
A/D = 40%
R = 60%
Gradients (see attachment)

Performance Measures:

- 1.1.e **Community Relations:**
Evaluation of management's awareness of public concern regarding Laboratory operations. Assessment will focus on management's effectiveness in addressing community issues in a proactive manner. **(Weight = 16.6%)**

Weighting for Approach/Deployment and Results:

A/D = 40%

R = 60%

Gradients (see attachment)

Agreement: Evaluation factors to be considered under this Performance Measure will be based on the agreement in the new five year contract.

- 1.1.f **Accountability and Commitments**
Evidence that systems ensure major commitments are met and information on status is timely and complete and that these systems allow informed management action. **(Weight = 16.6%)**

Weighting for Approach/Deployment and Results:

A/D = 40%

R = 60%

Gradients (see attachment)

Agreement: LANL specific - Evaluation to include management's efforts to support implementation of:

- Integrated Safety Management,
- Accelerator Production of Tritium, and
- Annual Certification of the Stockpile

Performance Objective #2 Regional Economic Partnership in Northern New Mexico

LANL will develop (in concert with UC and DOE) an effective partnership with regional entities to enhance economic development and diversification.

(Weight = 30%)

This Performance Objective and Measure is LANL - specific

Criteria:

- 2.1 **Regional Economic Partnership:**
Laboratory leadership establishes an effective program to partner with regional entities to enhance economic development and diversification.
(Weight = 100%)

Performance Measures:

- 2.1.a **Regional Economic Partnership:**
Evaluation of the effectiveness of the Laboratory's contribution to regional efforts in economic development and diversification. Evaluation factors to be considered under this Performance Measure will include the Appendix M program review criteria in the new 5-year contract such as:
- Laboratory's participation in Northern New Mexico regional economic initiatives such as the regional procurement initiatives;
 - Laboratory's effectiveness to partner with state, tribal and local officials and leaders;
 - Management's efforts in facilitating the commercialization of Laboratory technology;
 - Management efforts toward privatization of laboratory activities and operations that contribute to the economic growth of Northern New Mexico communities.
- (Weight = 100%)

Weighting for Approach/Deployment and Results:

A/D = 60%

R = 40%

Gradients (see attachment)

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Attachment

The performance expectation for each performance measure will use the scoring criteria indicated in Table 1 below. Each performance measure indicates the relative weights between the Approach/Deployment criteria and the Results criteria.

Table 1, Appraisal Scoring Guidelines for Laboratory Management

Narrative Rating	Score Range	Approach/Deployment	Results
Outstanding	90 - 100%	<ul style="list-style-type: none"> • a sound systematic approach, fully responsive to all requirements. • a very strong fact-based improvement process is a key management tool; strong refinement and integration - backed by excellent analysis. • approach is fully deployed without significant weaknesses or gaps in any areas or work units. 	<ul style="list-style-type: none"> • current performance is excellent in most areas of importance to the key business requirements. • excellent performance levels in most areas. • strong evidence of industry and benchmark leadership demonstrated in many areas.
Excellent	80-89%	<ul style="list-style-type: none"> • a sound systematic approach, responsive to the overall purposes. • a fact-based improvement process is a key management tool; clear evidence of refinement and improved integration as a result of improvement cycles and analysis. • approach is well developed, with no major gaps; deployment may vary in some areas or work units. 	<ul style="list-style-type: none"> • Current performance is good to excellent in most areas of importance to the key business requirements. • Most improvement trends and/or current performance levels are sustained. • many to most trends and/or current performance levels show areas of leadership and very good relative performance levels.
Good	70 - 79%	<ul style="list-style-type: none"> • a sound systematic approach, responsive to the primary requirements. • a fact-based improvement process in place in key areas; more emphasis is placed on improvement than on reaction to problems. • no major gaps in deployment, though some areas or work units may be in the very early stages of deployment. 	<ul style="list-style-type: none"> • improvement trends and/or good performance levels reported for many to most areas of importance to the key business requirements. • no pattern of adverse trends and/or poor performance levels in areas of importance to the key business requirements. • some trends and/or current performance levels show areas of strength and/or good to very good relative performance levels.
Marginal/ Unsatisfactory	50 - 69%	<ul style="list-style-type: none"> • beginning of a systematic approach to the primary purposes. • early stages of a transition from reacting to problems to a general improvement orientation. • major gaps exist in deployment that would inhibit progress in achieving the primary purposes. 	<ul style="list-style-type: none"> • early stages of developing; some improvements and/or early good performance level in a few areas.

Section B - Performance Objectives, Criteria and Measures for Operations & Administration

Part II - Operations

II - 1 Environment Restoration and Waste Management

Performance Objective #1 Environmental Restoration and Waste Management

The Laboratory will conduct Environmental Management (EM) waste operations in a safe manner that protects human health, the environment and the public and prevents adverse impacts thereon; the Laboratory will develop innovative solutions to advance the Environmental Management Program; and the Laboratory's Environmental Restoration Program will continually strive to improve efficiency and maximize remediation.

(Weight = 100%)

Criteria:

1.1 Waste Management

The Laboratory's facilities and operations for handling waste will be managed to minimize the impact on the environment and to maximize the efficient use of EM funds. The Laboratory will operate its waste facilities to continually strive to improve efficiency and reduce the waste inventory.

(Weight = 25%)

Performance Measures:

1.1.a Waste Management

The Laboratory will collect data on the volume of waste shipped offsite plus made "road-ready" per total operations dollar per fiscal year. This data will be trended to demonstrate improvement in efficiency and compared to an established baseline.

(Weight = 10%)

Assumptions:

1. The performance period is for a single fiscal year.
2. Baseline year will be the average of FY96 and FY97 data. The sites may use either the actual FY97 data or 1.15 times the FY97 goals to calculate this average.
3. Total operations dollar is funding obligated at end of fiscal year for operating expense and capital equipment, relegated to the Facility Operations and Maintenance (FO&M) Activity Data Sheet (ADS), and corrected for inflation as determined by DOE.
4. Waste volumes shall be limited to those funded and tracked by EM-30.
5. "Road Ready" waste volumes are wastes that have an intended disposal site and are certified to that site's waste acceptance criteria (WAC), but have yet to be shipped due to circumstances beyond the site's control.
6. Waste identified as "road ready" will be considered disposed. Disposal credit for shipped "road ready" waste volumes is not allowed in subsequent performance period(s).
7. Wastewater discharged to sewer will be classified as low-level waste (LLW), mixed waste (MW), and/or hazardous waste (HW) for tracking purposes, as appropriate.
8. Total wastewater inventory received is treated and then disposed (LLNL only).
9. Conversion factor of the specific density of water (1.0) will be used to convert the weight of wastewaters to volumetric measurements.
10. LLW with CA-only constituents will be managed and tracked as LLW.
11. Toxic Substances Control Act (TSCA) and medical waste volumes will be included with HW inventory.
12. MW is defined by the Federal Facilities Compliance Act (FFCAct).

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13. Legacy waste is defined as the backlog of stored waste for which a permanent disposition determination needs to be made or where insufficient characterization information exists to allow proper disposition.
14. Legacy waste volumes are determined by such inventory at the end of FY96, and will be classified as LLW, MW, and/or transuranic (TRU) waste for tracking purposes, as appropriate.
15. "Other Waste" (e.g., non-hazardous, sewerable) is defined as EM-30 waste not otherwise categorized as LLW, MW, HW, or TRU waste.
16. Due to its non-defense designation, TRU waste at LBNL is excluded as a waste type for the performance measure.
17. If sites do not receive funds that are within +/- 5% of the approved Current Year Work Plan (CYWP), then the Success Criteria will be renegotiated.

Success Criteria and Waste Type Matrix Elements will be renegotiated before the fiscal year performance period to account for any significant programmatic, regulatory, and/or fiscal changes.

Gradient:

The score for this performance measure will be based on the following table:

Success Criteria

Rating	Range
Outstanding	90-100%
Excellent	80-89 %
Good	60-79%
Marginal/Unsatisfactory	<60%

Gradient:

Good:

At least 5 of the following conditions are met as judged by Berkeley Lab and DOE staff.

- The Lab shall provide evidence that outcome and processes are linked and effective.
- The Lab shall demonstrate that outcome is used to drive improvement or maintain the current level of excellence.
- The Lab shall demonstrate that all criteria 1.2 have been used, that all Integrated Safety Management System principles and that the five core work functions have been addressed in processes aimed at protecting the worker from all applicable workplace safety hazards.
- There is appropriate and documented follow-up or response to injuries and illnesses, and exposures above the appropriate and applicable nationally recognized standard (such as OSHA PEL and ACGIH TLV)
- The subcontractor work force (as defined in the assumptions) is included in accident prevention programs.
- The Lab provides documented evidence of emergency planning response and property protection.

Excellent:

- Continuous quality improvement of the interaction between Occupational Medicine and the Safety disciplines and Line Management will be based on the Annual Interdisciplinary Peer Review and Improvement Process.
- The Laboratory has identified areas for injury reduction and is applying appropriate resources and attention to accident prevention in those areas.
- The Lab and the local DOE office shall agree on a set of processes for best in class benchmarking. The Lab shall compare current performance with best in class benchmark data and if necessary develop a strategy to meet best in class benchmark data.

Outstanding:

The first 6 and one additional of the following conditions are met or exceeded as judged by Berkeley Lab and DOE staff.

- The Lab provides documented evidence that an effective process exists for the elimination of workplace hazards, while ensuring that the lab mission continues to be met cost effectively.
- There is documented evidence that Lab management defines the scope of work for all activities where there are significant workplace safety hazards.
- The Lab provides documented evidence that there is line management responsibility for protection of the worker and that resources are effectively allocated (in balance with programmatic, operational and ES&H considerations) for all work activities where there are significant safety hazards (this would be defined by the need for activity authorizations such as AHD's OSR's or SAD's).
- The Lab provides documented evidence that there is a process for regular periodic review and assessment of hazards and that all the significant or major safety hazards are analyzed and that appropriate (i.e. tailored to the operation) administrative and engineering controls have been developed and implemented, while ensuring that the Lab mission continues to be met cost effectively.
- The Lab provides documented evidence that for all of the work activities where there are identified significant workplace safety hazards, conditions and requirements for safe operation are identified, and work is conducted in accordance with these conditions and requirements.
- The Lab provides documented evidence that all personnel working where there are significant workplace safety hazards, possess sufficient knowledge and skills to execute their duties safely.
- The Lab provides documented evidence that continuous improvement through self assessment, corrective actions, lessons learned and collaboration and peer review, in worker safety is implemented for all of the work activities where there are significant safety hazards.

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- The Lab and the local DOE office shall agree on a set of processes for best in class benchmarking. The Lab shall use best in class benchmark data in implementing strategies that move the Lab's performance toward best in class benchmark levels. Excellence is achieved when the Labs performance meets or exceeds best in class benchmark level.
- The Lab demonstrates that there is optimal two way communication between occupational medicine and all other applicable ES&H disciplines.
- The safety record of subcontractor companies is evaluated and considered in contracting.

Performance Measures:

1.2.c Waste Minimization, Pollution Prevention and Protection of the Environment

The Lab uses 10 LBNL ISMS (7 ISMS and 3 LBL developed) principles. These are used to develop and improve processes to maintain or enhance performance in environmental protection, waste minimization and pollution prevention associated with Lab operations and research activities.

Environmental concerns will be managed to assure that all applicable regulatory limits are not exceeded, unplanned releases are minimized, and regulatory standards of operation are followed.

The system for managing environmental protection, waste minimization and pollution prevention concerns will define environmental protection activities for establishing organization goals and policies, developing strategies for achievement, allocating resources for carrying out those strategies, providing structure and delineating roles, responsibilities, authorities, and accountabilities for accomplishing tasks, providing initiating mechanisms to produce the work effort, measuring, evaluating and correcting/improving performance.

Assumptions:

- Performance period for this measure is July 1, 1997 to June 30, 1998.
- Berkeley Lab and DOE agree by December 31, 1997 on the set of processes that are linked to the outcome measures.
- Performance will consider all aspects of the program that enhance and promote program objectives and overall compliance.
- The Laboratory has in place a system to evaluate new projects and activities for waste generation and pollution prevention opportunities.
- Peer reviews, existing procedures, implementing memoranda, Lab tracking system data and other work process products shall serve as demonstrable evidence in contribution to satisfaction of measure gradients. It is not the intention of this measure to foster the generation of supportive or demonstrable documents other than those needed or are necessary to perform the work.
- The intent of the process measure is to drive the Lab ES&H programs toward the Integrated Safety Management System. Its gradients are deliberately linked to the 10 LBNL ISMS principles. It is recognized that success is measured on a sliding subjective scale and that satisfaction of a level of excellence does not necessarily mean that all gradients are completely met. Overall performance evaluation is based on not just the gradients but the effectiveness of the complete Environmental Protection, and Waste Minimization & Pollution Prevention program.

Gradient:

Good:

- At least 8 of the following conditions are met as judged by Berkeley Lab and DOE staff.
 1. The Laboratory has linked process and outcome measures.
 2. The Laboratory has outcome results to drive improvement in programs where additional improvement is technically possible, or to maintain the current level of excellence in programs where further improvement is not cost-effective.

Appendix F - Objective Standards of Performance

3. Individuals throughout the organization recognize the environmental aspects of their job responsibilities and take responsibility for protecting the environment, minimizing waste and preventing pollution.
4. Environmental protection, waste minimization and pollution Prevention roles and responsibilities are well defined, clearly communicated, applicable to the work being performed and understood by all personnel whose activities may impact environmental performance.
5. Top management demonstrates its commitment to environmental protection, waste minimization and pollution prevention through personnel and managerial actions.
6. Formal programs are in place and kept up-to-date for the proper identification, management and control of hazardous materials and wastes to prevent or minimize their release into the environment.
7. Environmental risks are assessed and used to select the appropriate level of control to prevent or mitigate releases to the environment.
8. Environmental protection training needs are identified for all applicable Lab staff and tracked effectively.
9. Source operating requirements are established and communicated to source operators.
10. Formal programs are in place and kept up-to-date to effectively evaluate environmental protection, waste minimization and pollution prevention activities and communicate concerns and accomplishments within the Lab and to DOE.
11. The Lab and the local DOE office shall agree on a set of measures for best in class benchmarking. The Lab shall compare current performance with best in class benchmark data and if necessary develop a strategy to meet best in class benchmark data.

Excellent:

- All of the conditions for meets are satisfied and one is judged as superior by Berkeley Lab and DOE staff.
- The Lab and the local DOE office shall agree on a set of processes for best in class benchmarking. The Lab shall compare current performance with best in class benchmark data and if necessary develop and implement a strategy to meet best in class benchmark data.
- The Laboratory shall demonstrate that outcome is used to drive improvement or maintain the current level of excellence (for those programs where no further cost effective improvement is possible)

Outstanding:

- All of the conditions for meets are satisfied and two or more are judged as superior by Berkeley Lab and DOE staff. Some of the Laboratory's pollution prevention projects address the transuranic, low level and low level mixed waste streams that are costly and difficult to manage.
- The Lab and the local DOE office shall agree on a set of processes for best in class benchmarking. The Lab shall use best in class benchmark data in implementing strategies that move the Lab's performance toward best in class benchmark levels. Excellence is achieved when the Labs performance meets or exceeds best in class benchmark level.

Criteria:

Performance Measures:

1.3 Operational Requirements Guiding the Performance of Work Are Such That (ISMS Core Work Function #4):

- Personnel possess the experience, knowledge, skills, and abilities to discharge their responsibilities (ISMS Principle #3).
- The conditions and requirements for operations to be initiated and conducted are established (ISMS Principle #7).

(Weight =10%)

1.3.a Radiation Protection of the Public and the Worker:

The Lab uses 10 LBNL ISMS (7 ISMS and 3 LBNL developed) principles. These are used to develop and improve processes to maintain or improve excellence in protecting the public and the worker from all radiological hazards arising from Lab operations and research activities.

Radiation doses to the maximally exposed individual (member of the public) and the worker, from all Lab operations, will be managed to assure that all applicable regulatory limits are not exceeded. Unplanned exposures to radioactive material and ORPS reportable occurrences of skin or personal clothing contamination are minimized. Radioactive material is managed so that it does not leave controlled areas in an uncontrolled fashion.

Radiological public and worker protection processes are linked to select system outcomes; outcome information is used in ensuring public and worker safety from all radiological hazards arising from the Lab operations and research activities.

Assumptions:

- The performance period for this measure is July 1, 1997 to June 30 1998
- The severity of events is to be considered in the evaluation. The weighting from high to low severity is: doses greater than 100 mrem, skin contamination, and clothing contamination.
- DOE and the Lab agree by 12/31/97 on the processes outcome linkage.
- Peer reviews, existing procedures, implementing memoranda, Lab tracking system data and other work process products shall serve as demonstrable evidence in contribution to satisfaction of measure gradients. It is not the intention of this measure to foster the generation of supportive or demonstrable documents other than those needed or are necessary to perform the work.
- The intent of the process measure is to drive the Lab ES&H programs toward the Integrated Safety Management System. Its gradients are deliberately linked to the Lab's 10 ISMS principles. It is recognized that success is measured on a sliding subjective scale and that satisfaction of a level of excellence does not necessarily mean that all gradients are completely met. Overall Performance is based upon evaluation many factors including but not limited to the ones listed below.

Gradient:

Good:

At least the first 3 of the following conditions are met through a mutual agreement between the Berkeley Lab and the DOE.

- The Lab shall provide evidence that outcome and processes are linked and effective.
- The Lab shall demonstrate that outcome is used to drive improvement and maintain the current level of excellence.
- The Lab shall demonstrate that criteria 1.3 has been used, that all 10 LBNL Integrated Safety Management System principles and that the five core work functions have been addressed in processes aimed at protecting the worker and public from all applicable radiological workplace hazards.

Appendix F - Objective Standards of Performance

- The Lab and the local DOE office shall agree on a set of measures for best in class benchmarking. The Lab shall compare current performance with best in class benchmark data and if necessary develop a strategy to meet best in class benchmark data.

Excellent/Outstanding:

Documented evidence exists for criteria 1.3. but below the thresholds for Far Exceeds; to qualify for Far Exceeds at least 6 of the following conditions are satisfied at the 90% level and the benchmarking condition has been satisfied.

- There is documented evidence that management defines the scope of work for at least 90% of work activities where there are lesser workplace radiological hazards and 100% activities where there are significant workplace radiological hazards.
- The Lab provides documented evidence that there is line management responsibility for protection of the public and worker and that resources are effectively allocated (in balance with programmatic, operational and ES&H considerations) for at least 90% of work activities where there are lesser radiological hazards and 100% where there are significant radiological hazards.
- The Lab provides documented evidence that at least 90% of the lesser radiological hazards have been identified and 100% of the significant or major radiological hazards are analyzed and that appropriate (i.e. tailored to the operation) administrative and engineering controls have been developed and implemented.
- The Lab provides documented evidence that for at least 90% of work activities where there are lesser radiological hazards (not likely to cause significant harm to the public or worker) and 100% of the work activities where there are identified significant radiological workplace hazards, conditions and requirements for safe operation, are identified, and work is conducted in accordance with these conditions and requirements.
- The Lab provides documented evidence that at least 90% of all personnel working where there are lesser radiological workplace hazards and 100% of the applicable personnel working where there are significant workplace radiological hazards, possess sufficient knowledge and skills to execute their duties safely and with due regard for the radiological safety of the public.
- The Lab provides documented evidence that continuous improvement through self assessment, corrective actions, lessons learned and collaboration and peer review, in public and worker radiological safety is implemented for at least 90% of the workplace areas where there are lesser radiological hazards and 100% of the work activities where there are significant radiological hazards.
- The Lab and the local DOE office shall agree on a set of processes for best in class benchmarking. The Lab shall use best in class benchmark data in implementing strategies that move the Lab's performance toward best in class benchmark levels. Excellence is achieved when the Lab's performance meets or exceeds best in class benchmark level.

Performance Measures:

1.3.b **Safety Hazard Prevention and Protection of the Worker**

This Performance Measure encompasses the areas of Safety, Industrial Hygiene, Occupational Medicine, Natural Phenomena and Fire Prevention. Unless otherwise specified, the term "Safety" shall represent prevention and protection in all the above disciplines.

The Lab uses 10 LBNL ISMS (7 ISMS and 3 LBL developed) principles. These are used to develop and improve processes to maintain or improve excellence in protecting the worker from all safety hazards arising from Lab operations and research activities.

The Safety disciplines (including Health Physics) work together in an integrated manner to help prevent injury and illness. This integrated approach is extended into Line Management functions such that safety hazard prevention and protection is seamless.

Worker protection processes are linked to select system outcomes; outcome information is used in ensuring worker safety from all hazards arising from the Lab operations and research activities.

Assumptions:

- The Performance Period For This Measure Is July 1, 1997 To June 30 1998.
- The Severity Of Events Is To Be Considered In The Evaluation. Higher Severity Events Include (But Are Not Limited To): Imminent Danger Situations (As Defined By The Occupational Safety And Health Administration (OSHA)), Worker Exposures Above OSHA Permissible Exposure Limits, Biological Exposures Above The OSHA Medical Removal Levels, And Substantial Property Damage Or Personal Injury Due To Fire.
- DOE And The Lab Agree By 12/31/97 On The Processes/Outcome Linkage.
- Subcontractor Operations/Personnel Are Included In Any Corrective Actions If The Subcontractor Is Performing Part Of The Laboratory's Operations. Subcontractor Statistics Are Gathered Separately For Those Subcontractors That Report Their Hours To The Laboratory. Subcontractors Are Excluded If They Are ~~Oservicing~~ The Laboratory (E.G., Copy Machine Vendors Or Other Transient Workers).
- Peer Reviews, Existing Procedures, Implementing Memoranda, Lab Tracking System Data And Other Work Process Products Shall Serve As Demonstrable Evidence In Contribution To Satisfaction Of Measure Gradients. It Is Not The Intention Of This Measure To Foster The Generation Of Supportive Or Demonstrable Documents Other Than Those Needed Or Are Necessary To Perform The Work.
- The Intent Of The Process Measure Is To Drive The Lab ES&H Programs Toward The Integrated Safety Management System. Its Gradients Are Deliberately Linked To The 10 LBNL ISMS Principles It Is Recognized That Success Is Measured On A Sliding Subjective Scale And That Satisfaction Of A Level Of Excellence Does Not Necessarily Mean That All Gradients Are Completely Met. Overall Performance Is Based Upon Evaluation Many Factors Including But Not Limited To The Ones Listed Below.

Gradient:

Good:

At Least 5 Of The Following Conditions Are Met As Judged By Berkeley Lab And DOE Staff.

- The Lab Shall Provide Evidence That Outcome And Processes Are Linked And Effective.
- The Lab Shall Demonstrate That Outcome Is Used To Drive Improvement Or Maintain The Current Level Of Excellence.
- The Lab Shall Demonstrate That All Criteria 1.3 Have Been Used, That All Integrated Safety Management System Principles And That The Five Core Work Functions Have Been Addressed In Processes Aimed At Protecting The Worker From All Applicable Workplace Safety Hazards.
- There Is Appropriate And Documented Follow-Up Or Response To Injuries And Illnesses, And Exposures Above The Appropriate And Applicable Nationally Recognized Standard (Such As OSHA PEL And ACGIH TLV)
- The Subcontractor Work Force (As Defined In The Assumptions) Is Included In Accident Prevention Programs.
- The Lab Provides Documented Evidence Of Emergency Planning Response And Property Protection.

Excellent:

- Continuous Quality Improvement Of The Interaction Between Occupational Medicine And The Safety Disciplines And Line Management Will Be Based On The Annual Interdisciplinary Peer Review And Improvement Process.
- The Laboratory Has Identified Areas For Injury Reduction And Is Applying Appropriate Resources And Attention To Accident Prevention In Those Areas.
- The Lab And The Local DOE Office Shall Agree On A Set Of Processes For Best In Class Benchmarking. The Lab Shall Compare Current Performance With Best In Class Benchmark Data And If Necessary Develop A Strategy To Meet Best In Class Benchmark Data.

Outstanding:

The First 6 And One Additional Of The Following Conditions Are Met Or Exceeded As Judged By Berkeley Lab And DOE Staff.

- The Lab Provides Documented Evidence That An Effective Process Exists For The Elimination Of Workplace Hazards, While Ensuring That The Lab Mission Continues To Be Met Cost Effectively.
- There Is Documented Evidence That Lab Management Defines The Scope Of Work For All Activities Where There Are Significant Workplace Safety Hazards.
- The Lab Provides Documented Evidence That There Is Line Management Responsibility For Protection Of The Worker And That Resources Are Effectively Allocated (In Balance With Programmatic, Operational And ES&H Considerations) For All Work Activities Where There Are Significant Safety Hazards (This Would Be Defined By The Need For Activity Authorizations Such As AHD's OSR's Or SAD's).
- The Lab Provides Documented Evidence That There Is A Process For Regular Periodic Review And Assessment Of Hazards And That All The Significant Or Major Safety Hazards Are Analyzed And That Appropriate (I.E. Tailored To The Operation) Administrative And Engineering Controls Have Been Developed And Implemented, While Ensuring That The Lab Mission Continues To Be Met Cost Effectively.
- The Lab Provides Documented Evidence That For All Of The Work Activities Where There Are Identified Significant Workplace Safety Hazards, Conditions And Requirements For Safe Operation Are Identified, And Work Is Conducted In Accordance With These Conditions And Requirements.
- The Lab Provides Documented Evidence That All Personnel Working Where There Are Significant Workplace Safety Hazards, Possess Sufficient Knowledge And Skills To Execute Their Duties Safely.
- The Lab Provides Documented Evidence That Continuous Improvement Through Self Assessment, Corrective Actions, Lessons Learned And Collaboration And Peer Review, In Worker Safety Is Implemented For All Of The Work Activities Where There Are Significant Safety Hazards.

Appendix F - Objective Standards of Performance

- The Lab And The Local DOE Office Shall Agree On A Set Of Processes For Best In Class Benchmarking. The Lab Shall Use Best In Class Benchmark Data In Implementing Strategies That Move The Lab's Performance Toward Best In Class Benchmark Levels. Excellence Is Achieved When The Labs Performance Meets Or Exceeds Best In Class Benchmark Level.
- The Lab Demonstrates That There Is Optimal Two Way Communication Between Occupational Medicine And All Other Applicable ES&H Disciplines.
- The Safety Record Of Subcontractor Companies Is Evaluated And Considered In Contracting.

Performance Measures:

1.3.c **Waste Minimization, Pollution Prevention and Protection of the Environment**

The Lab uses 10 LBNL ISMS (7 ISMS and 3 LBL developed) principles. These are used to develop and improve processes to maintain and enhance performance in environmental protection, waste minimization and pollution prevention associated with Lab operations and research activities.

Environmental concerns will be managed to assure that all applicable regulatory limits are not exceeded, unplanned releases are minimized, and regulatory standards of operation are followed.

The system for managing environmental protection, waste minimization and pollution prevention concerns will define environmental protection activities for establishing organization goals and policies, developing strategies for achievement, allocating resources for carrying out those strategies, providing structure and delineating roles, responsibilities, authorities, and accountabilities for accomplishing tasks, providing initiating mechanisms to produce the work effort, measuring, evaluating and correcting/improving performance.

Assumptions:

- Performance period for this measure is July 1, 1997 to June 30, 1998.
- Berkeley Lab and DOE agree by December 31, 1997 on the set of processes that are linked to the outcome measures.
- Performance will consider all aspects of the program that enhance and promote program objectives and overall compliance.
- The Laboratory has in place a system to evaluate new projects and activities for waste generation and pollution prevention opportunities.
- Peer reviews, existing procedures, implementing memoranda, Lab tracking system data and other work process products shall serve as demonstrable evidence in contribution to satisfaction of measure gradients. It is not the intention of this measure to foster the generation of supportive or demonstrable documents other than those needed or are necessary to perform the work.
- The intent of the process measure is to drive the Lab ES&H programs toward the Integrated Safety Management System. Its gradients are deliberately linked to the 10 LBNL ISMS principles. It is recognized that success is measured on a sliding subjective scale and that satisfaction of a level of excellence does not necessarily mean that all gradients are completely met. Overall performance evaluation is based on not just the gradients but the effectiveness of the complete Environmental Protection, and Waste Minimization & Pollution Prevention program.

Gradient:

Good:

- At least 8 of the following conditions are met as judged by Berkeley Lab and DOE staff.
 1. The Laboratory has linked process and outcome measures.
 2. The Laboratory has outcome results to drive improvement in programs where additional improvement is technically possible, or to maintain the current level of excellence in programs where further improvement is not cost-effective.

Appendix F - Objective Standards of Performance

3. Individuals throughout the organization recognize the environmental aspects of their job responsibilities and take responsibility for protecting the environment, minimizing waste and preventing pollution.
4. Environmental protection, waste minimization and pollution Prevention roles and responsibilities are well defined, clearly communicated, applicable to the work being performed and understood by all personnel whose activities may impact environmental performance.
5. Top management demonstrates its commitment to environmental protection, waste minimization and pollution prevention through personnel and managerial actions.
6. Formal programs are in place and kept up-to-date for the proper identification, management and control of hazardous materials and wastes to prevent or minimize their release into the environment.
7. Environmental risks are assessed and used to select the appropriate level of control to prevent or mitigate releases to the environment.
8. Environmental protection training needs are identified for all applicable Lab staff and tracked effectively.
9. Source operating requirements are established and communicated to source operators.
10. Formal programs are in place and kept up-to-date to effectively evaluate environmental protection, waste minimization and pollution prevention activities and communicate concerns and accomplishments within the Lab and to DOE.
11. The Lab and the local DOE office shall agree on a set of measures for best in class benchmarking. The Lab shall compare current performance with best in class benchmark data and if necessary develop a strategy to meet best in class benchmark data.

Excellent:

- All of the conditions for meets are satisfied and one is judged as superior by Berkeley Lab and DOE staff.
- The Lab and the local DOE office shall agree on a set of processes for best in class benchmarking. The Lab shall compare current performance with best in class benchmark data and if necessary develop and implement a strategy to meet best in class benchmark data.
- The Laboratory shall demonstrate that outcome is used to drive improvement or maintain the current level of excellence (for those programs where no further cost effective improvement is possible)

Outstanding:

- All of the conditions for meets are satisfied and two or more are judged as superior by Berkeley Lab and DOE staff. Some of the Laboratory's pollution prevention projects address the transuranic, low level and low level mixed waste streams that are costly and difficult to manage.
- The Lab and the local DOE office shall agree on a set of processes for best in class benchmarking. The Lab shall use best in class benchmark data in implementing strategies that move the Lab's performance toward best in class benchmark levels. Excellence is achieved when the Labs performance meets or exceeds best in class benchmark level.

Criteria:

Performance Measures:

1.4 **Continuous Improvement to Achieve Excellence in ES&H is Accomplished Through** (ISMS Core Work Function #5):

- Approaches to ES&H management that are part of the total activity continuous improvement process, e.g.:
 - Self assessment
 - Lessons learned
 - collaboration and peer review
 - Benchmarking key outcomes and processes to "Best in Class"
 - Improved understanding between and the Laboratory

(Weight - 10%)

DOE

1.4.a **Radiation Protection of the Public and the Worker:**

The Lab uses 10 LBNL ISMS (7 ISMS and 3 LBL developed) principles. These are used to develop and improve processes to maintain or improve excellence in protecting the public and the worker from all radiological hazards arising from Lab operations and research activities.

Radiation doses to the maximally exposed individual (member of the public) and the worker, from all Lab operations, will be managed to assure that all applicable regulatory limits are not exceeded. Unplanned exposures to radioactive material and ORPS reportable occurrences of skin or personal clothing contamination are minimized. Radioactive material is managed so that it does not leave controlled areas in an uncontrolled fashion.

Radiological public and worker protection processes are linked to select system outcomes; outcome information is used in ensuring public and worker safety from all radiological hazards arising from the Lab operations and research activities.

Assumptions:

- The performance period for this measure is July 1, 1997 to June 30 1998
- The severity of events is to be considered in the evaluation. The weighting from high to low severity is: doses greater than 100 mrem, skin contamination, and clothing contamination.
- DOE and the Lab agree by 12/31/97 on the processes outcome linkage.
- Peer reviews, existing procedures, implementing memoranda, Lab tracking system data and other work process products shall serve as demonstrable evidence in contribution to satisfaction of measure gradients. It is not the intention of this measure to foster the generation of supportive or demonstrable documents other than those needed or are necessary to perform the work.
- The intent of the process measure is to drive the Lab ES&H programs toward the Integrated Safety Management System. Its gradients are deliberately linked to the Lab's 10 ISMS principles. It is recognized that success is measured on a sliding subjective scale and that satisfaction of a level of excellence does not necessarily mean that all gradients are completely met. Overall Performance is based upon evaluation many factors including but not limited to the ones listed below.

Gradient:

Good:

At least the first 3 of the following conditions are met through a mutual agreement between the Berkeley Lab and the DOE.

- The Lab shall provide evidence that outcome and processes are linked and effective.
- The Lab shall demonstrate that outcome is used to drive improvement and maintain the current level of excellence.

- The Lab shall demonstrate that criteria 1.4 has been used, that all 10 LBNL Integrated Safety Management System principles and that the five core work functions have been addressed in processes aimed at protecting the worker and public from all applicable radiological workplace hazards.
- The Lab and the local DOE office shall agree on a set of measures for best in class benchmarking. The Lab shall compare current performance with best in class benchmark data and if necessary develop a strategy to meet best in class benchmark data.

Excellent/Outstanding:

Documented evidence exists for criteria 1.4. but below the thresholds for Far Exceeds; to qualify for Far Exceeds at least 6 of the following conditions are satisfied at the 90% level and the benchmarking condition has been satisfied.

- There is documented evidence that management defines the scope of work for at least 90% of work activities where there are lesser workplace radiological hazards and 100% activities where there are significant workplace radiological hazards.
- The Lab provides documented evidence that there is line management responsibility for protection of the public and worker and that resources are effectively allocated (in balance with programmatic, operational and ES&H considerations) for at least 90% of work activities where there are lesser radiological hazards and 100% where there are significant radiological hazards.
- The Lab provides documented evidence that at least 90% of the lesser radiological hazards have been identified and 100% of the significant or major radiological hazards are analyzed and that appropriate (i.e. tailored to the operation) administrative and engineering controls have been developed and implemented.
- The Lab provides documented evidence that for at least 90% of work activities where there are lesser radiological hazards (not likely to cause significant harm to the public or worker) and 100% of the work activities where there are identified significant radiological workplace hazards, conditions and requirements for safe operation, are identified, and work is conducted in accordance with these conditions and requirements.
- The Lab provides documented evidence that at least 90% of all personnel working where there are lesser radiological workplace hazards and 100% of the applicable personnel working where there are significant workplace radiological hazards, possess sufficient knowledge and skills to execute their duties safely and with due regard for the radiological safety of the public.
- The Lab provides documented evidence that continuous improvement through self assessment, corrective actions, lessons learned and collaboration and peer review, in public and worker radiological safety is implemented for at least 90% of the workplace areas where there are lesser radiological hazards and 100% of the work activities where there are significant radiological hazards.

The Lab and the local DOE office shall agree on a set of processes for best in class benchmarking. The Lab shall use best in class benchmark data in implementing strategies that move the Lab's performance toward best in class benchmark levels. Excellence is achieved when the Lab's performance meets or exceeds best in class benchmark level.

Performance Measures:

1.4.b Safety Hazard Prevention and Protection of the Worker

This Performance Measure encompasses the areas of Safety, Industrial Hygiene, Occupational Medicine, Natural Phenomena and Fire Prevention. Unless otherwise specified, the term "Safety" shall represent prevention and protection in all the above disciplines.

The Lab uses 10 LBNL ISMS (7 ISMS and 3 LBL developed) principles. These are used to develop and improve processes to maintain or improve excellence in protecting the worker from all safety hazards arising from Lab operations and research activities.

The Safety disciplines (including Health Physics) work together in an integrated manner to help prevent injury and illness. This integrated approach is extended into Line Management functions such that safety hazard prevention and protection is seamless.

Worker protection processes are linked to select system outcomes; outcome information is used in ensuring worker safety from all hazards arising from the Lab operations and research activities.

Assumptions:

- The performance period for this measure is July 1, 1997 to June 30 1998.
- The severity of events is to be considered in the evaluation. Higher severity events include (but are not limited to): imminent danger situations (as defined by the Occupational Safety and Health Administration (OSHA)), worker exposures above OSHA Permissible Exposure Limits, biological exposures above the OSHA medical removal levels, and substantial property damage or personal injury due to fire.
- DOE and the Lab agree by 12/31/97 on the processes/outcome linkage.
- Subcontractor operations/personnel are included in any corrective actions if the subcontractor is performing part of the Laboratory's operations. Subcontractor statistics are gathered separately for those subcontractors that report their hours to the Laboratory. Subcontractors are excluded if they are "servicing" the Laboratory (e.g., copy machine vendors or other transient workers).
- Peer reviews, existing procedures, implementing memoranda, Lab tracking system data and other work process products shall serve as demonstrable evidence in contribution to satisfaction of measure gradients. It is not the intention of this measure to foster the generation of supportive or demonstrable documents other than those needed or are necessary to perform the work.
- The intent of the process measure is to drive the Lab ES&H programs toward the Integrated Safety Management System. Its gradients are deliberately linked to the 10 LBNL ISMS principles. It is recognized that success is measured on a sliding subjective scale and that satisfaction of a level of excellence does not necessarily mean that all gradients are completely met. Overall Performance is based upon evaluation many factors including but not limited to the ones listed below.

Gradient:

Good:

At least 5 of the following conditions are met as judged by Berkeley Lab and DOE staff.

- The Lab shall provide evidence that outcome and processes are linked and effective.
- The Lab shall demonstrate that outcome is used to drive improvement or maintain the current level of excellence.
- The Lab shall demonstrate that all criteria 1.4 have been used, that all Integrated Safety Management System principles and that the five core work functions have been addressed in processes aimed at protecting the worker from all applicable workplace safety hazards.
- There is appropriate and documented follow-up or response to injuries and illnesses, and exposures above the appropriate and applicable nationally recognized standard (such as OSHA PEL and ACGIH TLV)
- The subcontractor work force (as defined in the assumptions) is included in accident prevention programs.
- The Lab provides documented evidence of emergency planning response and property protection.

Excellent:

- Continuous quality improvement of the interaction between Occupational Medicine and the Safety disciplines and Line Management will be based on the Annual Interdisciplinary Peer Review and Improvement Process.
- The Laboratory has identified areas for injury reduction and is applying appropriate resources and attention to accident prevention in those areas.
- The Lab and the local DOE office shall agree on a set of processes for best in class benchmarking. The Lab shall compare current performance with best in class benchmark data and if necessary develop a strategy to meet best in class benchmark data.

Outstanding:

The first 6 and one additional of the following conditions are met or exceeded as judged by Berkeley Lab and DOE staff.

- The Lab provides documented evidence that an effective process exists for the elimination of workplace hazards, while ensuring that the lab mission continues to be met cost effectively.
- There is documented evidence that Lab management defines the scope of work for all activities where there are significant workplace safety hazards.
- The Lab provides documented evidence that there is line management responsibility for protection of the worker and that resources are effectively allocated (in balance with programmatic, operational and ES&H considerations) for all work activities where there are significant safety hazards (this would be defined by the need for activity authorizations such as AHD's OSR's or SAD's).
- The Lab provides documented evidence that there is a process for regular periodic review and assessment of hazards and that all the significant or major safety hazards are analyzed and that appropriate (i.e. tailored to the operation) administrative and engineering controls have been developed and implemented, while ensuring that the Lab mission continues to be met cost effectively.
- The Lab provides documented evidence that for all of the work activities where there are identified significant workplace safety hazards, conditions and requirements for safe operation are identified, and work is conducted in accordance with these conditions and requirements.
- The Lab provides documented evidence that all personnel working where there are significant workplace safety hazards, possess sufficient knowledge and skills to execute their duties safely.
- The Lab provides documented evidence that continuous improvement through self assessment, corrective actions, lessons learned and collaboration and peer review, in worker safety is implemented for all of the work activities where there are significant safety hazards.

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- The Lab and the local DOE office shall agree on a set of processes for best in class benchmarking. The Lab shall use best in class benchmark data in implementing strategies that move the Lab's performance toward best in class benchmark levels. Excellence is achieved when the Labs performance meets or exceeds best in class benchmark level.
- The Lab demonstrates that there is optimal two way communication between occupational medicine and all other applicable ES&H disciplines.
- The safety record of subcontractor companies is evaluated and considered in contracting.

Performance Measures:

1.4.c Waste Minimization, Pollution Prevention and Protection of the Environment

The Lab uses 10 LBNL ISMS (7 ISMS and 3 LBL developed) principles. These are used to develop and improve processes that maintain and enhance performance in environmental protection, waste minimization and pollution prevention associated with Lab operations and research activities.

Environmental concerns will be managed to assure that all applicable regulatory limits are not exceeded, unplanned releases are minimized, and regulatory standards of operation are followed.

The system for managing environmental protection, waste minimization and pollution prevention concerns will define environmental protection activities for establishing organization goals and policies, developing strategies for achievement, allocating resources for carrying out those strategies, providing structure and delineating roles, responsibilities, authorities, and accountabilities for accomplishing tasks, providing initiating mechanisms to produce the work effort, measuring, evaluating and correcting/improving performance.

Assumptions:

- Performance period for this measure is July 1, 1997 to June 30, 1998.
- Berkeley Lab and DOE agree by December 31, 1997 on the set of processes that are linked to the outcome measures.
- Performance will consider all aspects of the program that enhance and promote program objectives and overall compliance.
- The Laboratory has in place a system to evaluate new projects and activities for waste generation and pollution prevention opportunities.
- Peer reviews, existing procedures, implementing memoranda, Lab tracking system data and other work process products shall serve as demonstrable evidence in contribution to satisfaction of measure gradients. It is not the intention of this measure to foster the generation of supportive or demonstrable documents other than those needed or are necessary to perform the work.
- The intent of the process measure is to drive the Lab ES&H programs toward the Integrated Safety Management System. Its gradients are deliberately linked to the 10 LBNL ISMS principles. It is recognized that success is measured on a sliding subjective scale and that satisfaction of a level of excellence does not necessarily mean that all gradients are completely met. Overall performance evaluation is based on not just the gradients but the effectiveness of the complete Environmental Protection, and Waste Minimization & Pollution Prevention program.

Gradient:

Good:

- At least 8 of the following conditions are met as judged by Berkeley Lab and DOE staff.
 1. The Laboratory has linked process and outcome measures.
 2. The Laboratory has outcome results to drive improvement in programs where additional improvement is technically possible, or to maintain the current level of excellence in programs where further improvement is not cost-effective.

Appendix F - Objective Standards of Performance

3. Individuals throughout the organization recognize the environmental aspects of their job responsibilities and take responsibility for protecting the environment, minimizing waste and preventing pollution.
4. Environmental protection, waste minimization and pollution Prevention roles and responsibilities are well defined, clearly communicated, applicable to the work being performed and understood by all personnel whose activities may impact environmental performance.
5. Top management demonstrates its commitment to environmental protection, waste minimization and pollution prevention through personnel and managerial actions.
6. Formal programs are in place and kept up-to-date for the proper identification, management and control of hazardous materials and wastes to prevent or minimize their release into the environment.
7. Environmental risks are assessed and used to select the appropriate level of control to prevent or mitigate releases to the environment.
8. Environmental protection training needs are identified for all applicable Lab staff and tracked effectively.
Source operating requirements are established and communicated to source operators.
9. Formal programs are in place and kept up-to-date to effectively evaluate environmental protection, waste minimization and pollution prevention activities and communicate concerns and accomplishments within the Lab and to DOE.
10. The Lab and the local DOE office shall agree on a set of measures for best in class benchmarking. The Lab shall compare current performance with best in class benchmark data and if necessary develop a strategy to meet best in class benchmark data.

Excellent:

- All of the conditions for meets are satisfied and one is judged as superior by Berkeley Lab and DOE staff.
- The Lab and the local DOE office shall agree on a set of processes for best in class benchmarking. The Lab shall compare current performance with best in class benchmark data and if necessary develop and implement a strategy to meet best in class benchmark data.
- The Laboratory shall demonstrate that outcome is used to drive improvement or maintain the current level of excellence (for those programs where no further cost effective improvement is possible)

Outstanding:

- All of the conditions for meets are satisfied and two or more are judged as superior by Berkeley Lab and DOE staff. Some of the Laboratory's pollution prevention projects address the transuranic, low level and low level mixed waste streams that are costly and difficult to manage.
- The Lab and the local DOE office shall agree on a set of processes for best in class benchmarking. The Lab shall use best in class benchmark data in implementing strategies that move the Lab's performance toward best in class benchmark levels. Excellence is achieved when the Labs performance meets or exceeds best in class benchmark level.

Total System Outcome Performance Measures
(Weight = 60%)

Criteria:

Performance Measures:

1.5 **System Outcome measures**

System outcome measures are linked to the process measures. System outcomes are used to drive process excellence.

(Weight = 60%)

1.5.a **Routine Exposures from Routine Activities**

Occupational radiation doses to individuals (excluding accidental exposures) from DOE operations will be managed to assure that applicable 10 CFR 835 limits are not exceeded.

(Weight = 5%)

Assumptions:

- For FY98 the performance period is July 1, 1997 through June 31, 1998.
- Any actual or anticipated significant changes in workloads or badged worker population (interpreted to be an increase or decrease of 5% or more) that would affect radiation doses will be brought to the attention of UC and DOE and appropriate adjustments will be made.
- Some variability is expected which may not be indicative of a trend.
- This measure is directed toward current management and control of radioactive materials.

Gradient:

Good:

- The number of individuals with annual measurable exposures of less than 100 mrem, greater than or equal to 100 mrem and less than 250 mrem, and greater than or equal to 250 mrem and less than or equal to 500 mrem do not exceed the laboratory's 3 year running average for those 3 categories.

Excellent:

- No individual exposures in excess of 500 mrem
- The number of individuals with annual measurable exposures of less than 100 mrem, greater than or equal to 100 mrem and less than or equal to 250 mrem, and greater than or equal to 250 mrem and less than 500 mrem are below the laboratory's 3 year running average in two respective dose categories.

Outstanding:

- The number of individuals with annual measurable exposures of less than 100 mrem, greater than or equal to 100 mrem and less than 250 mrem, and greater than or equal to 250 mrem and less than 500 mrem are below the laboratory's 3 year running average in all three categories.

Performance Measures:

1.5.b **Radiation Protection of the Public and the Environment**

Public radiation doses to the maximally exposed individual (member of the public) and radiological emissions to the environment, from all Lab operations, will be managed to assure that all applicable regulatory limits are not exceeded.
(Weight = 5%)

Assumptions:

- For FY98 the performance period is January 1, 1997 through December 31, 1997
- Any actual or anticipated significant change in workloads (interpreted to be an increase or decrease of 10% or more) that would affect radiation doses or radiological emissions will be brought to the attention of UC and DOE and appropriate adjustments will be made.
- Each Laboratory will define any change in its site control level for the maximally exposed individual dose in coordination with its local DOE office by October 1 for use during the following year
- Expectations cited for "Exceeds" are consistent with ALARA goals.

Gradient:

Good:

- Radiation doses to the maximally exposed individual (member of the public) is greater than 4% and less than or equal to 10% of applicable regulatory limits.
- Radiological emissions to the environment are greater than 10% and less or equal to 20% of applicable regulatory limits.

Excellent:

- Radiation doses to the maximally exposed individual (member of the public) is less than or equal to 4% of applicable regulatory limits.
- Radiological emission to the environment are less than or equal to 10% of applicable regulatory limits.

Outstanding:

- Radiation doses to the maximally exposed individual (member of the public) is less than or equal to 1 % of applicable regulatory limits
- Radiological emissions to the environment are less than or equal to 1% of applicable regulatory limits.

Performance Measures:

1.5.c **Prevention of Unplanned Radiation Exposures**

Unplanned radiation exposures and ORPS reportable occurrences of skin or personal clothing contamination are managed and minimized

(Weight = 5%)

Assumptions:

- For FY98 the performance period is January 1, 1997 through December 31, 1997.
- The severity of the events is to be considered in the evaluation. The weighting from high to low severity is: unplanned radiation doses of greater than 100 mrem (weighting factor=1), skin contamination (weighting factor=0.75), then personal clothing contamination (weighting factor=0.5). If the ORPS event is classified as an Unusual Occurrence, the weighting factor is increased by a factor of 1.5.
- Data for this measure is reported as a normalized number of occurrences or exceedances.
- Some variability is expected which may not be indicative of a trend.

Good:

- The weighted number of occurrences will be maintained within one unit of the three year running average or equal to the ALARA goal.

Excellent:

- The weighted number of occurrences is less than the ALARA goal (currently this number is 4) for this measure set by the Berkeley Lab Radiation Safety Committee and agreed upon by Berkeley Lab and the local DOE office.

Outstanding:

- The weighted number of occurrences is less than or equal to 2.

Performance Measures:

- 1.5.d **Control of Radioactive Material**
Radioactive material, including radioactive sources and contaminated articles, is not found outside of controlled areas.
(Weight = 5%)

Assumptions:

- For FY98 the performance period is July 1, 1997 through June 31, 1998.
- Data for this measure is reported as the normalized number of occurrences or exceedances. Off-normal occurrences have a weighting factor of 1 and unusual occurrences have a weighting factor of 1.5.
- Some variability is expected which may not be indicative of a trend.

This measure is directed toward current management and control of radioactive materials.

Good:

- The weighted number of occurrences will be maintained to within 1 unit of the 3 year running average or equal to the ALARA goal.

Excellent:

- The weighted number of occurrences is less than the ALARA goal for this measure set by the Berkeley Lab Radiation Safety Committee and agreed upon by Berkeley Lab and the local DOE office.

Outstanding:

- The weighted number of occurrences is less than or equal to 2.

Performance Measures:

1.5.e Chemical Exposure Prevention

The number of exposures to toxic materials and physical and biological agents that are above applicable occupational exposure and medical removal levels will be tracked. A decreasing trend is expected.

(Weight = 5%)

Assumptions:

- For FY98 the performance period is July 1, 1997 through June 30, 1998.
- "Action level" is defined as one-half of 8-hour TWA, STEL and Ceiling for the OSHA PEL, ACGIH TLV[®], unless a different action level is specified by OSHA.
- Data for this measure is reported as the number of occurrences or exceedances versus the number of measurements taken.
- Exposure measurements will be corrected by the protection factor of the personal protective equipment in use.
- Some variability is expected which may not be indicative of a trend. Changes in operational levels or volumes shall be considered fully.
- Applicable exposures above the OSHA PELs resulting from an accident will be addressed by the local DOE office and the Laboratory.

Gradient:

Good:

- Ninety-five percent of the sampled exposures to toxic material/physical agents will be below the OSHA PEL.

Excellent:

- Ninety-five percent of the sampled toxic material/physical agent exposures will be below the ACGIH TLV[®] or other published occupational health standards.

Outstanding:

- 100% of exposures above the action level have been followed up by an industrial hygienist and corrective measures have been implemented when appropriate.

Performance Measures:

1.5.f Accident Prevention

The baseline period for comparison is the most recent 5 years of data. The Lab's Severity and frequency (defined as Lost Workday Incident Rate and Total Recordable Case Rate respectively) of accidents during the performance period will be compared to the baseline period. The number of Bureau of Labor Statistics reportable occurrences of these accidents will be tracked. A downward trend is expected as compared to the baseline years.

(Weight = 7%)

Assumptions:

- For FY97 the performance period is July 1, 1996 through June 30, 1997.
- Laboratory statistics will be collected for the baseline of Research and Services as reported to CAIRS.
- It is recognized that an initial increase may be experienced whenever a new prevention program is introduced and that some variability is expected which may not be indicative of a trend.
- Workers' Compensation costs will be considered during the self assessment.
- For FY97 and future years, the accident/injury types and baseline years will be updated by mutual agreement of the local DOE office and the Laboratory.
- Subcontractor operations/personnel are included in corrective actions. Subcontractor statistics will be maintained separately only for those subcontractors reporting hours worked to the Laboratory. Subcontractors are excluded if they are "servicing" the Laboratory (e.g., copy machine vendors or other transient workers).

Gradient:

Good:

- A downward trend in frequency and/or severity for the Laboratory is achieved.
- The subcontractor work force (as defined in the assumptions) is included in accident prevention programs.
- The frequency and severity rates for the research, and services functions are kept below the last available 5-year DOE average for research, and service contractors respectively.

Excellent:

- A downward trend in frequency and severity for the Laboratory is achieved.
- The frequency and severity rates for the Research and Services functions are kept 20% below the last available 5-year DOE average for Research and Service Contractors respectively.

Outstanding:

- An exceptional reduction in frequency and severity for the Laboratory is achieved.
- The frequency and severity rates for the Research and Services functions are kept 50% below the last available 5-year DOE average for Research and Service Contractors respectively.
- An exceptional reduction in injury frequency or severity is achieved in an area targeted for injury reduction.

Performance Measures:

- 1.5.g **Occupational Safety and Health**
Hazards are recognized during Occupational Safety and Health assessments and serious and imminent danger situations are appropriately mitigated.
(Weight = 7%)

Assumptions:

- Data will be collected for the period of July 1, 1996 through June 30, 1997.
- Imminent Danger situations and Serious violations are as defined by the OSHA Field Inspection Reference Manual and by Section 13(a) of the Occupational Safety and Health Act.
- Subcontractor operations/personnel are included if the subcontractor is performing part of the Laboratory's operations. Subcontractors are excluded if they are "servicing" the Laboratory (e.g., copy machine vendor or other transient workers).

Gradient:

Good:

- 70% of operations have documented evidence of annual safety inspection. All high hazard operations are inspected annually.
- Imminent Danger situations are mitigated immediately upon discovery.
- All Serious Violations are mitigated or corrected within 5 working days or an agreed-upon schedule. Until mitigation, equivalent protection or abatement will be implemented to ensure protection of workers.

Excellent:

- At least 90% of the scheduled formal self assessments have been completed and reports issued.
- At least 90% of the corrective actions have been completed on schedule.
- There is documented evidence that the lab has reviewed at least 90% of its workspaces, for those divisions reviewed in the current performance year, where there are hazards of medium and high level of concern as identified through the 1996 LBL IHA.

Outstanding:

- One hundred percent (100%) of the scheduled formal self assessments have been completed and reports issued.
- Corrective actions are consistently completed on schedule.
- There is documented evidence that the lab has reviewed 100% of its workspaces, for those divisions reviewed in the current performance year, where there are hazards of medium and high level of concern as identified through the 1996 LBL IHA.

Performance Measures:

1.5.h **Tracking Environmental Incidents**

The number of environmental incidents will be measured.
Environmental incidents include:

- violations resulting from regulatory inspections or regulatory reporting
- reportable occurrences of environmental releases exceeding regulatory or permitted levels

(Weight = 9%)

Assumptions:

Performance period for this measure is January 1, 1997 to December 31, 1997.

Audit is defined as an external review of a program that results in a formal report to the Laboratory, with any findings tracked by the appropriate organizational group (e.g., LBNL-OAA).

Environmental releases or excursions that remain within compliance limits will not be counted as incidents by this measure.

The Laboratory has the option to apply a weighting factor to each incident, depending on its severity and magnitude. All releases that are serious will be given a weighting factor of 1, on a scale of 0 to 1. A release is considered serious unless an alternate weighting factor is proposed by Berkeley Lab. The Laboratory and DOE technical counterparts will jointly agree upon the assignment of an appropriate weighting factor for non-serious releases.

Percent increase is based upon comparisons made to the average of the 3 previous years.

When the number of incidents is less than or equal to 3, scoring will be based solely on this number.

Gradient:

Good:

- More than 3 incidents and an increase in incidents by less than or equal to 50%

Excellent:

- More than 1 and less than or equal to 3 incidents

Outstanding:

- 1 incident or less.

Performance Measures:

1.5.i Waste Reduction and Recycling

The Laboratory continues to progress towards meeting the DOE's pollution prevention goals for the year 2000.
(Weight = 10 %)

Assumptions:

- DOE's pollution prevention goals by waste type, that are measured by this performance measure, are defined as follows:
 - Reduce by 50% the generation of radioactive waste (defined as TRU and LLW) from routine operations;
 - Reduce by 50% the generation of low-level mixed waste from routine operations;
 - Reduce by 50% the generation of hazardous waste from routine operations; and
 - Reduce by 33% the generation of non-hazardous waste from routine operations.
- For FY98 the performance period is January 1, 1997 through December 31, 1997.
- CY93 waste generation quantities will be used as a baseline for measuring waste reductions. (CY94, corrected to reflect previous years improvements, will be used for nonhazardous waste at LLNL. CY93 baselines for low level mixed and radioactive wastes will be determined by linear extrapolation of the high quality data for CY94 and CY95 at Berkeley Lab.)
- Recycling, reuse and exchange are considered to be methods of waste minimization and will be tracked.
- Any significant new project, activity or increase in workload will be evaluated for pollution prevention/waste minimization opportunities. After pollution prevention/waste minimization opportunities are implemented for the project or activity, the resulting new waste stream will not be included in the waste reduction calculation.
- Cleanup and stabilization waste (including environmental restoration waste, stabilization of nuclear and nonnuclear materials, and deactivation and decommissioning of facilities), legacy, construction debris and USEC waste will not be included in the calculations for meeting the waste reduction goals but will be included in the discussion on meeting the recycling goal.
- Waste generation will be reported and measured in the same way that it has been reported for this performance measure in previous years. (Routine hazardous waste generation at Berkeley Lab will be tracked using the total quantities shipped off site regardless of destination, as reflected in the EPA Biennial Reports).

Gradient:

- Progress toward reduction goals are evaluated by either using the following charts or progress on an agreed-to "waste type" reduction plan:

Appendix F - Objective Standards of Performance

Chart for or routine mixed, radioactive and hazardous waste streams:

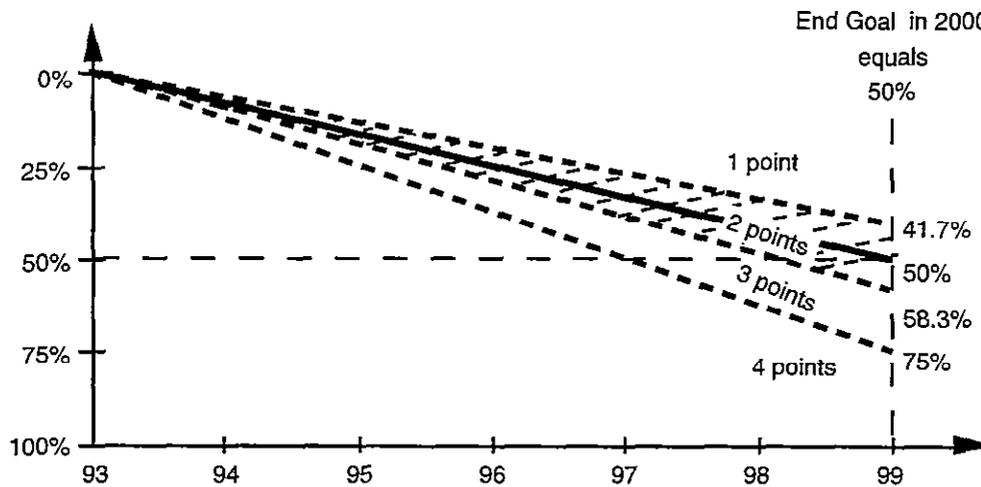
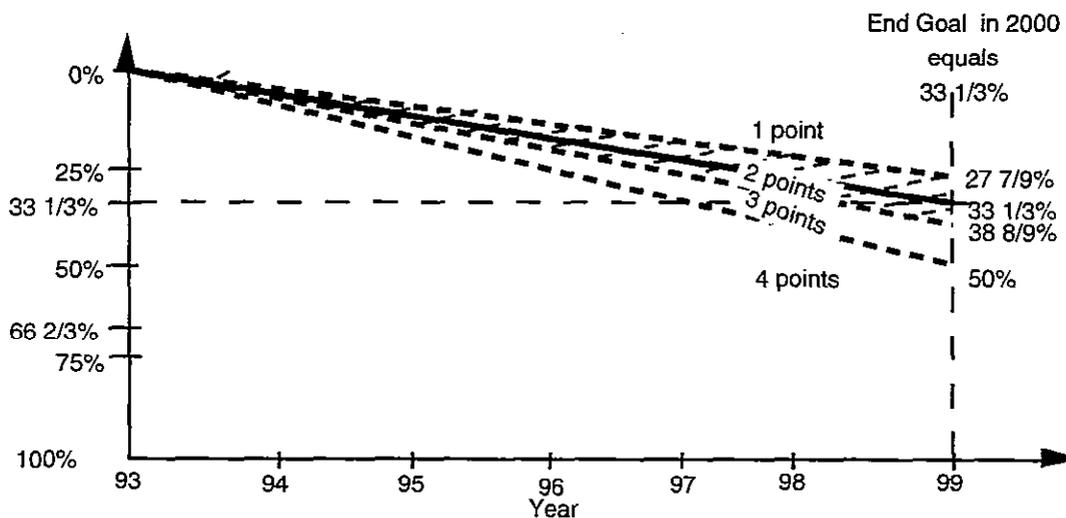


Chart for routine sanitary waste streams:



Good:

- A reduction in generation of each waste type is calculated and scored (1 to 4 points) then summed. The sum for the four waste types is 7, 8 or 9 points.

Excellent:

- A reduction in generation of each waste type is calculated and scored (1 to 4 points) then summed. The sum for the four waste types is greater than 9 points but less than 12.

Outstanding:

- A reduction in generation of each waste type is calculated and scored (1 to 4 points) then summed. The sum for the four waste types is greater than 12 points and less than 16.
- An annual increase in the types and amounts of wastes and materials recycled and/or reused onsite or offsite (after adjustment for source reduction)..

Section B - Performance Objectives, Criteria and Measures for Operations & Administration

Part II-Operations

II - 3 Facilities Management

Performance Objective #1 Real Property Management

The Laboratory will effectively manage Real Property.
(Weight = 5%)

Performance Objective #1 Real Property Management

The Laboratory will effectively manage Real Property. (Weight = 5%)

Criteria:

- 1.1 **Real Property Management**
Real property is effectively managed consistent with mission, requirements, and DOE direction.
(Weight = 5%)

Assumptions:

Intent is to measure the effectiveness, completeness, and timeliness of implementation of Real Property management actions. Milestones will be established in partnership with DOE and made a matter of record in the first month of the fiscal year. Milestones may be established for Facilities Information Management System completeness, office space utilization, substandard building space conversion, facility leases, etc.

Gradient

Outstanding - 0.90
Excellent - 0.80
Good - 0.70
Marginal/Unsatisfactory - less than 0.70

Performance Measures:

- 1.1.a **Program Implementation**
Number of completed milestones/milestones scheduled for completion.
(Weight = 5%)

Performance Objective #2 Physical Assets Planning

The Comprehensive Integrated Planning Process should reflect current and future Laboratory needs.
(Weight = 14%)

Criteria:

- 2.1 **Comprehensive Integrated Planning Process**
The Laboratory develops, documents, and maintains a comprehensive integrated planning process that is aligned with DOE mission needs. **(Weight = 14%)**

Assumptions:

The Laboratory will work with DOE counterparts in a cooperative effort to continuously evaluate the effectiveness of the comprehensive land-use planning process through the development of Laboratory specific planning elements. Site specific planning elements will be made a matter of record in the first month of the fiscal year.

Gradient

Outstanding - 0.90

Excellent - 0.80

Good - 0.70

Marginal/Unsatisfactory - less than 0.70

Performance Measures:

- 2.1.a **Effectiveness of Planning Process**
Assess how the planning process is executed to achieve maximum effectiveness in anticipating and articulating DOE and Laboratory needs.
(Weight = 14%)

Performance Objective #3 Project Management

The Laboratory will complete construction projects within approved budgets and schedules.
(Weight = 33%)

Criteria:

Performance Measures:

3.1 Construction Project Performance

Construction projects greater than \$500K (regardless of type of funds) achieve schedule, and performance objectives.

(Weight = 20%)

3.1.a Work Performed

Number of milestones completed/number of milestones planned for completion.

(Weight = 20%)

Assumptions:

The intent is to measure actual progress against that planned for the fiscal year and for the Laboratory to execute projects and cost project funds in a timely manner. A milestone list for all active projects will be negotiated with DOE and made a matter of record in the first month of the fiscal year. Only significant milestones will be listed, but each active project will have at least one milestone per year. By mutual agreement between the Laboratory and DOE, milestones may be weighted for significance and/or for late/early completion. Negotiated milestones are not to be interpreted as baseline change approval. Milestones must be consistent with either approved or proposed baselines. Completion is defined as Critical Decision 4, construction completion or beneficial occupancy, as mutually agreed.

Gradient: (LBNL/LLNL)

Outstanding - 1.00

Excellent - 0.90

Good - 0.80

Marginal/Unsatisfactory - less than 0.80

Gradient: (LANL)

Outstanding - 1.00

Excellent - 0.95

Good - 0.90%

Marginal/Unsatisfactory - less than 0.90

3.2 Construction Project Cost

Line-Item projects (including any project \$2000K and over regardless of type of funds) meet cost baselines.

(Weight = 13%)

3.2.a Total Estimated Cost (TEC)

Estimated cost at completion for all active projects/performance baseline TEC for all active projects.

(Weight = 13%)

Assumptions:

The intent is to measure Laboratory performance in executing projects within the approved TEC. The performance baseline is the original approved baseline adjusted for allowed cost or work scope changes. DOE determines whether cost or work changes are allowed. The method of calculating estimated cost at completion and how to handle contingency will be made a matter of record in the first month of the fiscal year. Disposition of pending Baseline Change Proposals, for the purposes of this measure, will be made by mutual agreement in the tenth month of the fiscal year. By mutual agreement between the Laboratory and DOE, projects may be weighted for significance.

Gradient:

Outstanding - 0.96

Excellent - 0.98

Good - 1.00

Marginal/Unsatisfactory - greater than 1.00

Criteria:

- 3.3 **Project Delivery Cost**
Project delivery costs for construction projects greater than \$500K are managed effectively.
(Weight = 0%)

Assumptions:

The intent is to measure project delivery costs as a percentage of estimated or actual construction costs. Projects to be measured are those with a TEC greater than \$500K that are scheduled to complete design and/or construction in FY98. The intent is to measure completed design and construction services costs versus estimated or actual construction costs. Design and construction services costs will be calculated and tracked separately, but consolidated for reporting under this measure. Design services costs to be tracked will include all costs (including burdens, G&A, etc.) associated with the following: Titles I & II Design, Design/Engineering services, Design-phase Project Management, Laboratory Design Review & Support, and all other costs (costs not in one of these categories) directly associated with project design. Construction services costs will include all costs (including burdens, G&A, etc.) associated with the following: Title III Design/Engineering, Construction-phase Project/Construction Management, Construction-phase Laboratory Services & Support, and all other costs (costs not in one of these categories) directly associated with the construction phase of the candidate projects. A mutually agreed list of projects will be made a matter of record in the first month of the fiscal year. Measure not applicable to LBNL and LLNL.

Gradient:

Track and trend.

Performance Measures:

- 3.3.a **Design/Construction Services**
Total project delivery costs/total construction costs for construction projects.
(Weight = 0%)

Performance Objective #4 Maintenance

The Laboratory will maintain capital assets to ensure reliable operations in a safe and cost-effective manner.
(Weight = 33%)

Criteria:

Performance Measures:

4.1 Facility Management

Facility operations and maintenance are effectively managed consistent with mission, risks, and costs.
(Weight = 13%)

Assumptions:

Intent is to measure the effectiveness and timeliness of the Laboratory's facility maintenance program. A list of mutually agreed milestones will be made a matter of record in the first month of the fiscal year. For multiple-facility milestones, completion percentage will be an average of the completion percentages for each facility included in the milestone. High hazard and nuclear facilities milestones will be weighted for significance. At LANL, milestones will be established in partnership with the Facility Management Council. Maintenance Implementation Plan (MIP) milestones and remaining milestones of the Maintenance Program Milestones Agreement of July 1993 will be included in this measure.

Gradient:

Outstanding - 105%
Excellent - 100%
Good - 95%
Marginal/Unsatisfactory - less than 95%

4.2 Maintenance Program

The facility maintenance program is effectively managed and performed.
(Weight = 20%)

Assumptions:

A composite index will be calculated using a weighted average for selected performance indicators. The list of performance indicators, and the calculation algorithm will be made a matter of record in the first month of the fiscal year. Performance gradient calculations will consider "Best-in-Class" for comparable Energy Facility Contractors Group (EFCOG) benchmarking participants and the EFCOG average for comparable activities/sites.

Gradient:

Outstanding - 1.00
Excellent - 0.90
Good - 0.80
Marginal/Unsatisfactory - less than 0.80

4.1.a Program Implementation

Sum of completion percentages for all milestones worked/milestones scheduled for completion.
(Weight = 13%)

4.2.a Maintenance Index

Calculate quality performance index based on EFCOG Maintenance Performance Indicators. (Weight = 20%)

Performance Objective #5 Utilities/Energy Conservation

The Laboratory will maintain a reliable utility system and conserve energy. (Weight = 15%)

Criteria:

Performance Measures:

- 5.1 **Reliable Utility Service**
Maintain reliable utility service.
(Weight = 8%)

- 5.1.a **Utility Service**
Total number of customer hours of utility service less the number of customer hours of unplanned outages/total customer hours.
(Weight = 8%)

Assumptions:

Unplanned outages that are caused by occurrences outside the boundary of the Laboratory's utility system may be excluded. Utilities to be measured, with assigned weights will be made a matter of record in the first month of the fiscal year. Definition of "Customer Hours" will be defined separately for each utility measured. A 12-month running average will be reported.

Gradient: (LBNL/LLNL)

Outstanding - 99.995%
Excellent - 99.990%
Good - 99.982%
Marginal/Unsatisfactory - less than 99.982%

Gradient: (LANL)

Outstanding - 99.971%
Excellent - 99.941%
Good - 99.883%
Marginal/Unsatisfactory - less than 99.883%

- 5.2 **Energy Consumption**
Effectively manage energy usage.
(Weight = 2%)

- 5.2.a **Building Energy**
The reduction in energy usage from FY85 levels in BTUs per gross square feet of building expressed as a percent of FY85 energy usage.
(Weight = 2%)

Assumptions:

Reduction for FY98 interpolated from the DOE goal of a 30% reduction from FY85 levels by FY2005.

Gradient:

Outstanding - 25%
Excellent - 22%
Good - 19%
Marginal/Unsatisfactory - less than 19%

Criteria:

Performance Measure:

- 5.3 **Energy Management**
Energy initiatives are managed consistent with a comprehensive energy management plan.
(Weight = 5%)

- 5.3.a **Energy Goals**
Energy goals accomplished/goals scheduled to be accomplished in accordance with the plan.
(Weight = 5%)

Assumptions:

The energy management plan will be made a matter of record in the first month of the fiscal year. Areas to be addressed in the plan are: (1) surveys and inspections for identifying cost effective energy and water conservation measures, including completion of Comprehensive Facility Audits by March 2004, energy conservation in surplus facilities, identification of low cost opportunities and solar/renewable energy applications; (2) completion of FEMP funded studies within budget and within one year of funding; (3) progress toward installing all cost-effective energy and water conservation measures identified by Comprehensive Facility Audits, by January 2005; (4) completion of FEMP funded retrofit projects within schedule and within two years of funding; (5) design and construction of new buildings and building alterations according to federal energy Reports and building commissioning; (6) provisions for cost effective energy and water conservation in real property leases; (7) use of alternative project financing, including Energy Savings Performance Contracts and demand-side management programs; (8) energy management training; (9) employee awareness; and, (10) procurement of energy efficient and water saving products.

Gradient:

Outstanding - 0.95

Excellent - 0.85

Good - 0.75

Marginal/Unsatisfactory - less than 0.75

Note: Plans, lists, and milestones made a matter of record in the first month of the fiscal year may be revised during the year by mutual agreement between the Laboratory and DOE.

Section B - Performance Objectives

PART III - Administration

III - 1 Financial Management

Performance Objective #1 Customer Focus and Satisfaction

Financial Management's practices are customer oriented.
(Weight = 20%)

Criteria:

- 1.1 **Methods to Evaluate Customer Expectations**
Maintain systematic methods/programs to collect information and determine internal and external customer needs and levels of satisfaction.
(Weight = 10%)

Performance Measures:

- 1.1.a **Effectiveness of Methods**
Degree to which effective and systematic methods to collect, document, and use customer feedback information are defined and deployed.
(Weight = 10%)

Assumptions:

Identify internal and external customer groups. Describe what and how information is collected, frequency and methods of collection, and how the finance and budget organizations evaluate and improve their processes for determining customer satisfaction, requirements, expectations, and preferences in support of missions.

Gradient:

A Good rating is achieved by developing and implementing the capability for systematically obtaining customer feedback.

Factors that will be considered for a higher rating include how well:

- coverage of customer groups is identified
- the methods used are effective customer communication tools
- customer learning strategies have continuity and are consistently deployed
- customer feedback is used to improve products/services provided to customers

Appendix F - Objective Standards of Performance

Criteria:

1.2 **Customer Satisfaction**
Improved levels of customer satisfaction.
(Weight = 10%)

Performance Measures:

1.2.a **Customer Satisfaction Results**
Improved levels of customer satisfaction over time.
(Weight = 10%)

Assumptions:

Describe current levels and trends in key measures and/or indicators of customer satisfaction and dissatisfaction.

Gradient:

A Good rating is achieved by demonstrating that Finance and Budget customers are generally satisfied with the products and services provided.

Factors that will be considered for a higher rating include:

- demonstrated improved or sustained high levels customer satisfaction
- customer satisfaction is maintained across most customer groups
- no general dissatisfaction exists with primary products/services provided

Performance Objective #2 Operational Effectiveness

Achieve cost effective and efficient financial management operations by applying available resources to continuous improvement efforts.

(Weight = 40%)

Criteria:

2.1 Leadership in Improving Financial Management Efficiency and Effectiveness

Consistent with DOE requirements and plans, take proactive leadership role to improve the financial management effectiveness and efficiency of the budget and financial processes and the financial reporting systems.

(Weight = 17%)

Assumptions:

The annual budget process and DOE routine periodic reports will be measured for timeliness and quality by measuring on-time performance. A narrative will describe the continuous process/product improvements, internal process used to validate the estimates including a discussion of the balances between programmatic and distributed budget requirements, and the proactive activities related to this Performance Measure.

Gradient:

A Good rating is achieved by meeting customer due dates and by demonstrating tangible incremental improvements in these processes and/or in the products developed.

Factors that will be considered for a higher rating include:

- reductions in cycle time and/or cost, automation improvements and initiatives
- proactive activities such as training and development of Financial Management's staff and internal customers, and coordination with other divisions/ organizations to address financial concerns
- customer feedback and other relevant information
- early submission of accurate and complete reports such as MARS/FIS, budgets, and DIMS prior to DOE's due dates.

Assumptions:

The measurement of special ad hoc DOE requests regarding budgets, financial information, analyses, estimates, and proposals submitted will include only formal written requests with deadlines of 8 or more working hours. Narrative will include customer satisfaction information from 1.1.

Gradient:

A Good rating is achieved with 90% of on-time performance with acceptable quality as determined from customer feedback.

Factors that will be considered for a higher rating include:

- on-time performance greater than 90%
- good customer feedback
- process improvements, cost, and cycle time reductions
- handling a higher volume or more complex requests

Performance Measures:

2.1.a Quality Performance in Reporting Processes

Budgets and financial reports and information, analyses, estimates, and proposals submitted will be evaluated for minimal time/form/ content deficiencies and incorporate budget validation and other systematic customer feedback. (Weight = 5%)

Performance Measures:

- 2.1.b **Leadership in Systems Improvements**
Degree to which proactive leadership supports DOE and Laboratory initiatives for continued contractor financial systems improvements.
(Weight = 12%)

Assumptions:

Narrative will describe the Laboratory's progress in support of this criterion, using existing tools and the Financial Management Systems (FMS) plan.

Gradient:

Factors that will be considered for Good rating include:

- timeliness of the FMS plan
- efforts are directed at initiatives with the most value added
- involvement in DOE's initiatives
- progress towards short-term initiatives

Factors considered for a higher rating include:

- progress towards long-term initiatives
- proactiveness in seeking opportunities for supporting DOE initiatives
- improved capacities, capabilities, and/or cost efficiencies for other financial processes not addressed in measure 2.2
- positive customer feedback

Criteria:

- 2.2 **Transaction Processing Improvements**
Reduce cycle times and/or costs while improving quality and accuracy for the processes identified.
(Weight = 13%)

Assumptions:

The Laboratory's finance and budget organizations will conduct benchmarking studies for financial processes identified in the study methodology every two years. The Laboratory will analyze the benchmarking results and select processes to be measured and improved prior to the next benchmarking study. The Laboratory will present its study findings and areas selected for improvement to its DOE customer for concurrence. Additional improvement processes may be selected in conjunction with the DOE. The Laboratory will also use the benchmarking information to select and demonstrate areas of excellence to feature in its self-assessment. The selected processes will be measured and featured in the annual self-assessments during the two years between benchmarking studies. Where necessary and appropriate, benchmarking measures will be augmented with qualitative information and other performance indicators for the selected processes.

Performance Measures:

- 2.2.a **Demonstration of Improvement**
Evaluation of improvement trends for processes selected for improvement towards best practices as compared with benchmarking information. Showcase areas of excellence.
(Weight = 13%)

Gradient:

A Good rating is achieved by demonstrating that selected process improvements are progressing in accordance with the Laboratory's plan.

Factors that will be considered for a higher rating include:

- process improvements resulting in performance above the benchmarking median
- processes performed close to the benchmarking study's first quartile level
- high levels of product/service quality are maintained
- effective linkage to Objective 1.0
- percent of processes maintained above the benchmarking median
- featured areas of excellence reflect outstanding performance

Criteria:

2.3 **Work Force Management**
Develop a highly skilled, motivated, empowered
Financial Management work force.
(Weight = 10%)

Performance Measures:

2.3.a **Effective Work Force Management**
Evaluation of processes, systems, and initiatives
related to Financial Management work force
management. (Weight = 10%)

Assumptions:

Narrative to describe the management of processes, systems, and initiatives related to the finance and budget work force.

Gradient:

A Good rating is achieved by establishing a systematic approach to Financial work force management.

Factors that will be considered for a higher rating include:

- span of control ratios
- number and effectiveness of self-directed work teams
- merging of related functions
- training and development activities
- alignment of individual performance objectives/appraisals with Financial Management objectives

Performance Objective #3 Financial Stewardship and Integrity

Financial Management's practices provide for financial stewardship, including compliance and data integrity.
(Weight = 40%)

Criteria:

- 3.1 **Costs and Commitments are Managed Properly**
Ensure that all costs and commitments are within DOE-authorized funding levels and that costs and commitments in excess of such levels are properly reported and recorded.
(Weight = 10%)

Performance Measures:

- 3.1.a **Costs and Commitments are Controlled to Appropriate Funding Levels**
Effectiveness of the Laboratory to control costs to B&R Level 9 and control costs plus commitments within authorized major funding levels (Obligation Control Level).
(Weight = 5%)

Assumptions:

"Within funding levels" defined as within identified funding in the contract modifications.

"Commitments" are defined as uncosted balances under contracts awarded by the Laboratory that are set aside or encumbered, including purchase orders issued; contracts and subcontracts awarded, including the full liability under lease purchases and capital leases; termination cost for incrementally funded firm fixed price contracts, operating lease agreements, and multi-year service contracts that contain termination clauses; and other agreements for the acquisition of goods and services not yet received and uncosted balances related to other integrated M&O contractor liabilities.

Meeting the objective of this performance measure is applicable only at year end for Construction, Operating, and Capital Equipment funds. Line item capital equipment and construction is applicable monthly. A narrative will be written to describe the Laboratory's performance relative to this measure. The narrative will identify the number of Obligation Control Level (OCL), B&R Level 9, line item capital equipment, and construction funding categories being measured.

Gradient:

A Good rating is achieved by staying within funding levels as defined above.

Factors that will be considered for a higher rating include:

- training and development
- other proactive activities that improve the effectiveness of the Laboratory to manage and control funds
- controlling costs within funding levels identified in the contract modification for each accounting period

Criteria:

Performance Measures:

- 3.1.b **Control of Funds**
Evaluation of proactive activities designed for control of funds.
(Weight = 5%)

Assumptions:
Narrative describing initiatives.

Gradient:
A Good rating is achieved by implementing an effective process for mitigating administrative control of funds violations.

Factors that will be considered for a higher rating include:

- process improvements
- identify control improvements and enhancements
- awareness training
- timely notification to DOE of significant changes in projected year-end uncosted balances

- 3.2 **Financial Management Practices**
Ensure that financial management and reporting practices fully disclose the results of operations and contain accurate, useful, timely information for program and fiscal management needs.
(Weight = 20%)

- 3.2.a **Financial Policies, Practices, Data, and Reports**
Evaluation of the level to which the Laboratory's financial policies, practices, data, and reports conform with applicable DOE requirements.
(Weight = 20%)

Assumptions:
Provide a narrative description of the financial management practices performed to better manage DOE's accounts with primary emphasis on accounts or processes identified by the Laboratory and DOE as high risk.

Gradient:
A Good rating is achieved by demonstrated incremental improvement in financial management practices of the high risk areas to ensure that financial practices, policies, data, and reports are consistent with DOE requirements.

Factors that will be considered for a higher rating include:

- results of financial statement audits
- results of CAS Disclosure Statement reviews/revisions
- significant improvement in the financial practices of high risk accounts or processes
- improvement in the financial practices of other low risk accounts while maintaining good practices for high risk accounts
- proactive interaction with the DOE with respect to financial management matters

Criteria:

Performance Measures:

3.3 **Effective Internal Controls and Compliance**
Provide for effective internal controls and ensure timely and effective resolution of identified weaknesses.
(Weight = 10%)

3.3.a **Internal Controls/Compliance Management**
Degree to which an effective system for identifying, reviewing, and correcting (if identified) financial management internal control/ compliance processes is maintained.
(Weight = 10%)

Assumptions:

Describe and self-assess the effectiveness of the internal controls and financial management techniques employed to minimize and mitigate risks for the major financial management processes identified in conjunction with DOE.

Gradient:

A Good rating is achieved by accurately describing well designed and well deployed systems/processes for managing internal controls and compliance concerns/weaknesses.

Factors that will be considered for a higher rating include:

- a risk prioritization system that demonstrates Laboratory focus on high risk financial management control/compliance areas
- prompt completion of corrective actions
- process improvements
- aggressiveness of corrective action schedules
- effective process for identifying with DOE, annual target areas
- proactive leadership in addressing and correcting internal and external audit findings and concerns related to financial management practices

Assumptions:

Where appropriate incorporate, in the self assessment, historical trends as the data becomes available.

Laboratory-specific targets identified by end of January of each year contingent on availability of benchmarking results.

Note: Laboratory-wide cost savings initiatives require the highest level of visibility and Laboratory commitment. For this reason, Performance Objectives, Criteria and Measures (POCMs) addressing cost savings are included in the Laboratory Management POCMs instead of here in the Financial Management section.

Section B - Performance Objectives

Part III - Administration

III - 2 Human Resources

Performance Objective #1 Cost Effectiveness

The Laboratory will strive to achieve cost effective HR systems and practices.
(Weight = 32%)

Criteria:

- 1.1 **Review and Evaluation of HR Systems and Processes**
HR systems are processes reviewed and evaluated in order to optimize the delivery of services with respect to quality and cost.
(Weight = 11%)

Performance Measures:

- 1.1.a **Evaluation of HR Systems and Processes**
The Laboratory will critically examine HR systems and processes.
(Weight = 11%)

Agreement:

LANL/LLNL: The Laboratory will use a variety of techniques that may include internal customer feedback mechanisms, cost benefit analysis, work flow analysis, process mapping, benchmarking, etc., to streamline, reengineer, outsource, or eliminate existing systems and processes or implement new initiatives.

LBNL:

1. The Laboratory will critically examine and document the system for identifying supervisors, managers and confidential employees.
2. The examination will emphasize increasing efficiencies and eliminating redundant work.

Gradients:

LANL:

Good:

Major HR systems or processes (as defined by the Laboratory) are prioritized for review. Project plans are developed for one or two, and action is initiated.

Excellent:

As a result of reengineering, or other actions, improvements are achieved as evidenced by internal customer feedback, improved cycle times, benchmarking earlier outcomes vs. current outcomes, cost benefit analysis, or comparisons with other organizations which have made similar efforts, cost savings, etc.

Outstanding:

As a result of reengineering, or other actions, significant improvements are achieved as evidenced by internal customer feedback; improved cycle times; benchmarking earlier outcomes vs. current outcomes, cost benefit analysis, or comparisons with other organizations which have made similar efforts, cost savings, etc.

Appendix F - Objective Standards of Performance

LBNL:

Good:

Identification and accurate quarterly reporting of the names of supervisors, managers, and confidential employees to ensure that employees are correctly classified.

Excellent:

No unfair labor practices charges or grievances are received based upon incorrect identification of supervisors, managers, or confidential employees.

Outstanding:

The Laboratory completes the system review identified for FY 98, implements appropriate actions to correct identified deficiencies and begins another high priority HR system review.

LLNL:

Good:

Major HR systems or process (as defined by the Laboratory) are prioritized for review. Project plans are developed for one or two, and action is initiated, and there is measurable progress or actions taken.

Excellent:

As a result of process improvements or other actions, added improvements are achieved over the prior year as evidenced by internal customer feedback, benchmarking earlier outcomes vs. current outcomes, cost benefit analysis, or comparisons with other organizations which have made similar efforts, cost savings, etc.

Outstanding:

In addition, significant improvements are achieved, such as completion ahead of schedule, or conclusion of unusually complex projects, or can serve as a model for other organizations.

Criteria:

Performance Measures:

- 1.2 **Workforce Planning/Staffing**
The Laboratory has an effective, integrated workforce planning system
(Weight = 10%)

- 1.2a **Workforce Planning**
Evaluation of the effectiveness of the Laboratory's workforce planning system.
(LANL Weight = 5%)
(LBNL Weight = 4%)
(LLNL Weight = 10%)

Agreements:

LANL: This measure will consider development and implementation of workforce planning processes and documentation which identify workforce skill requirements and staffing strategies. "Implement effectively..." means the degree to which it contains the following elements:

- Development of a baseline assessment of current workforce composition, jobs and competencies.
- Analysis of future workforce requirements based on strategic plans, program guidance, budgets, and contract reform strategy.
- Determination of future workforce composition, jobs, and competencies.
- Comparison of current workforce composition to future workforce composition to identify shortages and excesses.
- Training and development programs address and minimize the difference between the internal skills that exist and those that are required to satisfy staffing requirements identified in the workforce planning process.

Appendix F - Objective Standards of Performance

LBL: HR will initiate a process for partnering with the Directorate and the major programmatic division customers (Computing Sciences, Energy Sciences, General Sciences, Life Sciences) to develop proactive workforce pre-planning consistent with new scientific initiatives.

1. "Process" will be regular meetings, at least quarterly, with the Directorate and key programmatic division customers.
2. HR will produce tailored staffing/recruitment/training plans to address new scientific initiatives.
3. Workforce planning strategies will be aligned with the Laboratory's Institutional Plan and supportive of the principle of the DOE contractor HR Strategic Plan.

Gradients:

LANL

Good:

Development and implementation of workforce planning processes and documentation which satisfy all elements listed.

Excellent:

Shortfalls are tracked, trended, and benchmarked against like organizations as agreed upon by the Laboratory and the Department of Energy.

Outstanding:

Implementation of strategies to resolve shortfalls and excesses between current and future workforce compositions.

LBL:

Good:

Quarterly pre-planning meetings are held with the Directorate and the major programmatic division customers (Computing Sciences, Energy Sciences, General Sciences, Life Sciences) to develop proactive workforce pre-planning consistent with new scientific initiatives.

Excellent:

A plan with milestones and a schedule is developed for conducting a baseline assessment of current workforce composition and demographics.

Outstanding:

A dynamic methodology (i. e., one that is responsive to changing circumstances) is developed to connect current workforce with future needs.

LLNL:

Good:

Workforce reviews are conducted regularly; staffing, recruiting and appropriate training plans are updated to reflect changing needs.

Excellent:

In addition, assess new hire and hiring manager satisfaction with recruiting and orientation process, and modify process as required.

Outstanding:

In addition, development of tools (such as implementation of skills database where practical, etc.) and capabilities (such as expanded, integrated campus recruitment effort, etc.) for ongoing improvement. Recruiting efforts are analyzed for cost and effectiveness, and changes made to provide continuous improvement and increased cost effectiveness.

Criteria:

Performance Measures:

1.2b **Supplemental Workforce
(LANL/LBNL only)**

Evaluation of the effectiveness of the Laboratory's system, policies, and procedures for the appropriate, cost effective management of recruiting programs, hiring processes, and supplemental labor workforce.

(LANL Weight = 5%)

(LBNL Weight = 6%)

Agreements:

LANL: Analyses and evaluations will be conducted to determine the effectiveness of the mechanisms utilized to implement workforce planning results. The following areas will be addressed:

- Acquisition and management of supplemental workforce are cost effective and address workforce planning requirements.
- Cost effective recruiting programs yield highly diverse and qualified pools of applicants.
- Rate of job offers accepted to job offers made helps to determine that employment with the Laboratory is desirable.
- Total cycle time averages from date of job requisition to date of offer letter help to determine whether the employment process is effective.

By October 1, 1997, the Laboratory and DOE/AL will develop and document written criteria and guidelines to be utilized for Laboratory's self-assessment in the areas of recruiting, hiring and supplemental labor.

LBNL:

- Recruiting programs
 - 1) The Laboratory's recruiting program will be analyzed to determine the most cost effective recruiting strategies.
 - 2) "Recruitment strategies" will include newspaper ads, journal ads, trade shows, search firms, Web technology.
 - 3) Because FY 98 is the first year of this PM, sufficient data for meaningful analysis may not be reasonably collected within the assessment period.

• Supplemental labor

- 1) The results of the critical review will form the basis for tracking and trending the use of supplemental labor.

• Hiring Processes

The Laboratory will not evaluate hiring processes under this Performance Measure.

Gradients:

LANL:

Good:

Current Laboratory recruiting/staffing strategies and processes are documented and systems are developed to capture job offer/rejection and job requisition processing information.

Excellent:

Laboratory recruiting/staffing strategies and processes are benchmarked against like organizations as agreed upon by the Laboratory and the DOE.

Appendix F - Objective Standards of Performance

Outstanding:

Areas for improvement are addressed and demonstrated improvements are indicated by virtue of better cost effectiveness and improved staffing results.

LBNL:

• **Recruiting:**

Good:

Baseline data collected for future comparison and planning.

Excellent:

Analysis of baseline data and development of a plan to increase the effectiveness of various recruitment strategies.

Outstanding:

Areas for improvement are addressed and demonstrated improvements are indicated by virtue of cost per hire, and evidence of qualified and diverse applicant pools.

• **Supplemental Labor:**

Good:

Completion of a critical review of the process for identifying and reporting on supplemental labor

Excellent:

Policy on appropriate use of supplemental labor is developed

Outstanding:

Evidence of forecasting the use of supplemental labor including cost projections and evaluation for cost effectiveness.

Criteria:

Performance Measures:

- 1.3 **Compensation**
Compensation is administered in a cost competitive manner which takes into account external and/or internal equity.
(Weight = 11%)

- 1.3.a **LANL: Salary Increase Fund (SIF)**
Evaluation of the comprehensiveness and timeliness of Salary Increase Fund (SIF) proposal.
(Weight = 7%)

- LBNL: Baselineing**
Baseline evaluation of the Laboratory's research and support FTE costs.
(Weight = 6%)

- LLNL: Currency of Job Classification**
Cumulative % of classifications reviewed, updated and evaluated in accordance with the Laboratory's current system. Baseline is to have every classification reviewed at least once every 5 years.
(Weight = 6%)

Agreements:

LANL: An underlying principle of this measure is that the compensation program is market driven and rewards performance and productivity.

LBNL:

1. "Research FTE" are defined as professional staff who are programmatically funded.
2. "Support FTE" are defined as technical and administrative staff who are funded from either overhead or programmatic funds.
3. "Like R&D facilities" will be defined as multi-disciplinary research organizations with representation from both the public and private sectors as mutually agreed between DOE and the Laboratory.
4. "Career" (i.e. benefit accruing) vs. supplemental labor will be reported in separate graphs

LLNL:

1. Report annually on cumulative % of classifications reviewed (including results/actions) with the goal of 100% by the end of a 5-year period.
2. In assessing the value of job classifications, both internal alignment and external market forces must be considered.
3. Classifications for which changes are required will be counted under the cumulative % in the year in which the changes have been completed.

Gradients:

LANL:

Good:

SIF addresses all of the elements specified in the Appendix A and meets the agreed upon time requirements.

Excellent:

SIF incorporates agreements reached for improvements from the previous cycle's SIF, and identifies early efforts at resolution of any special problem areas.

Outstanding:

SIF thoroughly addresses all of the elements specified in Appendix A and includes other relevant issues not previously specified, meets or exceeds in the agreed upon time requirements, and the SIF proposal can serve as a model for other organizations.

LBNL:

Good:

100% of research and support FTE costs baselined.

Excellent:

Results of baseline evaluation analyzed and presented to Laboratory Management.

Outstanding:

Demonstrated implementation of appropriate recommendations to provide data that will enable management to make informed decisions regarding FTE costs.

LLNL:

Good:

95% in 5 years, plus a quality review process/system institutionalized as a part of normal processes.

Excellent:

100% in 5 years, plus a quality review process/system institutionalized as a part of normal processes.

Outstanding:

In addition, there are current classification description matrices which are made available to supervisors/managers, and the Laboratory develops training for supervisors/managers on effective usage of classification process and tools.

Performance Measures:

1.3.b Effectiveness of Implementation of Market-Based Pay Policy

LANL/LLNL: % of weighted classification average salaries fall within $\pm 5\%$ of target agreement.

(LANL Weight = 4%)

(LLNL Weight = 5%)

LBNL: Benchmarking- Benchmark evaluation of the Laboratory's research and support FTE costs in like R&D facilities

(Weight = 5%)

Agreement:

LANL: This measure may be limited to those classifications with 10 or more incumbents and to those classifications that are benchmarked. For purposes of the measure, "classifications" shall be limited to those in LANL's Structured Series, i. e., Administrative exempt and non-exempt and Technicians. LANL will compute the percentage of employees whose jobs are matched to survey jobs and whose salaries are within $\pm 5\%$ of market rates. Comparisons will be made when survey results become available. LANL will submit data to this measure in the third quarter. Regarding the Good: gradient listed below, LANL may meet expectations with less than 50% if LANL obtains DOE concurrence in the documented analysis of the situation and any planned corrective action.

LBL:

1. "Research FTE" are defined as professional staff who are programmatically funded.
2. "Support FTE" are defined as technical and administrative staff who are funded from either overhead or programmatic funds.
3. "Like R&D facilities" will be defined as multi-disciplinary research organizations with representation from both the public and private sectors as mutually agreed between DOE and the Laboratory.
4. "Career" (i.e. benefit accruing) vs. supplemental labor will be reported in separate graphs.

LLNL: This measure may be limited to those classifications with 10 or more incumbents and, to those classifications within the classification series that are benchmarked. Classification series average salary will then be compared to the target and designated "yes" if the classification series average falls within $\pm 5\%$ of the target and "no" if they do not. The populations of classifications series designated "yes" will then be added and the sum divided by the total population in the covered classifications series. Targets for the fiscal year shall be established by LLNL prior to the implementation of the salary review for that fiscal year.

LLNL will track and share data at the benchmark level (i.e., 105.1s, 105.2s, 105.3s, etc.) but will be graded at the classification series level (i. e., 100s, 200s, 300s, etc.). For positions included in the competency-based performance management pilot ("role/stage assignment(s)" are substituted for "classification(s)") the numbers for the approximate 1,300 employees in the pilot will be deleted for all calculations within the classification series whenever appropriate.

Gradients:

LANL/LLNL:

Good:

50% or greater but less than 70%

Excellent:

70% or greater but less than 85%

Outstanding:

85% or greater

LBL:

Good:

A comprehensive plan, milestones and schedule in place which includes identification of comparators and job titles included in the research and support categories.

Excellent:

Quarterly status reports reflect progress towards milestones.

Outstanding:

Plan is completed and results are analyzed and presented to Laboratory Management.

Performance Objective #2 Work Force Excellence

The Laboratory will develop and motivate its work force to excel in meeting programmatic needs of the Laboratory and its customers.
(Weight = 16%)

Criteria:

- 2.1 **Performance Management**
Effective employee performance management.
(LANL/LBNL Weight = 8%)
(LLNL Weight = 10%)

Performance Measures:

- 2.1.a **Currency of Performance Appraisals**
Evaluation of the system that ensures that each employee is appraised on an annual basis, against pre-established, job-related performance criteria is in place
(LANL Weight = 2%)
(LBNL Weight = 8%)
(LLNL Weight = 5%)

Agreements:

LANL: Baseline of completed appraisals is 95%. Report latest viable data. Percent completed is determined by dividing the number of completed performance appraisals by the eligible population. A 10% random sample of the completed Performance Appraisals will be drawn annually and reviewed by a team of qualified personnel to determine if the Performance Appraisals contain all the elements and meet the standards set forth in laboratory guidelines. A performance appraisal will not be counted as completed unless it has the elements set forth in the laboratory guidelines. September data will be used for FY 98. Documented evidence of a feedback mechanism to management on the results of the qualitative review is required. The lowest percentage achieved between the quantitative and qualitative scores will determine the awarded gradient.

For purposes of this measure, the Laboratory will report the Director's Office submissions of the Laboratory Leadership Council members performance appraisals in the subsequent fiscal year data.

The Laboratory will select the 10% random sample from the Performance Appraisals submitted under the new Performance Management System.

LBNL:

- The review will consider the following factors:
 - Position description is in place and is appropriate to the job classification.
 - If an Individual Development Plan is required, it is in place.
 - The rating is consistent with the narrative.
 - The appraisal has been completed consistent with institutional guidelines.
- A 5% random sample will be used which includes proportionate representation from S&E, Admin./Clerical, and Technical job classifications.

LLNL: Report latest viable data. Evaluation will be of the percentage completed and quality of annual performance appraisals for employees against pre-established, job-related performance criteria. Percent completed determined by dividing the number of completed performance appraisals by the eligible population. A performance appraisal will not be counted as completed unless it has the elements set forth in the laboratory guidelines. September (or the latest available) data will be used for FY98.

Gradients:

LANL:

Good:

95% on Performance Appraisal completion's and 75% or greater but less than 80% of the 10% random sample contain all the elements and meet the standards set forth in Laboratory guidance.

Excellent:

96% on Performance Appraisal completion's and 80% or greater but less than 85% of the 10% random sample contain all the elements and meet the standards set forth in Laboratory guidance.

Outstanding:

97% on Performance Appraisal completion's and 85% or greater of the 10% sample contain all the elements and meet the standards set forth in Laboratory guidance.

LBNL:

Good:

A 5% random sample is completed per the Agreements noted. Feedback is provided to line management and training or other remediation is provided as appropriate.

Excellent:

Analysis for trends which may reflect problems, e.g., poor business practice, liability exposure, cost inefficiencies, and implementation of training or remediation as appropriate based on the results of the analysis.

Outstanding:

Actions to address trend or assessments that the appraisal system is being implemented consistently in all organizations.

LLNL:

Good:

95% on Performance Appraisal completion's and 75% or greater but less than 80% of the 2% random sample contain all the elements and meet the standards set forth in Laboratory guidance.

Excellent:

96% on Performance Appraisal completion's and 80% or greater but less than 85% of the 2% random sample contain all the elements and meet the standards set forth in Laboratory guidance.

Outstanding:

97% on Performance Appraisal completion's and 85% or greater of the 2% random sample contain all the elements and meet the standards set forth in Laboratory guidance.

Performance Measures:

- 2.1.b **Individual Development Plan (LANL/LLNL only)**
% of employees with a current development plan that meets qualitative standards.
(LANL Weight = 2%)
(LLNL Weight = 5%)

Agreements:

LANL: Baseline for the number of employees with a current development plan is 75%. A 10% random sample of the completed development plans will be drawn annually and reviewed by a team of qualified personnel to determine if the development plans contain the elements and meet the standards set forth in Laboratory guidelines. Documented evidence of a feedback mechanism to management on the results of the qualitative review is required. The lowest percentage achieved between the quantitative and qualitative scores will determine the awarded gradient.

LLNL: A 2% random sample of the covered population will be drawn to review development plans for acceptability. An IDP will not be counted as current unless it has the elements set forth in laboratory guidelines. In cases where the employee does not want an IDP and signs this statement, it will be counted as current for purposes of this PM.

Gradients:

LANL:

Good:

75% or greater but less than 80% on development plan completion's and 75% or greater but less than 80% of the 10% random sample contain all the elements and meet the standards set forth in Laboratory guidance.

Excellent:

80% or greater but less than 85% on development plan completion's and 80% or greater but less than 85% of the 10% random sample contain all the elements and meet the standards set forth in Laboratory guidance, or, 85% or greater on development plan completion's and 75% or greater but less than 80% of the 10% sample contain all the elements and meet the standards set forth in Laboratory guidance.

Outstanding:

85% or greater on development plan completion's and 85% or greater of the 10% sample contain all the elements and meet the standards set forth in Laboratory guidance.

LLNL:

Good:

75% or greater but less than 80% and guidelines issued.

Excellent:

80% or greater but less than 85%, guidelines issued, sample formats posted to internal HR website, feedback given to Directorates as needed, and refresher training made available.

Outstanding:

In addition to above, 85% or greater completion rate is achieved.

Performance Measures:

2.1.c **Employee Development (LANL only)**

Evaluation of the employee development program's ability to meet the Laboratory's workforce planning and mission needs

(Weight = 4%)

Agreements:

It is understood that employees are primarily responsible for identifying and addressing their career and development needs consistent with the Laboratory's mission needs.

Gradients:

Good:

Guidance is issued describing employee responsibilities for career and employee development consistent with the Laboratory's workforce planning and mission needs.

Excellent:

Analysis is conducted to determine the extent of the differences between the individual development plan requirements and the Laboratory workforce planning and mission needs.

Outstanding:

As a result of analysis, formal action plans are developed and implemented to improve Laboratory workforce planning.

Criteria:

Performance Measures:

- 2.2 **Effectiveness of Employee/ Labor Relations**
Effectiveness of employee/labor relations programs.
(LANL/LBNL Weight = 8%)
(LLNL Weight = 6%)

- 2.2.a Measure the effectiveness of complaint resolution.
(LANL Weight = 8%)
(LBNL Weight = 8%)
(LLNL Weight = 6%)

Agreements:

LANL: Where known, multiple internal filings on the same issue by the same individual may be counted as 1. Actions filed by applicants and retirees will not count against this performance measure.

Internal organizations that will provide data for this measure will include Employee Relations, the Internal Evaluation Office, the Ombuds Office, and Legal Counsel. Types of cases will include, but not be limited to employee discipline, EEO, IEO, administrative reviews, grievances. Data will only be reported in a manner which will assure anonymity.

LBNL: The Laboratory will trend formal complaints from employees by type of complaint, division/department, job class, type of appointment (also by bargaining unit for represented employees) in order to identify problem areas in need of corrective action.

1. Trend data will be collected and reported quarterly.
2. "Formal complaints" will include administrative reviews, grievances, mediation, litigation and external agency charges. In addition, for labor relations trending, "formal complaints" will also include unfair labor practice charges.
3. It is acknowledged that formal complaints may result from multiple causes.
4. Because FY '98 is the first year of this PM, sufficient data for meaningful trending may not be reasonably collected within the assessment period.

LLNL: The Laboratory will trend Ratio of External to Internal Complaints, and Ratio of Formal to Informal Complaints, plus provide a narrative broadly describing processes and efforts to mitigate and minimize issues, as it did for FY96 PMs. External complaints are agency filings and lawsuits. Multiple filings on the same issue by the same individual will count as 1; actions filed by applicants and retirees will not count against this performance measure.

The narrative summary will discuss management initiated actions that may have impacted the results of this measure.

Gradients:

LANL:

Good:

Conduct analysis of cases by (1) where they were originally filed, (2) the type of case, (3) the issue involved, (4) the outcomes, (5) cycle times for processing, and, (6) approximate cost involved in processing and resolution.

Excellent:

Process results are benchmarked against other like organizations as agreed to by the Laboratory and the DOE.

Outstanding:

As a result of analysis and benchmarking, formal management action plans are developed and implemented to improve employee relations.

LBNL:

Good:

Trending is conducted per the Agreements

Excellent:

Data are analyzed and provisions made for corrective action

Outstanding:

Evidence of reduced number of formal complaints in problem areas identified

LLNL:

Good:

A system is in place to respond to both formal and informal complaints, trend data is presented and a narrative summary provided of management actions impacting the data.

Excellent:

In addition, a trend analysis is done to determine the nature of issues being raised, and a report of institution-wide trend data is provided to Laboratory management.

Outstanding:

In addition, management actions are taken to address institution-wide issues raised through the on-going awareness and knowledge of trends. New issues raised by the end of the assessment year trend analysis will be addressed through management action the following year.

Performance Objective #3 Equal Opportunity

Strengthen the commitment to and accountability for equal opportunity, affirmative action and work force diversity.
(Weight = 24%)

Criteria:

- 3.1 **Employment of Women and Minorities**
Promote work force diversity and improve the representation of minorities and women in the work force through the development and implementation of strategies and other affirmative action "good faith efforts."
(Weight = 24%)

Performance Measures:

- 3.1a **Employment of Minorities**
An assessment of planning and implementation of good faith efforts designed to improve recruitment, selection and retention of minorities in high priority underutilized job groups.
(Weight = 12%)

Agreement:

1. High priority underutilized groups will be selected at the beginning of the assessment period as defined by each Laboratory. For LANL, this is October 1; for LBNL, this is October 1; and for LLNL, this is January 1. The following factors may be utilized for the designation of high priority areas: underutilization levels, availability levels, placement opportunities and typical size and diversity of applicant pools.
2. The Laboratory will provide a results oriented plan with a purpose of improving organizational performance in the recruitment, selection, and retention of minorities in the selected high priority areas. The plan will display the specific actions which will be targeted for achievement during the fiscal/calendar year and assigned responsibility for those actions. The plan shall incorporate, at a minimum, good faith efforts designed to enhance the following:
 - coupling of outreach and recruitment efforts in high priority job groups
 - systematic effort to measure and report outcomes and impact of the outreach and recruitment process
 - diversity and viability of candidate pools
 - efforts to educate and sensitize the work force to diversity awareness
 - integration of diversity issues in Laboratory operations and the daily fabric of Laboratory life
 - active top management support of diversity considerations, including affirmative action and educational outreach efforts
 - representation of minorities as defined in the Laboratory's Affirmative Action Program

Gradients:

Good:

Plan Development and Execution

1. Plan Development – The Laboratory developed a results-oriented plan which clearly communicates the Laboratory's commitment and investment in carrying out its good faith efforts to develop strategies and actions to improve employment and retention of minorities in high priority underutilized job groups. The plan must incorporate, at a minimum, good faith efforts as outlined above.
2. Plan Execution – Specific actions identified in plan were carried out substantially in the manner and time-frames identified in the plan.

The Laboratory will summarize how the plan was executed relative to the specific actions taken to improve the recruitment, selection and retention of minorities. The summary should include a narrative describing the efforts taken, and any significant

outcome or events resulting from the process. The summary should also include statistical analyses assessing the representation of minorities in candidate pools, interviews, placements, and attrition in the specified job groups.

Excellent:

In the aggregate, high priority underutilized job groups show improvement toward full utilization. Job groups not designated as high priority also show improvement or remain at the same level of utilization.

Outstanding:

In addition to the criteria for Excellent, improvement toward full utilization is achieved for each designated high priority group or full utilization is achieved in any of the high priority job groups

Performance Measures:

3.1b Employment of Women

An assessment of planning and implementation of good faith efforts designed to improve recruitment, selection and retention of women in high priority underutilized job groups

(Weight = 12%)

Agreement:

1. High priority underutilized groups will be selected at the beginning of the assessment period. . For LANL, this is October 1; for LBNL, this is October 1; and for LLNL, this is January 1. The following factors may be utilized for the designation of high priority areas: underutilization levels, availability levels, placement opportunities and typical size and diversity of applicant pools.
2. The Laboratory will provide a results oriented plan with a purpose of improving organizational performance in the recruitment, selection, and retention of women in the selected high priority areas.

The plan will display the specific actions which will be targeted for achievement during the fiscal/calendar year and assigned responsibility for those actions. The plan shall incorporate, at a minimum, good faith efforts designed to enhance the following:

- coupling of outreach and recruitment efforts in high priority job groups
- systematic effort to measure and report outcomes and impact of the outreach and recruitment process
- diversity and viability of candidate pools
- efforts to educate and sensitize the work force to diversity awareness
- integration of diversity issues in Laboratory operations and the daily fabric of Laboratory life
- active top management support of diversity considerations, including affirmative action and educational outreach efforts
- representation of women as defined in the Laboratory's Affirmative Action Program

Gradients:

Good:

Plan Development and Execution

1. Plan Development -- The Laboratory developed a results-oriented plan which clearly communicates the Laboratory's commitment and investment in carrying out its good faith efforts to develop strategies and actions to improve employment and retention of women in high priority underutilized job groups. The plan must incorporate, at a minimum, good faith efforts as outlined above.
2. Plan Execution -- Specific actions identified in plan were carried out substantially in the manner and time-frames identified in the plan.

The Laboratory will summarize how the plan was executed relative to the specific actions taken to improve the recruitment, selection and retention of women. The summary should include a narrative describing the efforts taken, and any significant outcome or events resulting from the process. The summary should also include statistical analyses assessing the representation of women in candidate pools, interviews, placements, and attrition in the specified job groups.

Excellent:

In the aggregate, high priority underutilized job groups show improvement toward full utilization. Job groups not designated as high priority also show improvement or remain at the same level of utilization.

Outstanding:

In addition to the criteria for Excellent, improvement toward full utilization is achieved for each designated high priority group or full utilization is achieved in any of the high priority job groups

Performance Objective #4 Customer Needs

Human Resources has a system for identifying and evaluating customer needs and for building and maintaining positive customer relationships.

(Weight = 14%)

Criteria:

Performance Measures:

4.1 Customer Needs Analysis

Requirements, expectations and preferences of internal and external customers are collected and addressed. Strategies to evaluate and anticipate needs are in place.

(Weight = 14 %)

4.1.a Customer Needs Input

Evaluation of the implementation and utilization of internal and external customer input mechanisms.

(Weight = 14%)

Agreement:

LANL/LBNL: Mechanisms will be used to gather customer input regarding HR practices. Practices could be policies, services, programs, systems, processes and procedures. These mechanisms are varied and could include customer surveys, focus groups, customer feedback forms, etc. Measurement will include the extent of utilization of customer input in improving HR practices and will include closing the loop with the customers. Measurement deliverable will be a narrative description of how the laboratory addresses the performance criterion and objective.

LLNL: Evaluate the use of customer input mechanisms to meet customer needs.

Gradients:

Good:

Internal and external customer input mechanisms exist and are utilized to evaluate and improve human resources practices. Input and any changes to practices, whether resulting from feedback or not, are communicated to the customers, as appropriate.

Excellent:

Internal and external customer requirements, expectations and preferences are collected and utilized in a methodical manner to evaluate and improve human resources practices. Methodical manner means the information sought from customer feedback mechanisms and the frequency of collection are clearly defined. New or changes to existing practices are clearly linked to feedback results as well as the laboratory's strategic direction and communicated to the customers, as appropriate.

Outstanding:

In addition to the items identified under Excellent, other data such as industry standards, utilization of services and operational effectiveness indicators are collected and taken into consideration. Furthermore, Human Resources evaluates and improves its processes for determining customer requirements, expectations and preferences.

Performance Objective #5 HR Leadership in Deploying Mission/Business Strategy

The Laboratory aligns its HR plan with the Laboratory strategic or institutional plan and supports the principle of the DOE contractor HR strategic plan.

(Weight = 14%)

Criteria:

- 5.1 **Alignment of HR Programs**
HR programs and policies such as in recruitment and staffing, compensation and benefits, labor and employee relations, diversity and training are aligned with Laboratory business strategies.
(Weight = 14%)

Performance Measures:

- 5.1.a **Deployment of Strategy**
Evaluation of the HR planning process that addresses alignment of HR programs and practices with business plans as well as the well being of the entire work force. Measurement will also include the strategy to communicate with employees, supervisors and managers regarding HR programs and practices.
(Weight = 14%)

Agreement:

Measurement Deliverable: Narrative description of the above.

LLNL: The evaluation will include items such as those noted in the PM 5.1.a, above, plus any others relevant to this POCM.

Gradients:

Good:

Documented plan to align HR programs and practices with the Laboratory business plans or strategy. Documented communication strategy.

Excellent:

Evidence of implementation of documented HR plan.

Outstanding:

Evidence of implementation of the HR documented plan and communication strategy that addresses key aspects of the HR planning elements. For LANL those elements are contained in the Bakdrige criteria. In addition, the work force planning process addresses the alignment of the work force with business needs such as core mission requirements, cost cutting or budget requirements and streamlining efficiency initiatives, while balancing such requirements with the needs of employees. The organization demonstrates a balance between work force and organizational needs by effectively implementing strategies for targeted recruitment, skill mix requirements, internal placements, appropriate retraining programs, outplacement activities, etc.

Section B - Performance Objectives

Part III - Administration

III - 3 Information Management

Performance Objective #1 Information Management Program

The Laboratory manages information as a corporate resource to improve the quality of its products, to add value to scientific programs and customer services, and as a tool to improve its work processes

(Weight = 100%)

Criteria:

- 1.1 **Strategic and Tactical Planning**
Information Management practices will be guided by programmatically coordinated strategic and tactical planning.
(Weight = 20%)

Performance Measures:

- 1.1.a **Planning Initiatives**
Evaluation of evidence that IM planning supports the Laboratory's mission.
(Weight = 20%)

Assumptions:

Measurement deliverable - IM plans or narrative descriptions of IM initiatives that support the mission and plans of the Laboratory. IM planning supports both programmatic and operational/administrative needs. Reference may be made to accessible work products or other existing Laboratory documentation.

Gradient:

Good:

Planning, evidenced by documentation, that effectively supports the Laboratory's missions and customer requirements. Planning documents demonstrate the effectiveness of the planning approach of (1) aligning with the Laboratory's missions (2) determination of customer requirements and expectations (3) integration of the various components of information resources.

Excellent and Outstanding factors to be considered:

Existence of one or more of the following:

- substantial progress against milestones under challenging conditions.
- external recognition of excellence in IM planning.
- implementation of tools to facilitate IM planning.
- demonstrated support of the Laboratory's mission through IM planning that exceeds the Laboratory's targets, goals or objectives.

Criteria:

- 1.2 **Self Assessment Program**
Maintain a self assessment program that evaluates the effectiveness of management and operational practices. (Weight = 25%)

Performance Measures:

- 1.2.a **Self Assessment Program**
Evaluation that self assessments are taking place and that corrective actions, where necessary, are accomplished in a timely and effective manner. (Weight = 25%)

Assumptions:

Measurement deliverable – self-assessment of the Information Management functions accompanied by appropriate supporting material. The narrative description may be accomplished through reference to accessible work products or other existing Laboratory documentation. The Laboratory and its DOE Operations Office will agree to develop and document in writing guidelines for self assessment criteria to be used. These written guidelines for the SA criteria to be used to assess the performance of the DOE/Laboratory agreed-to IM focus areas will be completed by October 1, 1997 and will be shared with all members of the IM team. IM focus area results must be incorporated in the Laboratory's Self-Assessment Report.

Gradient:

Good:

The self assessment addresses all agreed-upon criteria. The self assessment is based upon objective supporting material where appropriate. Deficiencies noted in previous assessments have been corrected or have corrective action plans under development or in place. Results of self assessments demonstrate that compliance issues are being effectively and efficiently addressed

Excellent and Outstanding factors to be considered:

- System for rescheduling missed milestones established.
- System for timely communication of changes to appropriate management implemented.
- Cost effective and/or innovative approaches to achieving the objectives of the self assessment program.
- Results of self assessments demonstrate that compliance issues were addressed in advance of target dates and goals were exceeded, or are addressed with results that demonstrate significant cost-savings and efficiencies attributable to Information Management innovation.

1.3 Information Management Program Results

The information management program provides cost-effective quality products and services that meet customer requirements. **(Weight = 55%)**

1.3a Level of Customer Satisfaction

Evaluation of annual reviews of customer satisfaction which compare results with previous reviews, trend customer satisfaction, and implement activities toward improvement.
(Weight = 25%)

Assumptions:

Measurement deliverable - results of the customer satisfaction reviews.

Gradient:

Good:

A demonstrated approach in response to the measurement of customer satisfaction levels. The approach will include the rationale for process by which customer input is acquired. Evidence of customer involvement in development of information management plans, including conceptual, deployment, maintenance, and transition. Clear evidence of meeting commitments to customers requirements.

Excellent and Outstanding:

Factors to be considered:

- Cost effective and/or innovative approaches to measuring customer satisfaction.
- Aggressive responses to information derived in determining customer satisfaction levels.
- Customer involvement in all stages of information management activities, including conceptual, deployment, maintenance, and transition.
- Evidence of improvement in customer satisfaction levels relative to product and service innovation.
- Evidence of significant improvements in systems and process and demonstrated results attributable to timely analysis of customer requirements, or evidence of multiple cycles of improvements with significant results.

Criteria:

Performance Measures:

1.3b Operational Effectiveness

Evaluation of measurable improvements and cost-effective operations.
(Weight = 30%)

Assumptions:

Measurement deliverable - narrative description of the information management program's accomplishments which have resulted in measurable improvements in the provision of cost-effective, quality products. The narrative description may be accomplished through reference to accessible work products or other existing Laboratory documentation.

Gradient:

Good:

Examples that demonstrate cost-effective, quality M services and products. A system for measuring performance. Establishment of cost-efficiencies and cost-savings goals.

Excellent and Outstanding factors to be considered:

- Results from cost effective and/or innovative approaches to improving information management.
- Successful implementation of new technologies in support of programmatic requirements.
- Evidence of successful results from prioritization efforts.
- Demonstrated application of best business practices.
- Benchmarking initiatives indicate best-in-class performance.
- Peer review findings recognize operational effectiveness.
- Demonstrated results which clearly indicate that cost-efficiencies and cost-savings goals were exceeded; demonstrated significant improvement results attributable to performance measurement systems.

Section B - Performance Objectives

Part III - Administration

III - 4 Procurement

Performance Objective #1 Management of Procurement Business Requirements

The Laboratory shall have systems in place that ensure Procurement programs are consistent with policies and procedures approved by DOE.

(Weight = 30%)

Criteria:

- 1.1 **System Evaluation**
The Procurement organization conducts, documents, and reports annually, the results of a successful assessment of its purchasing system against established evaluation criteria. (Weight = 30%)

Performance Measures:

- 1.1.a **Assessing System Operations**
The Procurement organization shall develop and submit a risk-based system evaluation plan to DOE and UC no later than October 1, 1997, for review and concurrence. The procurement system shall be assessed against system evaluation criteria as identified in the plan. In addition, an aggressive, cost effective management plan for resolution of system deficiencies and opportunities for process improvement shall be developed. Management of the results of the system assessment shall be evaluated. System deficiencies will include those identified by the Procurement organization, internal Laboratory organizations and external organizations.
(Weight = 30%)

Basis for Rating:

Good: There is a sound, systematic approach, responsive to the primary purpose of the system evaluation. Cost benefit analyses and risk assessments are good when addressing deficiencies and/or opportunities for improvement. Implementation of remedial actions is appropriate and demonstrates responsible leadership in many to most cases.

Excellent: The requirements for a Good rating are met. There is a sound, systematic approach, responsive to the overall purpose of the system evaluation. In addition, cost benefit analyses and risk assessments are rated good to excellent when addressing deficiencies and/or opportunities for improvement. Implementation of remedial actions is sound and demonstrates responsible leadership in most cases.

Outstanding: The requirements for an Excellent rating are met. There is a sound, systematic approach, fully responsive to all the requirements of the system evaluation. In addition, cost benefit analyses and risk assessments are rated excellent when addressing deficiencies and/or opportunities for improvement. Implementation of remedial actions is sound and demonstrates strong leadership in most cases.

Performance Objective #2 Procurement System Cost Effectiveness and Efficiency

The Procurement organization shall ensure that business is being conducted at an optimum operational efficiency level.
(Weight = 40%)

Criteria:

- 2.1 **Pursuing Best Practices**
The Procurement organization successfully uses benchmarking data and industry standards to identify targets of opportunity for improving operational efficiency related to service, cycle times and/or cost and pursues opportunities aggressively. (Weight = 40%)

Performance Measures:

- 2.1.a **Measuring Efficiency Gains**
The Procurement organization will be measured against benchmarks or industry standards/practices in areas prescribed in the Value-Based Self-Assessment (VBSA) Model. The Procurement organization will establish final baselines, goals and gradients no later than December 1, 1997. (Weight = 40%)

Basis for Rating:

In partnership with DOE and UC, the Laboratory shall identify benchmarks/industry standards in each procurement area identified as a core requirement in the VBSA Model and establish and justify goals in pursuit of those standards. The Laboratory may propose gradients based on data other than benchmarks or industry standards if the Laboratory provides adequate support of other optimum operating levels.

Assumptions:

- The current core areas identified for pursuing cost effectiveness and efficiency under the VBSA Model are cycle time, process cost, effective competition, and product/service cost savings/avoidance.
- The weight of the measure will be distributed evenly among the applicable categories unless otherwise agreed to in coordination with DOE and UC.

Performance Objective #3 Customer Satisfaction

The Procurement organization shall maintain a focus on satisfying customer needs.
(Weight = 15%)

Criteria:

- 3.1 **Customer Feedback**
The Procurement organization listens and responds to its internal and external customers and stakeholders in a fair and open process that encourages dialogue and participation. (Weight = 15%)

Performance Measures:

- 3.1.a **Working Customer Needs**
Based on the results of the FY97 customer survey, the Procurement organization shall select areas to work in partnership with its customers in order to effect customer-driven improvements in the procurement area. Improved customer satisfaction will be measured in comparison to a baseline established from the FY97 customer survey. The Procurement organization will submit areas for customer interaction and its plan of action by November 1, 1997. (Weight = 15%)

Basis for Rating:

Good: Identify customers (end users) and methods for customer interaction. Establish methods for determining customer satisfaction. Implementation plan with scheduled milestones are met. Documentation of results as outlined in the implementation plan verifies that customer satisfaction improvement goals for a Good rating, as identified by the Laboratory in partnership with DOE and UC, have been achieved.

Excellent: The requirements for a Good rating are met. Documentation of results as outlined in the implementation plan verifies that customer satisfaction improvement goals for an Excellent rating, as selected by the Laboratory in partnership with DOE and UC, have been achieved.

Outstanding: The requirements for an Excellent rating are met and, in addition, documentation of results as outlined in the implementation plan verifies that customer satisfaction improvement goals for a Outstanding rating, as selected by the Laboratory in partnership with DOE and UC, have been achieved.

Note: The same customer survey that was employed in FY97 to measure the success of deployment of results will be employed in FY99.

Performance Objective #4 Professional & Social Responsibility

The Laboratory shall ensure that the procurement process is conducted in a professional and socially responsible manner.
(Weight = 15%)

Criteria:

- 4.1 **Supplier Performance**
The Procurement organization shall manage its suppliers in such a manner as to ensure that the goods and services which they provide meet the Laboratory's requirements.
(Weight = 10%)

Performance Measures:

- 4.1.a **Measuring Supplier Performance**
The Procurement organization shall measure the performance of its key suppliers. Supplier performance will be measured from a baseline with goals and gradients agreed to by the DOE, UC, and the Laboratory no later than November 30, 1997.
(Weight = 10%)

Basis for Rating:

Good: The Laboratory has identified its key suppliers and measures their performance against the baseline established for each of those suppliers.

Excellent: The requirements for a Good rating are achieved and, in addition, supplier performance improvement goals for an Excellent rating, as selected by the Laboratory in partnership with DOE and UC, have been achieved.

Outstanding: The requirements for an Excellent rating are achieved and, in addition, supplier performance improvement goals for a Outstanding rating, as selected by the Laboratory in partnership with DOE and UC, have been achieved.

Assumptions:

Contract Administration is assessed annually by each Laboratory under Performance Measure 1.1.a.

Criteria:

Performance Measures:

4.2 **Socioeconomic Subcontracting**
The Procurement organization shall support and promote socioeconomic subcontracting programs.
(Weight = 5%)

4.2.a **Meeting Socioeconomic Commitments**
The percentage of actual subcontract dollar obligations (not subcontract face value) in the following 4 categories will be compared against goals negotiated for FY98.

- (a) Small Business
- (b) Small Business Set-Asides
- (c) Small Disadvantaged Business
- (d) Women-Owned Small Business

The Procurement organization will propose and provide supporting rationale and statistical support for socioeconomic goals.

(Weight = 5%)

Basis for Rating:

It is recognized that pursuit of cost effectiveness and best business practices may impact on the establishment of socioeconomic goals and/or on the final achievement of such goals. Consideration will be given to this impact during forecasting and mid-year updates of goals and during evaluation of self assessments.

Good: Meeting all goals with consideration given to changes in funding profiles, changes in forecast, deletion of requirements, etc., should goals not be met.

Excellent: Exceeds three of the four goals and meets the fourth goal. Consideration will be given to such factors as awards/recognition, pilot program participation, or other support for DOE socioeconomic programs when the Laboratory is borderline to meeting a goal that leads to a rating of Excellent.

Outstanding: Exceeds all goals. Consideration will be given to such factors as awards/ recognition, pilot program participation, or other support for DOE socioeconomic programs when the Laboratory is borderline to meeting a goal that leads to a rating of Outstanding.

Assumptions:

Obligations qualifying in more than 1 category may be counted in more than 1 category, e.g., Small Business and Small Business Set-Asides.

The purchasing base for purposes of this measure is all obligations incurred during the fiscal year period, excluding: (1) Subcontracts with foreign corporations which will be performed entirely outside of the United States; (2) Utilities (gas, sewer, water, steam, electricity and regulated telecommunications services); (3) Federal Supply Schedule Orders when all terms of the GSA contract apply; (4) GSA Orders when all terms of the GSA contract apply; (5) Agreements with DOE management and operating contractors and University campuses; (6) Federal government and DOE mandatory sources of supply; Federal prison industries, industries of the blind and handicapped; and (7) Procurement card purchases.

The schedule for submitting and negotiating goals will be followed per Appendix D.

Section B - Performance Objectives

Part III- Administration

III - 5 Property

Property Management will employ the Personal Property Assessment Model (PPAM) for FY98. Each Property Management organization will finalize its final assessment plan with DOE and UC by September 30, 1997. This plan will cover performance thresholds, performance ranges (gradients), specific scoring criteria, frequency of reporting, and frequency of scoring.

In this Model points are used to determine the score for each activity. Weights and the corresponding points are shown below at the Objective, Criteria, and Measure levels. At the Basis for Rating level total possible points for each activity are shown below. Overall ratings will be based on the following (where a total weight of 100% is equal to 500 points):

- >= 475 Outstanding
- >= 450 Excellent
- >= 400 Good
- >= 352 Marginal
- < 352 Unsatisfactory

The Adjectival Rating and Contractual Score will be assigned using the Property Management Scoring Table (see Exhibit I).

Performance Objective #1 Accountability for Equipment and Sensitive Property, and Precious Metals

The Laboratory shall ensure accountability for equipment and sensitive personal property and precious metals.
(Weight = 45%/Total Points = 225)

Criteria:

Performance Measure:

- 1.1 **Accountability for Equipment and Sensitive Property**
The Laboratory shall conduct successful personal property inventories as established in its inventory plan.
(Weight = 25%/Total Points = 125)

- 1.1.a **Property Accounted For**
The percentage of personal property accounted for, as described in the approved inventory plan, will be measured.
(Weight = 25%/Total Points = 125)

Basis for Rating:

- % of sensitive inventory items located by acquisition value (according to approved inventory plan) (Total Points for Activity = 62)
- % of equipment inventory items located by acquisition value (according to approved inventory plan) (Total Points for Activity = 63)

Gradient:

- 99.5% and Above = Outstanding
- 99.2% - 99.4% = Excellent
- 98.7% - 99.1% = Good

Criteria:

Performance Measure:

1.2 **Precious Metals Inventory**
The Laboratory shall conduct successful precious metals inventories as established in its inventory plan.
(Weight = 5%/Total Points = 25)

1.2.a **Precious Metals Inventory Results**
The percentage of precious metals accounted for, as described in the approved inventory plan, will be measured.
(Weight = 5%/Total Points = 25)

Basis for Rating:

- % of precious metals accounted for by weight in grams (Total Points for Activity = 25)

Gradient:

99.8% and Above = Outstanding
99.6% - 99.7% = Excellent
99.0% - 99.5% = Good

1.3 **Identification of Items Subject to Inventory**
The Laboratory will ensure personal property items which are subject to inventory are accurately identified.
(Weight = 15%/ Total Points = 75)

1.3.a **Accuracy of Identification**
The percentage of items accurately identified in the property database will be measured. **(Weight = 15%/ Total Points = 75)**

Basis for Rating:

- % of property tagged when received (Total Points for Activity = 25)
- % of tagging requests completed by field personnel within 10 days (Total Points for Activity = 25)
- % of property identified in database (floor-to-database sampling) (Total Points for Activity = 25)

Gradient:

98.0% and Above = Outstanding
95.5% - 97.9% = Excellent
90.0% - 95.4% = Good

Performance Objective #2 Stewardship Over Personal Property

The Laboratory shall ensure that both stewardship and custodianship for personal property is maintained.
(Weight = 20%/Total Points = 100)

Criteria:

Performance Measure:

2.1 **Organizational Stewardship and Individual Custodianship**

The Laboratory will ensure organizational and individual accountability (stewardship and custodianship, respectively) for property.

(Weight = 20%/Total Points = 100)

2.1.a **Timeliness of Assignment**

The accountable individual is identified for equipment and sensitive property, and the timeliness of such identification is measured.

(Weight = 20%/Total Points= 100)

Note: At LANL, only individual responsibility applies.

Basis for Rating:

- % of accurate custodian assignments for sensitive property (Total Points for Activity = 30)
- % of accurate custodian assignments for equipment (Total Points for Activity = 30)
- % of initial custodians assigned within 60 days (Total Points for Activity = 40)

Gradient:

- 98.0% and Above = Outstanding
- 95.5% - 97.9% = Excellent
- 90.0% - 95.4% = Good

Performance Objective #3 Vehicle Utilization

The Laboratory shall have a program to manage its vehicle fleet.
(Weight = 5%/Total Points = 25)

Criteria:

3.1 **Fleet Management**
The Laboratory shall manage its fleet to ensure appropriate vehicle utilization.
(Weight = 5%/Total Points = 25)

Performance Measure:

3.1.a **Vehicle Utilization**
The Laboratory shall measure the percentage of total eligible vehicles meeting local utilization criteria.
(Weight = 5%/Total Points = 25)

Basis for Rating:

- % of essential vehicles meeting utilization criteria (Total Points for Activity = 10)
- % of discretionary vehicles meeting utilization criteria (Total Points for Activity = 10)
- % of material handling vehicles meeting utilization criteria (Total Points for Activity = 5)

Gradient:

98.0% and Above = Outstanding
95.5% - 97.9% = Excellent
90.0% - 95.4% = Good

Performance Objective #4 Information to Improve/Maintain Processes (Systems Evaluation)

The Laboratory ensures that Property Management programs are consistent with policies and procedures approved by DOE.
(Weight = 15%/Total Points = 75)

Criteria:

Performance Measure:

4.1 Self-Assessment of Policies and Procedures

The Laboratory shall plan, conduct, document, and report annually, the results of a successful property management system evaluation.

(Weight = 15%/Total Points = 75)

4.1.a Assessing Support Processes

The property processes shall be measured against identified system evaluation criteria established in the plan.

(Weight = 15% /Total Points = 75)

Basis for Rating:

Rating will be determined using the Self-Assessment Measures Scoresheet in the Property Performance Assessment Model Plan. Factors to be reviewed for this measure will be:

- Evaluation of Personal Property programs including High Risk Program (Total Points for Activity = 50)
- Evaluation of Stores Management programs (Total Points for Activity =13)
- Evaluation of Storage Management program (Total Points for Activity =12)

PERFORMANCE OBJECTIVE #5 Customer Alignment

The Laboratory shall ensure that there is a property management program for identifying and evaluating customer needs and for building and maintaining positive customer relations.

(Weight = 5%/Total Points = 25)

Criteria:

Performance Measure:

5.1 **Monitoring Customer Alignment**
The Property Management organization shall ensure that the property management programs are responsive to customer expectations.
(Weight = 5% /Total Points = 25)

5.1.a **Aligning Customer Expectations**
The Laboratory will have processes in place to monitor customer expectations of property management tools and products with regard to ease of use, timeliness, accuracy, and certainty.
(Weight = 5% /Total Points = 25)

Basis for Rating:

Were the methods to determine customer satisfaction accomplished per the Customer Satisfaction Worksheet (Plan)? (Total Points for Activity = 25)

- Ease of use
- Timeliness
- Accuracy
- Certainty
- Reliability

Performance Objective #6 Balancing Performance and Cost

The Laboratory ensures that property is managed appropriately to balance performance and cost.
 (Weight = 10%/Total Points = 50)

Criteria:

Performance Measure:

6.1 **Performance/Cost Efficiency**
 The Laboratory shall ensure that property processes/products are provided in the most cost efficient manner while maintaining desired levels of performance.
 (Weight = 10%/Total Points = 50)

6.1.a **Measuring Cost Efficiency/ Effectiveness**
 The Laboratory shall measure its ability to effectively balance property management costs and performance.
 (Weight = 10%/Total Points= 50)

Basis for Rating:

Areas selected for FY98 in which to apply the scoring matrix below:

- Cost of determining custodian assignment vs. performance (Total Points for Activity = 25)
- Cost of performing tagging on-site vs. performance (Total Points for Activity = 25)

GRADIENT

Cost Vs Baseline Plan Developed Each Year	Performance Level			
	Higher Gradient or Outstanding	Same Gradient	Lower Performance and Not Less Than Good	Lower Performance and/or Less Than Good
Less Cost	Outstanding	Excellent	Good	Marginal
Same Cost	Excellent	Good	Marginal	Unsatisfactory
More Cost	Good	Marginal	Unsatisfactory	Unsatisfactory
More Cost More Requirements	Renegotiate Performance Gradients for Critical Activities			

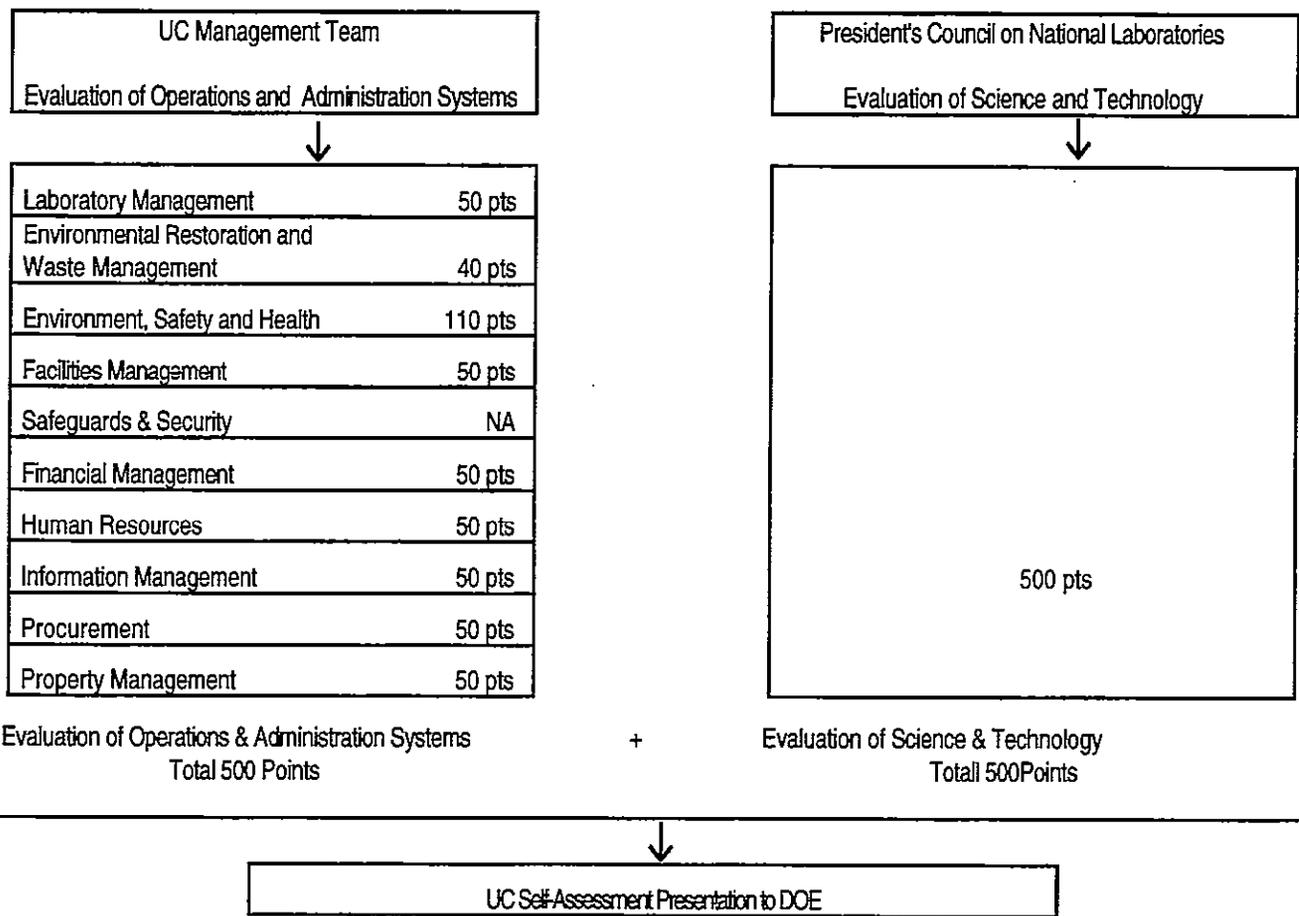
**EXHIBIT I
 PROPERTY MANAGEMENT
 SCORING TABLE**

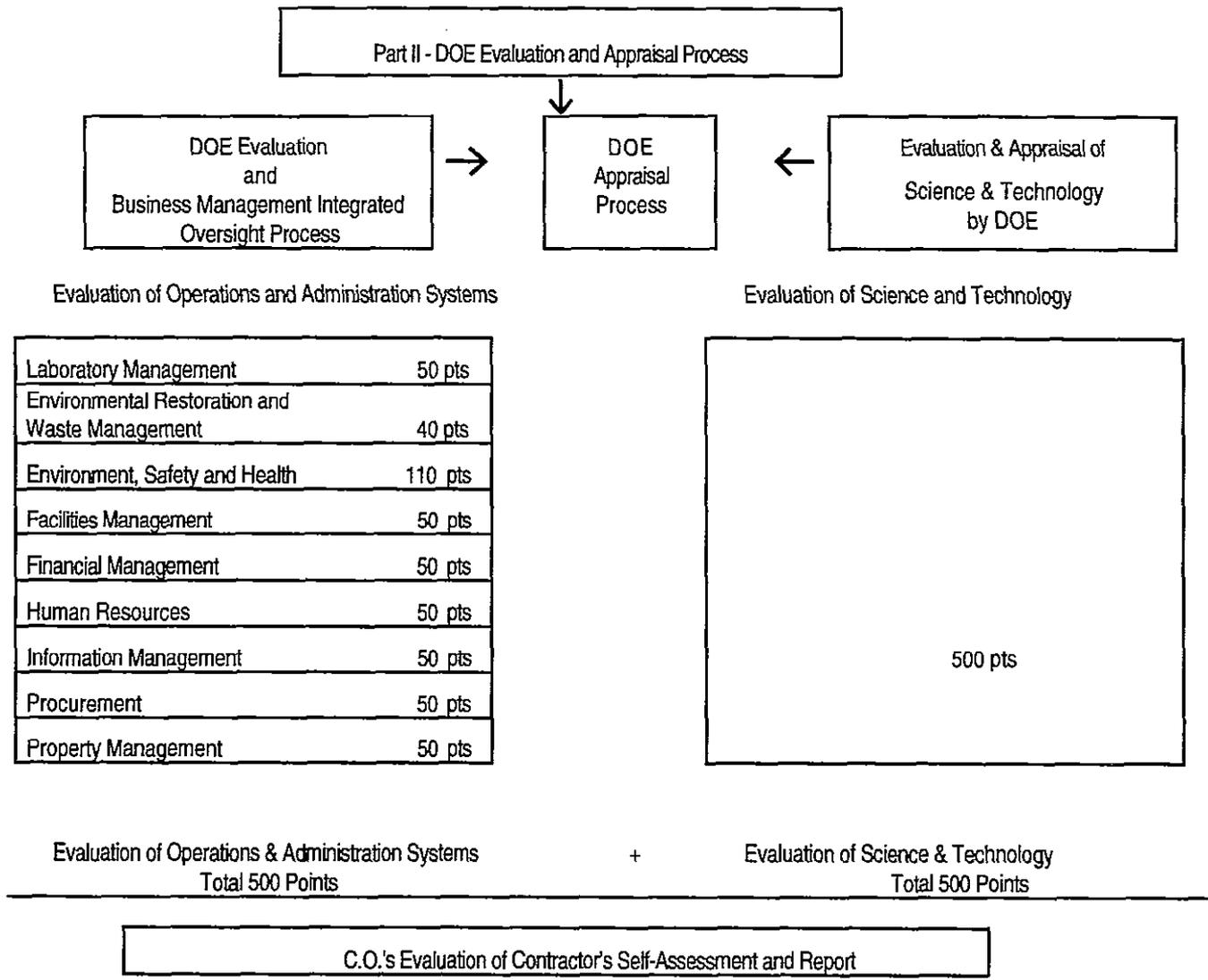
PPAM Points Earned	Translation to Appendix F Contractual Scoring	Adjectival Rating
493-500	98	Outstanding
484-492	95	
475-483	92	
469-474	88	Excellent
460-468	85	
450-459	82	
433-449	78	Good
417-432	75	
400-416	72	
384-399	68	Marginal
368-383	65	
352-367	62	
336-351	58	Unsatisfactory
320-335	55	
304-319	52	

Section C - Assessment and Appraisal

Part I - UC Self-Assessment and Rating Process

- A comprehensive and balanced peer review process will be conducted by the Contractor for the Laboratory through the University President's Council on National Laboratories.
- The UC Management team evaluates operations and administration systems for each Laboratory in each functional area (Laboratory Management, Environment Restoration and Waste Management, Environment, Safety & Health, Facilities Management, Safeguards and Security, Financial Management, Human Resources, Information Management, Procurement, and Property Management) on the basis of established performance measures.
- Weighting of points for each area is established at the beginning of each annual evaluation cycle. Numerical scores expressed as percentages are assigned to each functional area based upon the performance assessment ratings listed below. These percentages multiplied by the maximum points allocated for each functional area result in the total points for that area. UC establishes an aggregate "rating" for each Laboratory based on evaluation of each functional area - ratings for Science and Technology and Operations and Administration Systems are averaged together.





Part III - Performance Appraisal

Example

Science & Technology	Excellent			435 pts
Operations & Administration Systems	Rating (*See Table 1)	% x	Max pts =	Pt Score
Laboratory Management	Good	75% x	50 =	38 pts
Environmental Restoration and Waste Management	Good	75% x	40 =	30 pts
Environment, Safety & Health	Good	75% x	110 =	83 pts
Safeguards & Security	NA	% x		NA
Facilities Management	Good	75% x	50 =	38 pts
Financial Management	Good	75% x	50 =	38 pts
Human Resources	Excellent	88% x	50 =	44 pts
Information Management	Good	75% x	50 =	38 pts
Procurement	Outstanding	98% x	50 =	49 pts
Property Management	Good	75% x	50 =	38 pts
Total of Operations & Administration Systems				366 pts
Total of Science & Technology and Operations & Administration Systems				801 pts

Senior Management Salary Increase Authorization Multiplier Table

Total Points	Numeric Equivalent
900 - 1000 points	1.50
800 - 899 points	1.25
700 - 799 points	1.00
0 - 699 points	.75

Scientists & Engineers Cost-to-Market (for example) 4.80%

Senior Management Merit Pool Percentage (4.80% x 1.25) = 6.00%

Table 1

DOE- UC Rating Adjectives

Numerical Range	Adjectival Description	Definition
100-90	Outstanding	Significantly exceeds the standard of performance; achieves noteworthy results; accomplishes very difficult tasks in a timely manner
89-80	Excellent	Exceeds the standard of performance; although there may be room for improvement in some elements, better performance in all other elements offset this
79 - 70	Good	Meets the standard of performance; assigned tasks are carried out in an acceptable manner - timely, efficiently, and economically. Deficiencies do not substantively affect performance.
69- 60	Marginal	Below the standard of performance; deficiencies are such that management attention and corrective action are required.
< 60	Unsatisfactory	Significantly below the standard of performance; deficiencies are serious, and may affect overall results; immediate senior management attention, and prompt corrective action is required.

Note: This set of adjectival ratings is being phased in for FY98.

APPENDIX G

DOE DIRECTIVES

Appendix G - DOE Directives

DOE DIRECTIVES

(a) General.

(1) In accordance with Clause 5.5, Laws, Regulations, and DOE Directives, the Contractor and DOE have agreed on a complete list of DOE directives in effect at the start of this contract. This agreement is contained in the document entitled, Modification M253 Directives Baseline Document.

(2) The List of applicable directives under this appendix is generated from a Contractor-maintained contracts management database which is available on an unrestricted basis to the parties. The database information includes the most current version of the directive, the date on which it was included in the List, and information on the Laboratory's implementation status of said directives. If a directive is included on the List with supplemental Contracting Officer direction, the database record and listing shall be annotated to reflect that information. The database is accessed through the Internet. The URLs for access are:

UC Contracts: <http://www.llnl.gov/comix/comix/comix.html>

Contract Directives: http://www.llnl.gov/comix/comix/bfm/app_g.html

EMC2 and Reports: <http://labs.ucop.edu/emc2/emc2.html>

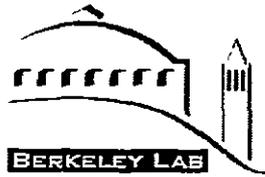
(3) Directives shall be deleted in their entirety from the List of applicable directives by written direction from the Contracting Officer.

(b) Implementation of applicable directives.

(1) The Contractor shall submit a plan for implementation of an applicable directive to the Contracting Officer when required by the directive or other instruction of the Contracting Officer or within a time agreed to by the Parties. Prior to submitting the plan, the University and DOE shall expeditiously address all issues requiring resolution in connection with the development of the plan.

(2) Within 90 days of receipt of the implementation plan, the Contracting Officer will approve or disapprove the plan and notify the Contractor of the decision. If the Contracting Officer disapproves the plan, he/she shall clearly identify all deficiencies and provide reasonable suggestions for making the plan acceptable. Within 60 days after notification of the disapproval of a plan, the Contractor shall submit to the Contracting Officer the revised plan for approval as described above.

(3) During the process of implementation, the Contractor will notify the Contracting Officer if modifications to the plan are required for any reason. The Contracting Officer will consider all such requests and will not unreasonably withhold his/her approval to modify such plans when circumstances warrant modification.



Appendix G as of 01-OCT-97

Directive	Effective Date
1220.1A. Ch1 Congressional and Intergovernmental Affairs	27-MAY-93
1300.2A Department of Energy Technical Standards Program	23-DEC-93
1300.3 Policy on the Protection of Human Subjects	20-NOV-92
1340.1B Management of Public Communications Publications and Scientific, Technical, and Engineering Publications	01-JUN-93
1350.1 Audiovisual and Exhibits Management	20-NOV-92
1360.2B Unclassified Computer Security Program	23-DEC-93
1430.1D Scientific and Technical Information Management	07-FEB-97
1450.4 Consensual Listening-In to or Recording Telephone/Radio Conversations	23-DEC-93
1500.3. Ch7 Foreign Travel Authorization	21-JUL-94
151.1 Comprehensive Emergency Management [Only Chap.VIII, Communication Requirements, Sections 4.a and 4.d. "Response Phase," and Chap.X, Evaluations and Readiness Assurance, Sections 3.a and 3.b. "Emergency Readiness Assurance Plans". SEE WSS BELOW.]	13-NOV-96
200.1 Information Management Program	13-JUN-97
2030.4B Reporting Fraud, Waste, and Abuse to the Office of Inspector General	06-OCT-93
210.1, Ch2 Performance Indicators and Analysis of Operations Information [11/13/96 SEE WORK SMART STANDARDS SET BELOW]	13-NOV-96
2100.8A Cost Accounting, Cost Recovery, and Interagency Sharing of Information Technology Facilities	27-MAY-93
2110.1A, Ch2 Pricing of Departmental Materials and Services	14-OCT-94
225.1, Ch2 Accident Investigations	13-NOV-96
2300.1B Audit Resolution and Followup	20-NOV-92
231.1, Ch1 Environment, Safety, and Health Reporting [SEE WORK SMART STANDARDS SET BELOW]	13-NOV-96
232.1, Ch2 Occurrence Reporting and Processing of Operations Information	14-AUG-97
2320.1C Cooperation with the Office of the Inspector General	01-APR-93
2321.1B Auditing of Programs and Operations	20-NOV-92
2340.1C Coordination of General Accounting Office Activities	17-MAY-94
311.1A Equal Employment Opportunity and Diversity Program, [only Attachment 1, Contractor Requirements Document].	08-SEP-97
350.1 Contractor Human Resource Management Programs [see annotations re:prime clauses take precedence over some chapters]	01-OCT-97
3791.2A, Ch1 Federal Employee Motor Vehicle Safety Program	02-DEC-93
413.2 Laboratory Directed Research and Development	22-JUL-97
420.1 Facility Safety [11/13/96 SEE WORK SMART STANDARDS SET BELOW]	13-NOV-96
425.1, Ch1 Startup and Restart of Nuclear Facilities [11/13/96 SEE WORK SMART STANDARDS SET BELOW]	13-NOV-96
430.1, Ch1 Life Cycle Asset Management [11/13/96 SEE WORK SMART STANDARDS SET BELOW]	20-MAR-96
430.2 In-House Energy Management	18-AUG-97

440.1 Worker Protection Management For DOE Federal and Contractor Management Employees [Only Attachment 2, CRD - Worker Protection Management for DOE Contractor Employees, Section 18, "Occupational Medicine." SEE WSS STANDARDS SET BELOW.]	13-NOV-96
440.2 Aviation [11/13/96 SEE WORK SMART STANDARDS SET BELOW]	13-NOV-96
470.1. Ch1 Safeguards and Security Program (ONLY CHAPTERS I, VII, AND IX in VARYING DEGREES)	20-AUG-97
470.1. Ch1 Safeguards and Security Program (ONLY CHAPTERS I, VII, AND IX in VARYING DEGREES)	20-AUG-97
481.1 Work for Others (Non- Department of Energy Funded Work)	01-OCT-97
534.1 Accounting	07-MAR-97
5400.1 General Environmental Protection Program [11/13/96 Remove paragraphs 2b, 4b, & 4c. of Chap II, and 2d & 3b of Chap III. ALSO SEE WORK SMART STANDARDS SET BELOW]	20-NOV-92
5400.2A, Ch1 Environmental Compliance Issue Coordination [11/13/96 Remove paragraphs 5a(2) and 5a(7). SEE WORK SMART STANDARDS SET BELOW]	29-JUN-93
5400.4 CERCLA Requirements	20-NOV-92
5400.5. Ch2 Radiation Protection of the Public and the Environment [11/13/96 Remove paragraph 1a(3)(a) of Chapter II. SEE WORK SMART STANDARDS SET BELOW]	06-DEC-93
5480.19, Ch1 Conduct of Operations Requirements for DOE Facilities	02-DEC-93
5480.1B, Ch5 Environment, Safety, and Health Program for Department of Energy Operations	06-DEC-93
5480.21 Unreviewed Safety Questions	20-NOV-92
5480.22, Ch1 Technical Safety Requirements	02-DEC-93
5480.25 Safety of Accelerator Facilities [11/13/96. Only paragraphs 9d - j, 10, 11, see Work Smart Standards Set below.]	29-DEC-93
5480.29 Employee Concerns Management System	05-SEP-97
5480.3 Safety Requirements for the Packaging and Transportation of Hazardous Materials [11/13/96 Remove paragraph 9e. SEE WORK SMART STANDARDS SET BELOW]	20-NOV-92
5480.4, Ch4 Environmental Protection, Safety, and Health Protection Standards [10/1/97 -cancel Attach. 2, para. 2c, 2d(2)-(3), 2e(1)-(8); and Attach. 3, para. 2c, 2d(2)-(3), and 2e(1)-(7).]	29-DEC-93
5482.1B Environment, Safety, and Health Appraisal Program	20-NOV-92
5484.1 ES&H Information Reporting Requirements [Effective 11/13/96 - remove paragraphs 1 - 5, 6a(1) - (10), both 6f(1) - (8) and the second paragraph numbered 6f, and Chapters I, II, III, IV and V.]	20-NOV-92
5530.5, Ch1 Federal Radiological and Monitoring Assessment Center	02-DEC-93
5632.1C Protection and Control of Safeguards and Security Interests	21-NOV-94
5633.3B Control and Accountability of Nuclear Materials	07-SEP-95
5660.1B Management of Nuclear Materials	11-JAN-95
5700.6C Quality Assurance	20-NOV-92
5700.7C Work Authorization System	20-NOV-92
5800.1A Research and Development Laboratory Technology Transfer Program	20-NOV-92
5820.2A Radioactive Waste Management [11/13/96 SEE WORK SMART STANDARDS SET BELOW]	20-NOV-92
C.O. 98-1 Ref Clauses 5.12 and 6.7	01-OCT-97
M 231.1-1, Ch1 Environment, Safety and Health Reporting Manual [SEE WORK SMART STANDARDS SET BELOW]	13-NOV-96
M 232.1-1 Occurrence Reporting and Processing of Operations Information	04-SEP-96
M 450.3-1 The Department of Energy Closure Process for Necessary and Sufficient Sets of Standards [11/13/96 SEE WORK SMART STANDARDS SET BELOW]	13-NOV-96
N 441.1 Radiological Protection for DOE Activities	15-NOV-96
SEN 30-91 Setting the Course for Technology Transfer in the DOE	20-NOV-92
Work Smart Standards Set	13-NOV-96

APPENDIX I

**LEASE AND OCCUPANCY AGREEMENTS,
CAMPUS BUILDINGS, SPACE
AND EQUIPMENT**

Appendix I - Lease And Occupancy Agreements, Campus Buildings, Space And Equipment

LEASE AND OCCUPANCY AGREEMENTS,
CAMPUS BUILDINGS, SPACE AND EQUIPMENT

(a) The Contractor and the Government have entered into the following lease and occupancy agreements:

(1) Occupancy Agreement entered into on June 28, 1948; Supplement No. 1 dated May 16, 1956; Supplement No. 2 dated October 24, 1961; Supplement No. 3 dated April 30, 1963; Supplement No. 4 dated December 2, 1964; Supplement No. 5 dated June 15, 1970; Supplement No. 6 dated February 23, 1988.

(2) Lease Agreement entered into on September 1, 1948 (Wilson Tract); Supplement No. 1 dated January 3, 1949; Supplement No. 2 dated June 30, 1955; Supplement No. 3 dated April 17, 1962; Supplement No. 4 dated April 6, 1965; Supplement No. 5 dated December 5, 1967; Supplement No. 6 dated April 3, 1975.

(3) Lease Agreement entered into on November 9, 1959 (State University Tract); Supplement No. 1 dated December 2, 1964; Supplement No. 2 dated June 6, 1986; Supplement No. 3 dated February 23, 1988.

(4) Lease Agreement entered into on January 19, 1961 (East Site Development - Parcel 15); Supplement No. 1 dated May 25, 1962 (State University Tract, Simmons Plot); Supplement No. 2 dated September 21, 1962; Supplement No. 3 dated December 5, 1967; Supplement No. 4 dated October 6, 1969; Supplement No. 5 dated July 5, 1979; Supplement No. 6 dated April 1, 1985; Supplement No. 7 dated October 25, 1985; Supplement No. 8 dated October 12, 1985; Supplement No. 9 dated July 23, 1992.

(5) Lease Agreement entered into on May 1, 1962 (University Campus Plot "O"); Supplement No. 1 dated September 21, 1962; Supplement No. 2 dated October 21, 1964; Supplement No. 3 dated March 23, 1965; Supplement No. 4 dated April 27, 1966; Supplement No. 5 dated February 10, 1967.

(6) Lease Agreement entered into on June 15, 1963 (Bailey Tract); Supplement No. 1 dated February 23, 1988.

(b) The provisions outlined below shall apply to the lease or occupancy by the Government of the property of the Contractor:

(1) Lease And Occupancy Agreements For Structures And Improvements On Regular University Campus. The Contractor and DOE have entered into or shall enter into occupancy or lease agreements for the use of the regular University campus upon which structures and other improvements financed by the Government have been or will be constructed. Lease agreements shall be used in the case of new Government-owned structures and to the extent mutually agreed upon for other structures. Such lease agreements shall conform to leases entered into pursuant to paragraph (b)(2) below, except for such differences as the parties have agreed upon for prior leases on the State University Tract or may hereafter mutually agree upon. Such occupancy agreements shall incorporate the following terms and conditions, and such other provisions as may be agreed to by the parties:

Appendix I - Lease And Occupancy Agreements, Campus Buildings, Space And Equipment

(i) DOE shall have the right to occupy and use the property in conjunction with the Contractor during the term of this contract and any successor contracts and for three years after termination of such contracts as provided below.

(ii) After termination of this contract or any successor contract, and by mutual agreement of the parties at any time during the course of the work, the Contractor shall have the right to purchase any such structure or improvement at a price to be agreed upon as fair and proper. DOE shall be given reasonable notice of the Contractor's election to purchase. In the event the parties cannot agree upon the price for any such structure or improvement which the Contractor elects to purchase, the value of the structure shall be determined by an appraiser mutually acceptable to the parties. In any such appraisal the original cost and appropriate depreciation of the structure or improvement shall be given full consideration in the determination of value.

(iii) Subject to the Contractor's right to purchase, DOE shall have the right to occupy and use the structures and improvements in conjunction with the Contractor for a period of three years after termination for storage and such other purposes as may be approved by the Contractor, and to remove all or any part of any such structure or other improvements.

(iv) DOE shall not be obligated to restore any such property to its original condition or otherwise, except if DOE removes any substantial part of any structure or improvement the Contractor may require the restoration of the affected premises to its original condition.

(v) During the period of occupancy by DOE after termination, the Contractor shall continue to provide adequate maintenance, utilities and other necessary services, and shall afford DOE and its designees access to the premises at all times. DOE shall pay the Contractor for its direct expenses for maintenance and services for the structures and improvements attributable to DOE's occupancy and use during the period after termination.

(vi) Upon expiration of the three-year period after termination, all structures and improvements not purchased or removed shall become the property of the Contractor.

(2) Lease Agreements For Structures And Improvements On Wilson Tract, Plot "O" And Plot "M." The Contractor and DOE have entered into or shall enter into lease agreements granting DOE rights in the property of the Contractor known as Wilson tract, Plot "O" and "M" upon which structures and other improvements financed by the Government have been or will be constructed. Such leases shall incorporate the following terms and conditions, and such other provisions as may be agreed to by the parties:

(i) DOE shall be granted a 50-year lease for the premises occupied by such structures and improvements together with a reasonable surrounding area. If the contractual relations between the Contractor and the Government are in effect at the end of the 50-year period of any lease the term of the lease shall extend until the termination of such relationship and three years thereafter. The term of the lease for each structure or improvement shall be effective from the date of approval of construction by DOE or July 1, 1948, whichever is later. In special cases the Administration may approve the use of a different effective date or lease term.

(ii) Under any such lease during the term of this contract and its extensions, the premises shall be used solely by the Contractor and DOE in carrying on work under this contract, unless otherwise agreed to by the parties in writing.

Appendix I - Lease And Occupancy Agreements, Campus Buildings, Space And Equipment

(iii) The Contractor at any time during the term of the contract may purchase any such structure or improvement where the needs of the program no longer require their use. Such purchase shall be subject to paragraph (b)(2)(iv) below.

(iv) After termination of this contract or any successor contract, and by mutual agreement of the parties at any time during the course of the work, the Contractor shall have the right to purchase any such structure or improvement at a price to be agreed upon as fair and proper. DOE shall be given reasonable notice of the Contractor's election to purchase. In the event the parties cannot agree upon the price for any such structure or improvement which the Contractor elects to purchase, the value of the structure shall be determined by an appraiser mutually acceptable to the parties. In any such appraisal the original cost and appropriate depreciation of the structure or improvement shall be given full consideration in the determination of value.

(v) After termination, subject to the Contractor's right to purchase, DOE shall have the right to (A) continue research work related to energy, (B) place and maintain equipment related to the energy program, (C) remove all or any part of any such structure or improvements, and (D) carry on such other activities as may be mutually agreed to by the parties except as may be qualified by the parties. In exercising its rights pursuant to this subparagraph, DOE shall have the right to permit other organizations and individuals to participate with DOE in carrying on such activities.

(vi) Under any such lease, DOE shall not be obligated to restore any property to its original condition or otherwise, except that if DOE removes any substantial part of any structure or improvement the Contractor may require the restoration of the affected premises to its original condition.

(vii) During the period of the lease after termination of the contract, the Contractor shall continue to provide adequate maintenance, utilities, and other necessary services (including standby services), and shall afford DOE and its designees access to the premises at all times. DOE shall pay the Contractor for its direct expenses for maintenance and services for the structures and improvements attributable to DOE's use of the property during the period after termination.

(viii) Upon expiration of the term of this lease and such extensions as may be mutually agreed upon, all structures and improvements not purchased or removed shall become the property of the Contractor.

(3) Lease And Occupancy By DOE Of Real Property Owned By The University - Responsibility For Environmental Restoration And Remedial Work. Upon termination or expiration of contract DE-AC03-76SF00098 or any lease or occupancy agreements providing for the Government's use of the property of the Contractor, DOE shall be responsible for complying with applicable laws, regulations, or orders requiring investigation, monitoring, cleanup, containment, restoration, removal, or other remedial activity with respect to any hazardous substances present in the soil, ground water or buildings as a result of activities conducted during the term of this contract or any prior contract modifications or during the term of any said lease or occupancy agreements.

(4) Campus Building Space And Equipment.

(i) Campus building space and equipment used directly by Laboratory personnel under Contract DE-AC03-76SF00098 (previously Contract W-7405-ENG-48) shall be at least equivalent to:

Appendix I - Lease And Occupancy Agreements, Campus Buildings, Space And Equipment

Location Facility Area Net Sq. Ft.

Berkeley campus proper buildings:

Donner Laboratory	20,951
Melvin Calvin Lab	17,724
Hearst Mining	9,652
Hildebrand Hall	13,194
Gilman Hall	5,050
LeConte Hall	1,842
Birge Hall	5,662
Life Sciences	409
Giauque Lab	6,154
Latimer Hall	14,824
Etcheverry Hall	3,092
Lewis Hall	3,585
Cory Hall	53
Hesse Hall	1,594
Wurster Hall	1,717
Subtotal (Campus)	105, 503

LBNL site proper buildings:

Chemistry Building No. 5	4,742
Advanced Light Source Building (previously 184" Cyclotron Building)	22,814
Subtotal (Hill)	27,556
Richmond Field Station	6,161
Total Space Used	137,022

<u>Equipment:</u>	<u>Number/Value</u>
Polar Crane from 184" Cyclotron (Value of U. C. Books)	\$50,000
Various Equipment (approx)	\$100,000
Total Equipment	\$150,000

(ii) The Parties agree that campus space furnished under subparagraph (b)(4)(i) above by the Contractor may be changed from time to time by mutual agreement of the parties, and except as otherwise agreed, the Contractor shall continue to furnish space at no less than 78,890 square feet. In the event that the space actually furnished varies significantly from said 78,890 square feet, the Parties agree, upon the request of either party, to negotiate an appropriate adjustment for maintenance charges related to such variation.