

BECHTEL JACOBS COMPANY
RADIATION PROTECTION PROGRAM
FOR
10 CFR 835
OCCUPATIONAL RADIATION PROTECTION

**BECHTEL JACOBS COMPANY
RADIATION PROTECTION PROGRAM PLAN**

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EXECUTIVE SUMMARY

1.0 PURPOSE

The Bechtel Jacobs company has a prime contract with the U.S. Department of Energy (DOE) (DE-ACOS-980R22700) to accomplish the Management and Integration of the Oak Ridge and Enrichment Facilities scope of work (the M&I Contract). The purpose of the Bechtel Jacobs Company Radiation Protection Program (RPP) is to accomplish the contracted work in a manner that meets the Price-Anderson Amendments Act (PAAA) requirements of Title 10 Code of Federal Regulations Part 835 (10 CFR 835).

The intent of the RPP is to minimize exposure to ionizing radiation for employees, the public, and the environment to levels as low as reasonably achievable (ALARA). This RPP incorporates an aggressive ALARA policy using a graded approach to the application of pre-job ALARA reviews, workplace monitoring, job site inspections, and radiological performance indicators to assure accomplishment of annually established radiological performance goals.

The RPP is a management tool that enhances the ability to carry out tasks in a manner that will protect employees, the public, and the environment. Subcontractors shall be contractually required to comply with the Bechtel Jacobs Company RPP.

2.0 SCOPE

The RPP applies to all M&I Contract operations involving potential exposure to ionizing radiation at the East Tennessee Technology Park (ETTP), Oak Ridge National Laboratory (ORNL), Y-12, Paducah and Portsmouth gaseous diffusion plants, and any other sites or facilities within the prime contract scope of work where Bechtel Jacobs Company conducts operations for DOE.

3.0 AS LOW AS REASONABLY ACHIEVABLE (ALARA)

Bechtel Jacobs Company is firmly committed to having a radiological control program of the highest quality. This program applies to M&I Contract activities that manage radiation and radioactive materials and that may result in radiation exposure to workers, the public, and the environment. The fundamental principle underlying the Bechtel Jacobs Company RPP is the following statement from the Radiation Protection Guidance to Federal Agencies for Occupational Exposure (1987): "There should not be any occupational exposure of workers to ionizing radiation without the expectation of an overall benefit from the activity causing the exposure."

The method of implementing the Bechtel Jacobs Company ALARA program is highly dependent on the complexity and magnitude of potential radiological hazards. The elements of the Bechtel Jacobs Company ALARA program are identified in formal ALARA procedures. The degree of formality and the level of detail contained in these procedures and other pertinent documentation are commensurate with the magnitude of the radiological hazards. Bechtel Jacobs Company activities with higher collective dose and/or potential for significant occupational doses, have more detailed ALARA documentation than an activity with low collective doses and/or potential for significant occupational doses. ALARA policy and procedures address the following elements at a level commensurate with the radiological hazards associated with the work activities.

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3.1 ALARA Policy

The Bechtel Jacobs Company policy is to conduct radiological operations in a manner that promotes the health and safety of all employees, subcontractors, and the general public. In achieving this objective, the Bechtel Jacobs Company shall minimize the radiation exposure to employees, subcontractors, the public, and the environment. Deliberate efforts will be taken to further reduce exposures and releases in accordance with a process to make any such exposures or releases ALARA. The Bechtel Jacobs Company radiological control program consistently reflects this policy.

It is the policy of the Bechtel Jacobs Company to perform all activities and services in a radiologically safe manner that meets or exceeds the applicable requirements of 10 CFR 835. The Bechtel Jacobs Company is committed to the philosophy of maintaining individual and collective exposures ALARA.

The management of the Bechtel Jacobs Company affirms the following:

1. Personal radiation exposure shall be maintained ALARA;
2. Radiation exposure of the work force and public shall be controlled via a graded approach such that radiation exposures are well below regulatory limits and that there is no radiation exposure without commensurate benefit;
3. Each person involved in radiological work is expected to demonstrate responsibility and accountability through an informed, disciplined, and cautious attitude toward radiation and radioactivity;
4. Excellent performance is evident when site missions are completed and radiation exposures are maintained well below regulatory limits, contamination is minimized, radioactivity is well controlled, and radiological spills or uncontrolled releases are prevented; and
5. Continuing improvement is essential to excellence in radiological control.

3.2 Training

Standards are established to promote the technical competency of the Bechtel Jacobs Company work force, as appropriate, through implementation of radiological training and development programs. An appropriate level of technical competence gained through education, experience, and job-related technical and professional training is a critical component of achieving goals for the Bechtel Jacobs Company radiological control policy. Qualification requirements commensurate with this objective are established for technical and professional radiological control program positions and are, at a minimum, consistent with applicable industry standards and promote professional development and excellence in radiological performance. All employees subject to occupational exposure receive radiation safety training commensurate with their job assignment.

3.3 Planning

Bechtel Jacobs Company procedures for radiological operations and activities allow for appropriate, effective implementation of dose and contamination reduction and control measures through preplanning. Preplanning of radiological operations and activities is performed in accordance with a graded approach and includes reasonable controls directed toward reducing exposure, preventing the spread of radiological contamination, and minimizing the generation of contaminated wastes and the release of effluents.

The incorporation of dose reduction, contamination reduction, and waste minimization features into M&I work is implemented in the earliest planning stages whenever applicable or feasible. Whenever possible, these features are directed to controlling contamination at the source, eliminating airborne radioactivity,

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maintaining personnel exposure below regulatory limits, and using a process that assures ALARA exposure levels and releases.

3.4 Internal Audits

The responsibility for compliance with Bechtel Jacobs Company radiological protection requirements and for maintaining personnel radiation exposure ALARA starts at the employee level, progresses upward through the project organization, and includes both Bechtel Jacobs Company and subcontractor organizations. Bechtel Jacobs Company managers are fully responsible for radiological performance within their projects. Managers take necessary actions to incorporate ALARA principles, monitor performance, and take corrective actions when necessary. Comprehensive internal audits and self-assessments are conducted to help assure compliance with requirements and ALARA implementation. Results are periodically reported to the highest levels of Bechtel Jacobs Company management.

3.5 Design

Dose reduction, contamination reduction, and waste minimization features will be included in the design of new facilities or modifications to existing facilities, waste processing, and surplus facilities surveillance and maintenance (S&M) activities. Best efforts will be made to control radiation and radioactivity at the source first and foremost with engineering controls in an attempt to obviate use of administrative controls and personal protective equipment.

3.6 Radiological Work/Experiment Administration and Planning

Bechtel Jacobs Company implements controls and uses optimization methods to assure that occupational dose is maintained ALARA for routine and special operation or experiments.

3.7 Records

Documentation that demonstrates compliance with the ALARA program is produced as a result of the Bechtel Jacobs Company RPP and supports the commitment to maintain exposures ALARA.

4.0 PROGRAM DESCRIPTION

The primary focus of the work performed by the Bechtel Jacobs Company is to accomplish the Environmental Management Oak Ridge 2006 Plan and revisions thereto for the assigned sites, as presently described in the Oak Ridge Office (ORO) document dated June 1997 entitled "Accelerating Cleanup: Focus on 2006 (Discussion Draft)." Any revisions thereto are to be incorporated into subsequent editions of the Oak Ridge 2006 Plan.

Bechtel Jacobs Company is fully responsible and accountable for safe accomplishment of all work, whether performed by its own personnel or subcontractors. The strategy is for Bechtel Jacobs Company to manage the overall effort; the actual execution of work in the field will primarily be done by subcontractors. These subcontractors will be held contractually accountable to Bechtel Jacobs Company for compliance with the RPP.

The M&I scope of work includes: (1) environmental management including: environmental restoration, waste management, technology development demonstrations, and nuclear materials and facilities

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stabilization at all assigned sites; (2) infrastructure responsibilities at ETTP; (3) support to reindustrialization as a means to more cost-effectively accomplish cleanup/decontamination and decommissioning (D&D) of sites and facilitate economic transition from DOE to alternate use; and (4) Enrichment Facilities (EF) programs relating to disposition of highly enriched uranium, management of depleted uranium cylinders and polychlorinated biphenyls, and facilities infrastructure management.

The complete identification of work to be accomplished under the scope of the M&I contract is subject to change. In particular, it is anticipated that either the Portsmouth or Paducah gaseous diffusion plant may be returned to the DOE to begin the D&D process. Similarly, designated facilities at the Y-12 or ORNL site may be accepted into the EM program. If directed by DOE, such additional work will be conducted by Bechtel Jacobs Company. Bechtel Jacobs Company may be requested to perform services using existing facilities and capabilities from other federal agencies or non-federal entities.

4.1 Environmental Management

Bechtel Jacobs Company will manage and integrate environmental management activities at the Oak Ridge Reservation (ORR), Paducah, and Portsmouth sites, including related offsite locations. Bechtel Jacobs Company and its subcontractors will:

1. Perform remedial investigations, validate and interpret the data, and maintain the required databases to determine the baseline risk to the environment and human health.
2. Develop documents to support decision making based on the data obtained during remedial investigations, land-use decisions, historical knowledge of the site, and regulator and stakeholder input.
3. Perform interim actions/removal actions as necessary.
4. Develop remedial designs and conduct remedial actions including facility D&D.
5. Perform S&M of inactive buildings and sites including nuclear reactors, nuclear facilities, and ancillary support structures before, during, and after D&D or remediation, to include surface and groundwater monitoring.
6. Perform D&D activities.
7. Manage all wastes generated by environmental restoration activities at ORR, Portsmouth, and Paducah.
8. Perform legacy waste management at Portsmouth and Paducah.
9. Support DOE's Technology Coordination Group.
10. Champion the use of enhanced or alternative cost-effective technologies in environmental restoration and waste management.
11. Manage legacy reactor spent fuel, including fuel removal and transport to offsite storage.

4.2 East Tennessee Technology Park Infrastructure

Bechtel Jacobs Company will manage assigned infrastructure at ETTP in a manner consistent with current and anticipated EM activities, including reindustrialization efforts. The objective is to turn the infrastructure and services over to commercial entities as soon as possible. Infrastructure is defined as all activities required to maintain and support facilities, systems, and grounds operations. Bechtel Jacobs Company and its subcontractors will:

1. Provide site maintenance services.

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2. Provide necessary site services such as occupational medical, training, transportation, garage, cafeteria, janitorial, emergency management, fire protection, information systems, telecommunications and multimedia services, etc., unless provided by DOE.
3. Provide for necessary repairs, alterations, and improvements to ensure that the structural condition of assigned facilities is adequate and safe for their intended use.
4. Ensure that equipment and facility areas are protected and maintained; provide nuclear materials safeguards and accountability where appropriate.
5. Provide for inventory stores, warehousing, and material/property management.
6. Provide infrastructure support, as directed by DOE, to assist new tenants in establishing a business presence at the ETTP.

4.3 Reindustrialization Support

Bechtel Jacobs Company will assist DOE's reindustrialization efforts at the ORR. Reindustrialization is a means for reducing mortgage costs and expediting cleanup. Bechtel Jacobs Company and its subcontractors will:

1. Coordinate reindustrialization input into the Oak Ridge 2006 Plan.
2. Assess ORO facilities for industrial or other commercial reuse potential.
3. Assist in the preparation of documents necessary to meet regulatory requirements.
4. Assist DOE in the development of "marketing" strategies and execution of the marketing strategies for dispositioning DOE facilities, equipment, and materials.
5. Develop transition plans for government-owned facilities to non-government-owned facilities.
6. Provide support to DOE for communications/negotiations with other government agencies, community organizations, and commercial parties.
7. Assist DOE with transition of government equipment and facilities to tenants.

4.4 Enrichment Facilities Programs

Bechtel Jacobs Company is responsible for planning, procuring, managing, and integrating the full range of actions required to execute the Uranium Programs Baseline Plan. Bechtel Jacobs Company and its subcontractors will:

1. Execute the depleted uranium hexafluoride (DU) cylinder program including cylinder inspections, coating, data tracking, cylinder handling and stacking, maintenance of cylinders, cylinder yard and equipment, and management of substandard cylinders.
2. Support the Programmatic Environmental Impact Statement (PEIS) for depleted uranium.
3. Execute the PCB collection and containment program including inspection, maintenance, analysis, cleanup, and reporting.
4. Support lease administration for the U.S. Enrichment Company (USEC) and provide support for nonleased facilities.
5. Recommend to DOE the alternate use of non-leased, government-owned site assets at Portsmouth and Paducah.
6. Support DOE in nuclear safety activities including compliance plans, annual reports to Congress, annual recertification requirements, and verifying USEC's incurred costs for nuclear safety upgrades program.

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7. When required, work with appropriate DOE Program Offices to safeguard and remove all stored highly enriched uranium from the Portsmouth and Y-12 plants or other locations as directed by DOE for blending down and/or temporary storage.
8. Provide planning support to DOE for the potential return of a gaseous diffusion plant from USEC.
9. Support the DOE transparency program including training programs for monitors, technical support, personnel for monitoring visits to Russia, development of special monitoring equipment, and support for Russian visits to the Portsmouth plant.

5.0 INCLUDED AND EXCLUDED ACTIVITIES

All of the activities described in Section 4 with the potential to result in occupational exposure to ionizing radiation shall be performed consistent with the provisions of this RPP. Bechtel Jacobs Company does not anticipate performing work for DOE according to the provisions of a Nuclear Regulatory Commission (NRC) or agreement state license. Note that the list of activities described in Section 4 may or may not be all-inclusive of work to be performed by Bechtel Jacobs Company because DOE may direct the addition or removal of work scope.

6.0 HAZARD ASSESSMENT

Radiological hazards found at M&I sites are related to the generic categories of direct gamma and beta radiation exposure; inhalation of airborne radioactivity; ingestion of loose surface contamination, contaminated soil, and other contaminated environmental media; and direct transfer or radioactivity into the blood stream by wounds. The level of hazard varies from site to site and is attributed to uranium and daughter products (including enriched, natural, and depleted); mixed fission products; and, to a lesser degree, tritium and transuranic elements, notably plutonium, americium, and neptunium.

Uranium, by far, is the primary radionuclide of concern at ETTP, Portsmouth, Paducah, and Y-12. Thus, direct gamma exposure is much less significant than inhalation of this long-lived alpha-emitter. Good contamination controls and aggressive personnel air sampling are essential during remediation and D&D activities. Beta radiation exposure to the skin, extremities, and lens of the eye are also a concern when working in close proximity to contaminated surfaces.

At ORNL M&I site, direct gamma exposure and, to a lesser extent, beta exposure pose the most immediate hazards when remediating waste storage tanks and areas and performing safe shut down and D&D of nuclear reactors and isotope separation or production facilities. These direct exposures are attributable mainly to mixed fission products. Transuranic elements are also contained in waste storage tanks and areas; thus, inhalation hazards will be prevalent, necessitating good contamination control and airborne radioactivity monitoring.

7.0 IMPLEMENTATION

Implementation of the Bechtel Jacobs Company RPP is provided through plans and procedures developed for each of the ORR sites. These plans and procedures have been used successfully at these sites to provide a fully compliant program. The Bechtel Jacobs Company intends to apply the continuous improvement philosophy to day-to-day tasks and will enhance the existing plans and procedures commensurate with the changing mission from operations to environmental remediation and from a management and operations to a management and integration approach, subcontracting over 90 percent of

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the work activities. The degree of protection of workers, the public, and the environment will not be degraded.

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APPROVALS

**Radiation Protection Program for
10 CFR 835
Occupational Radiation Protection**

BJC/OR-301

Revision 1

November 9, 1999

Operated by:

Bechtel Jacobs Company, LLC
Post Office Box 4699, Oak Ridge, TN

Signature on File

Steve Green, CHP
Bechtel Jacobs Radiological Control Manager

11/11/99

Date

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Dennis A. Stevenson, Ph.D, CHP
Bechtel Jacobs Company Environment, Safety, and Health Manager

11/11/99

Date

Signature on File

Joseph Nemec
President, Bechtel Jacobs Company

11/11/99

Date

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10 CFR 835: 1AA.4.01STATUS: Full Compliance

REQUIREMENT STATEMENT:

To allow for an actual measured equilibrium concentration or a demonstrated equilibrium concentration, the values given in this table SHOULD be multiplied by the ratio (100%/ actual %) or (100%/demonstrated %), respectively.

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs administers a program that permits adjustment of an actual measured or demonstrated equilibrium concentration to be multiplied by the ratio (100%/actual %) or (100%/demonstrated %), respectively.

10 CFR 835: 1AA.4.02STATUS: Full Compliance

REQUIREMENT STATEMENT:

Alternatively, the DAC values for Rn-220 and Rn-222 MAY be replaced by 1 WL and 1/3 WL, respectively, for appropriate limiting of daughter concentrations.

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs administers a program that permits the DAC values for Rn-220 and Rn-222 to be replaced by 1 WL and 1/3 WL respectively, to limit their daughter concentrations.

10 CFR 835: 1AC (e)STATUS: Full Compliance

REQUIREMENT STATEMENT:

The DAC values are given for individual radionuclides. For known mixtures of radionuclides, determine the sum of the ratio of the observed concentration of a particular radionuclide and its corresponding DAC for all radionuclides in the mixture. If this sum exceeds unity (1), then the DAC has been exceeded. For unknown radionuclides, the most restrictive DAC (lowest value) for those isotopes not known to be absent SHALL be used.

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs administers a program based on the DAC values given for individual radionuclides. For known mixtures of radionuclides, determine the sum of the ratio of the observed concentration of a particular radionuclide and its corresponding DAC for all radionuclides in the mixture. If this sum exceeds unity (1), then the DAC has been exceeded. For unknown radionuclides, the most restrictive DAC (lowest value) for those isotopes not known to be absent will be used.

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10 CFR 835: 1AD.1STATUS: Full Compliance

REQUIREMENT STATEMENT:

Where surface contamination by both alpha- and beta-gamma-emitting nuclides exists, the limits established for alpha- and beta-gamma-emitting nuclides apply independently.

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs applies the surface contamination limits independently for both alpha- and beta-gamma-emitting nuclides when they exist together.

10 CFR 835: 1AD.3.01STATUS: Full Compliance

REQUIREMENT STATEMENT:

The (surface radioactivity) levels MAY be averaged over one square meter provided the maximum surface activity in any area of 100 cm² is less than three times the value specified. For purposes of averaging, any square meter of surface SHALL be considered to be above the surface contamination value if:

- (1) from measurements of a representative number of sections it is determined that the average contamination level exceeds the applicable value; or
- (2) it is determined that the sum of the activity of all isolated spots or particles in any 100 cm² area exceeds three times the applicable value.

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs operates the workplace monitoring program by averaging the surface radioactivity levels over one square meter provided the maximum surface activity in any area of 100 cm² is less than three times the value specified. For purposes of averaging, any square meter of surface is considered to be above the surface contamination guide if: from the measurements of a representative number of sections, it is determined that the average contamination level exceeds the applicable value; or it is determined that the sum of the activity of all isolated spots or particles in any 100 cm² area exceeds three times the applicable value.

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10 CFR 835: 1AD.3.02STATUS: Full Compliance

REQUIREMENT STATEMENT:

The (surface radioactivity) levels MAY be averaged over one square meter provided the maximum surface activity in any area of 100 cm² is less than three times the value specified.

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs averages surface radioactivity levels over one square meter provided the maximum surface activity in any area of 100 cm² is less than three times the value specified.

10 CFR 835: 1AD.4.01STATUS: Full Compliance

REQUIREMENT STATEMENT:

The amount of removable radioactive material per 100 cm² of surface area SHOULD be determined by swiping the area with dry filter or soft absorbent paper, applying moderate pressure, and then assessing the amount of radioactive material on the swipe with an appropriate instrument of known efficiency. (Note - The use of dry material MAY not be appropriate for tritium.)

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs determines the amount of removable radioactive material per 100 cm² of surface area by swiping the area with dry filter or soft absorbent paper, applying moderate pressure, and then assessing the amount of radioactive material on the swipe with an appropriate instrument of known efficiency. (Note - The use of dry material MAY not be appropriate for tritium.)

10 CFR 835: 1AD.4.02STATUS: Full Compliance

REQUIREMENT STATEMENT:

When removable contamination on objects of surface area less than 100 cm² is determined, the activity per unit area SHALL be based on the actual area and the entire surface SHALL be wiped.

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs determines removable contamination on objects of surface area less than 100 cm² by estimating the actual area and wiping the entire surface.

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10 CFR 835: 1AD.6STATUS: Full Compliance

REQUIREMENT STATEMENT:

Tritium contamination may diffuse into the volume of matrix of materials. Evaluation of surface contamination SHALL consider the extent to which such contamination may migrate to the surface in order to ensure the surface contamination value provided in this appendix is not exceeded. Once this contamination migrates to the surface, it may be removable, not fixed; therefore, a "Total" value does not apply.

DESCRIPTION OF COMPLIANCE:

Bechtel Jacobs recognizes that tritium contamination may diffuse into the volume of matrix of materials. Evaluation of surface contamination will consider the extent to which such contamination may migrate to the surface in order to ensure the surface contamination value provided in this appendix is not exceeded. Once this contamination migrates to the surface, it may be removable, not fixed; therefore, a "Total" value does not apply.

10 CFR 835: 1 (a)STATUS: Full Compliance

REQUIREMENT STATEMENT:

General. The rules in this part establish radiation protection standards, limits, and program requirements for protecting individuals from ionizing radiation resulting from the conduct of DOE activities.

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs recognizes that the rules in this part establish radiation protection standards, limits, and program requirements for protecting individuals from ionizing radiation resulting from the conduct of DOE activities.

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10 CFR 835: 1 (b)STATUS: Full Compliance

REQUIREMENT STATEMENT:

Exclusion. The requirements in this part do not apply to: (1) Activities that are regulated through a license by the Nuclear Regulatory Commission or a State under an Agreement with the Nuclear Regulatory Commission, including activities certified by the Nuclear Regulatory Commission under section 1701 of the Atomic Energy Act; (2) Activities conducted under the authority of the Director, Naval Nuclear Propulsion Program, as described in Pub. L. 98-525; (3) Activities conducted under the Nuclear Explosives and Weapons Safety Program relating to the prevention of accidental or unauthorized nuclear detonations; or (4) Background radiation, radiation doses received as a patient for the purposes of medical diagnosis or therapy, or radiation doses received from voluntary participation in medical research programs.

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs recognizes that the requirements in this do not apply to: (1) Activities that are regulated through a license by the Nuclear Regulatory Commission or a State under an Agreement with the Nuclear Regulatory Commission, including activities certified by the Nuclear Regulatory Commission under section 1701 of the Atomic Energy Act; (2) Activities conducted under the authority of the Director, Naval Nuclear Propulsion Program, as described in Pub. L. 98-525; (3) Activities conducted under the Nuclear Explosives and Weapons Safety Program relating to the prevention of accidental or unauthorized nuclear detonations; or (4) Background radiation, radiation doses received as a patient for the purposes of medical diagnosis or therapy, or radiation doses received from voluntary participation in medical research programs.

10 CFR 835: 2STATUS: Full Compliance

REQUIREMENT STATEMENT:

(a) As used in this part: (defined terms not copied here); (b) As used in this part to describe various aspects of radiation dose: (defined terms not copied here); (c) Terms defined in the Atomic Energy Act and not defined in this part are used consistent with the meanings given in the Act. (d) As used in this part, words in the singular also include the plural and words in the masculine gender also include the feminine and vice versa, as the case may be.

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs accepts the definitions of general terminology in section 10 CFR 835.2(a) and the definitions of dosimetry terminology in section 10 CFR 835.2(b) without exception. Bechtel Jacobs recognizes that terms defined in the Atomic Energy Act and not defined in this part are used consistent with the meanings given in the Act, and that, as used in this part, words in the singular also include the plural and words in the masculine gender also include the feminine and vice versa, as the case may be.

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10 CFR 835: 3 (a)

STATUS: Full Compliance

REQUIREMENT STATEMENT:

No person or DOE personnel SHALL take or cause to be taken any action inconsistent with the requirements of:

- (1) this part; or
- (2) any program, plan, schedule, or other process established by this part.

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs requires that all personnel may only take actions or cause actions to be taken that are consistent with the requirements of 10 CFR 835, or any program, plan, schedule, or other process established by 10 CFR 835.

10 CFR 835: 3 (b)

STATUS: Full Compliance

REQUIREMENT STATEMENT:

With respect to a particular DOE activity, contractor management SHALL be responsible for compliance with the requirements of this part.

DESCRIPTION OF COMPLIANCE STATUS:

With respect to all DOE activities conducted under the Management and Integration Contract, Bechtel Jacobs management is responsible for compliance with the requirements of 10 CFR 835.

10 CFR 835: 3 (c)

STATUS: Not Applicable

REQUIREMENT STATEMENT:

Where there is no contractor for a DOE activity, DOE SHALL ensure implementation of and compliance with the requirements of this part.

DESCRIPTION OF COMPLIANCE STATUS:

This requirement is not applicable to Bechtel Jacobs; it is directly applicable to DOE.

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10 CFR 835: 3 (d)STATUS: Full Compliance

REQUIREMENT STATEMENT:

Nothing in this part SHALL be construed as limiting actions that may be necessary to protect health and safety.

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs does not construe the requirements in 10 CFR 835 as limiting any actions that are necessary to protect health and safety.

10 CFR 835: 3 (e)STATUS: Full Compliance

REQUIREMENT STATEMENT:

For those activities that are required by 10 CFR 835.102, 835.901(e), 835.1202(a), and 835.1202(b), the time interval to conduct these activities may be extended by a period not to exceed 30 days to accommodate scheduling needs.

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs may extend the time interval to conduct the activities required by 10 CFR 835.102, 835.901(e), 835.1202(a), and 835.1202(b) by a period not to exceed 30 days.

10 CFR 835: 4STATUS: Full Compliance

REQUIREMENT STATEMENT:

Unless otherwise specified, the quantities used in the records required by this part SHALL be clearly indicated in special units of curie, rad, roentgen, or rem, including multiples and subdivisions of these units. The SI units, becquerel (Bq), gray (Gy), and sievert (Sv) are only provided parenthetically in this part for reference with scientific standards.

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs records required by 10 CFR 835 will be maintained in the special units of curie, rad, roentgen, rem, or dpm including multiples and subdivisions of these units. The SI units, becquerel (Bq), gray (Gy), and sievert (Sv) may be provided parenthetically for reference with scientific standards.

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10 CFR 835: 101 (a)

STATUS: Full Compliance

REQUIREMENT STATEMENT:

A DOE activity SHALL be conducted in compliance with a documented radiation protection program (RPP) as approved by the DOE.

DESCRIPTION OF COMPLIANCE STATUS:

All Bechtel Jacobs activities performed under contract to DOE will be conducted in compliance with this radiation protection program (RPP), which will be approved by DOE.

10 CFR 835: 101 (b)

STATUS: Full Compliance

REQUIREMENT STATEMENT:

The DOE MAY direct or make modifications to a RPP.

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs acknowledges DOE's authority to direct or make modifications to a RPP.

10 CFR 835: 101 (c) .01

STATUS: Full Compliance

REQUIREMENT STATEMENT:

The content of each RPP SHALL be commensurate with the nature of the activities performed and shall include formal plans and measures for applying the as low as reasonably achievable (ALARA) process to occupational exposure.

DESCRIPTION OF COMPLIANCE STATUS:

The Bechtel Jacobs RPP is commensurate with the activities performed under the contract and includes formal plans and measures for applying the as low as reasonably achievable (ALARA) process to occupational exposure.

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10 CFR 835: 101 (c) .02

STATUS: Full Compliance

REQUIREMENT STATEMENT:

The content of each RPP shall be commensurate with the nature of the activities performed and SHALL include formal plans and measures for applying the as low as reasonably achievable (ALARA) process to occupational exposure.

DESCRIPTION OF COMPLIANCE STATUS:

The Bechtel Jacobs RPP is commensurate with the activities performed under the contract and includes formal plans and measures for applying the as low as reasonably achievable (ALARA) process to occupational exposure.

10 CFR 835: 101 (d) .01

STATUS: Full Compliance

REQUIREMENT STATEMENT:

The RPP SHALL specify the existing and/or anticipated operational tasks that are intended to be within the scope of the RPP.

DESCRIPTION OF COMPLIANCE STATUS:

The Bechtel Jacobs RPP specifies the existing and/or anticipated operational tasks that are intended to be within the scope of the RPP.

10 CFR 835: 101 (d) .02

STATUS: Full Compliance

REQUIREMENT STATEMENT:

Except as provided in 10 CFR 835.101(h), any task outside the scope of a RPP SHALL not be initiated until an update of the RPP is approved by DOE.

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs will perform no tasks outside the scope of the RPP until an update of the RPP is approved by DOE, except under conditions defined in 10 CFR 835.101(h).

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10 CFR 835: 101 (e)

STATUS: Full Compliance

REQUIREMENT STATEMENT:

The content of the RPP SHALL address, but SHALL not necessarily be limited to, each requirement in this part.

DESCRIPTION OF COMPLIANCE STATUS:

The Bechtel Jacobs RPP addresses all applicable requirements in 10 CFR 835.

10 CFR 835: 101 (f) .01

STATUS: Full Compliance

REQUIREMENT STATEMENT:

The RPP SHALL include plans, schedules, and other measures for achieving compliance with regulations of this part. Unless otherwise specified in this part, compliance with amendments to this part SHALL be achieved no later than 180 days following approval of the revised RPP by DOE.

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs has implemented required changes to achieve compliance with the 10 CFR 835 amendments.

10 CFR 835: 101 (f) .02

STATUS: Full Compliance

REQUIREMENT STATEMENT:

Compliance with the requirements of 10 CFR 835.402(d) for radiobioassay program accreditation SHALL be achieved no later than January 1, 2002.

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs will comply with the requirements for radiobioassay program accreditation no later than January 1, 2002.

**BECHTEL JACOBS COMPANY
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10 CFR 835: 101 (g) (1)

STATUS: Full Compliance

REQUIREMENT STATEMENT:

An update of the RPP SHALL be submitted to DOE:
Whenever a change or an addition to the RPP is made;

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs will submit an update of the RPP to DOE whenever a change or an addition to the RPP is made.

10 CFR 835: 101 (g) (2)

STATUS: Full Compliance

REQUIREMENT STATEMENT:

An update of the RPP SHALL be submitted to DOE:
Prior to the initiation of a task not within the scope of the RPP; or

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs will submit an update of the RPP to DOE prior to the initiation of any task outside the scope of the approved RPP.

10 CFR 835: 101(g) (3)

STATUS: Full Compliance

REQUIREMENT STATEMENT:

An update of the RPP SHALL be submitted to DOE:
Within 180 days of the effective date of any modifications to this part.

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs will submit an update of the RPP to DOE within 180 days of the effective date of any modifications to 10 CFR 835.

**BECHTEL JACOBS COMPANY
RADIATION PROTECTION PROGRAM PLAN**

10 CFR 835: 101 (h).01

STATUS: Full Compliance

REQUIREMENT STATEMENT:

Changes, additions, or updates to the RPP MAY become effective without prior Department approval only if the changes do not decrease the effectiveness of the RPP and the RPP, as changed, continues to meet the requirements of this part.

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs will implement changes, additions, or updates to the RPP without prior Department approval only if the changes do not decrease the effectiveness of the RPP and the RPP, as changed, continues to meet the requirements of this part.

10 CFR 835: 101 (h) .02

STATUS: Full Compliance

REQUIREMENT STATEMENT:

Proposed changes that decrease the effectiveness of the RPP SHALL not be implemented without submittal to and approval by the Department.

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs will not implement proposed changes to the RPP that decrease the effectiveness of the RPP without submittal to and approval by the Department.

10 CFR 835: 101 (i)

STATUS: Full Compliance

REQUIREMENT STATEMENT:

An initial RPP or an update SHALL be considered approved 180 days after its submission unless rejected by DOE at an earlier date.

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs considers the RPP as approved 180 days following submission to DOE unless rejected by DOE at an earlier date.

**BECHTEL JACOBS COMPANY
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10 CFR 835: 102

STATUS: Full Compliance

REQUIREMENT STATEMENT:

Internal audits of the radiation protection program, including examination of program content and implementation, shall be conducted through a process that ensures that all functional elements are reviewed no less frequently than every 36 months.

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs conducts internal audits of all functional elements of the radiation protection program every 36 months and reviews program content and implementation.

10 CFR 835: 103

STATUS: Full Compliance

REQUIREMENT STATEMENT:

Individuals responsible for developing and implementing measures necessary for ensuring compliance with the requirements of this part SHALL have the appropriate education, training, and skills to discharge these responsibilities.

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs will ensure that individuals responsible for developing and implementing measures necessary for ensuring compliance have the appropriate education, training, and skills.

10 CFR 835: 104

STATUS: Full Compliance

REQUIREMENT STATEMENT:

Written procedures SHALL be developed and implemented as necessary to ensure compliance with this part, commensurate with the radiological hazards created by the activity and consistent with the education, training, and skills of the individuals exposed to those hazards.

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs has developed and implemented written procedures that are commensurate with the radiological hazards created by the activity and consistent with the education, training, and skills of the individuals exposed to the hazards.

**BECHTEL JACOBS COMPANY
RADIATION PROTECTION PROGRAM PLAN**

10 CFR 835: 202 (a) (1)

STATUS: Full Compliance

REQUIREMENT STATEMENT:

Except for planned special exposures conducted consistent with 10 CFR 835.204 and emergency exposures authorized in accordance with 10 CFR 835.1302, the occupational dose received by general employees shall be controlled such that the following limits are not exceeded in a year:
A total effective dose equivalent of 5 rem (0.05 sievert);

DESCRIPTION OF COMPLIANCE STATUS:

Except for planned special exposures conducted consistent with 10 CFR 835.204 and emergency exposures authorized in accordance with 10 CFR 835.1302, Bechtel Jacobs controls the occupational dose received by general employees such that a total dose equivalent of 5 rem (0.05 sievert) will not exceeded in a year.

10 CFR 835: 202 (a) (2)

STATUS: Full Compliance

REQUIREMENT STATEMENT:

Except for planned special exposures conducted consistent with 10 CFR 835.204 and emergency exposures authorized in accordance with 10 CFR 835.1302, the occupational dose received by general employees shall be controlled such that the following limits are not exceeded in a year:

The sum of the deep dose equivalent for external exposures and the committed dose equivalent to any organ or tissue other than the lens of the eye of 50 rem (0.5 sievert).

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs controls the occupational exposure to general employees resulting from DOE activities (other than planned special exposures under 835.204 and emergency exposure situations under 835.1302) such that the sum of the deep dose equivalent for external exposures and the committed dose equivalent to any organ or tissue other than the lens of the eye is less than 50 rem (0.5 sievert).

**BECHTEL JACOBS COMPANY
RADIATION PROTECTION PROGRAM PLAN**

10 CFR 835: 202 (a) (3)

STATUS: Full Compliance

REQUIREMENT STATEMENT:

Except for planned special exposures conducted consistent with 10 CFR 835.204 and emergency exposures authorized in accordance with 10 CFR 835.1302, the occupational dose received by general employees shall be controlled such that the following limits are not exceeded in a year:

A lens of the eye dose equivalent of 15 rem (0.15 sievert); and

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs controls the occupational dose to general employees resulting from DOE activities (other than planned special exposures under 10 CFR 835.204 and emergency exposure situations under 10 CFR 835.1302) such that the lens of the eye dose equivalent of 15 rem (0.15 sievert) is not exceeded.

10 CFR 835: 202 (a) (4)

STATUS: Full Compliance

REQUIREMENT STATEMENT:

Except for planned special exposures conducted consistent with 10 CFR 835.204 and emergency exposures authorized in accordance with 10 CFR 835.1302, the occupational dose received by general employees shall be controlled such that the following limits are not exceeded in a year:

A shallow dose equivalent of 50 rems (0.5 sievert) to the skin or to any extremity.

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs controls the occupational dose to general employees resulting from DOE activities (other than planned special exposures under 10 CFR 835.204 and emergency exposure situations under 10 CFR 835.1302) such that the shallow dose equivalent of 50 rem (0.5 sievert) to the skin or to any extremity is not exceeded.

**BECHTEL JACOBS COMPANY
RADIATION PROTECTION PROGRAM PLAN**

10 CFR 835: 202 (b)STATUS: Full Compliance

REQUIREMENT STATEMENT:

All occupational doses received during the current year, except doses resulting from planned special exposures conducted in compliance with 10 CFR 835.204 and emergency exposures authorized in accordance with 10 CFR 835.1302, SHALL be included when demonstrating compliance with 10 CFR 835.202(a) and 835.207.

DESCRIPTION OF COMPLIANCE STATUS:

Except doses resulting from planned special exposures conducted in compliance with 10 CFR 835.204 and emergency exposures authorized in accordance with 10 CFR 835.1302, Bechtel Jacobs will include all occupational doses received during the current year when demonstrating compliance with 10 CFR 835.202(a) and 835.207.

10 CFR 835: 202 (c)STATUS: Full Compliance

REQUIREMENT STATEMENT:

Doses from background, therapeutic and diagnostic medical radiation, and participation as a subject in medical research programs SHALL not be included in dose records or in the assessment of compliance with the occupational exposure limits.

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs does not include doses from background, therapeutic and diagnostic medical radiation, and participation as a subject in medical research programs in dose records or in the assessment of compliance with the occupational exposure limits.

10 CFR 835: 203 (a)STATUS: Full Compliance

REQUIREMENT STATEMENT:

The total effective dose equivalent during a year SHALL be determined by summing the effective dose equivalent from external exposures and the committed effective dose equivalent from intakes during the year.

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs determines the total effective dose equivalent during a year by summing the effective dose equivalent from external exposures and the committed effective dose equivalent from intakes during the year.

**BECHTEL JACOBS COMPANY
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10 CFR 835: 203 (b)

STATUS: Full Compliance

REQUIREMENT STATEMENT:

Determinations of the effective dose equivalent SHALL be made using the weighting factor values provided in 10 CFR 835.2.

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs determines the effective dose equivalent using the weighting factor values provided in 10 CFR 835.2.

10 CFR 835: 204 (a) (1)

STATUS: Full Compliance

REQUIREMENT STATEMENT:

A planned special exposure MAY be authorized for a radiological worker to receive doses in addition to and accounted for separately from the doses received under the limits specified in 10 CFR 835.202(a), provided that each of the following conditions is satisfied:

The planned special exposure is considered only in an exceptional situation when alternatives that might prevent a radiological worker from exceeding the limit in 10 CFR 835.202(a) are unavailable or impractical;

DESCRIPTION OF COMPLIANCE STATUS:

A planned special exposure may be authorized for a radiological worker to receive doses in addition to and accounted for separately from the doses received under the limits specified in 10 CFR 835.202(a), provided the planned special exposure is considered only in an exceptional situation when alternatives that might prevent a radiological worker from exceeding the limit in 10 CFR 835.202(a) are unavailable or impractical.

**BECHTEL JACOBS COMPANY
RADIATION PROTECTION PROGRAM PLAN**

10 CFR 835: 204 (a) (2)STATUS: Full Compliance

REQUIREMENT STATEMENT:

A planned special exposure MAY be authorized for a radiological worker to receive doses in addition to and accounted for separately from the doses received under the limits specified in 10 CFR 835.202(a), provided that each of the following conditions is satisfied:

The contractor management (and employer, if the employer is not the contractor) specifically requests the planned special exposure, in writing; and

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs may authorize a planned special exposure for a radiological worker to receive doses in addition to and accounted for separately from the doses received under the limits specified in 10 CFR 835.202(a), provided Bechtel Jacobs management (and employer, if the employer is not the contractor) specifically requests the planned special exposure in writing.

10 CFR 835: 204 (a) (3)STATUS: Full Compliance

REQUIREMENT STATEMENT:

A planned special exposure MAY be authorized for a radiological worker to receive doses in addition to and accounted for separately from the doses received under the limits specified in 10 CFR 835.202(a), provided that each of the following conditions is satisfied:

Joint written approval is received from the appropriate DOE Headquarters program office and the Secretarial Officer responsible for environment, safety, and health matters.

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs may authorize a planned special exposure for a radiological worker to receive doses in addition to and accounted for separately from the doses received under the limits specified in 10 CFR 835.202(a), provided joint written approval is received from the appropriate DOE Headquarters program office and the Secretarial Officer responsible for environment, safety, and health matters.

**BECHTEL JACOBS COMPANY
RADIATION PROTECTION PROGRAM PLAN**

10 CFR 835: 204 (b)STATUS: Full Compliance

REQUIREMENT STATEMENT:

Prior to requesting an individual to participate in an authorized planned special exposure, the individual's dose from all previous planned special exposures and all doses in excess of the occupational dose limits SHALL be determined.

DESCRIPTION OF COMPLIANCE STATUS:

Prior to requesting an individual to participate in an authorized planned special exposure, Bechtel Jacobs will determine the individual's dose from all previous planned special exposures and all doses in excess of the occupational dose limits.

10 CFR 835: 204 (c) (1)STATUS: Full Compliance

REQUIREMENT STATEMENT:

An individual SHALL not receive a planned special exposure that, in addition to the doses determined in 10 CFR 835.204(b), would result in a dose exceeding the following:

In a year, the numerical value of the dose limits established at 10 CFR 835.202(a); and

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs will not authorize an individual to receive a planned special exposure that, in addition to the doses determined in 10 CFR 835.204(b), would result in a dose exceeding the numerical value of the dose limits established in 10 CFR 835.202(a) in a year.

10 CFR 835: 204 (c) (2)STATUS: Full Compliance

REQUIREMENT STATEMENT:

An individual SHALL not receive a planned special exposure that, in addition to the doses determined in 10 CFR 835.204(b), would result in a dose exceeding the following:

Over the individual's lifetime, five times the numerical values of the dose limits established at 10 CFR 835.202(a).

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs will not authorize an individual to receive a planned special exposure that, in addition to the doses determined in 10 CFR 835.204(b), would result in a dose exceeding five times the numerical values of the dose limits established at 10 CFR 835.202(a), over the individual's lifetime.

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10 CFR 835: 204(d)

STATUS: Full Compliance

REQUIREMENT STATEMENT:

Prior to a planned special exposure, written consent SHALL be obtained from each individual involved.

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs will obtain written consent from each individual involved in a planned special exposure.

10 CFR 835: 204 (d) (1)

STATUS: Full Compliance

REQUIREMENT STATEMENT:

Prior to a planned special exposure, written consent shall be obtained from each individual involved. Each such written consent SHALL include:

The purpose of the planned operations and procedures to be used.

DESCRIPTION OF COMPLIANCE STATUS:

Prior to a planned special exposure, Bechtel Jacobs will obtain written consent from each individual involved. Each such written consent will include the purpose of the planned operations and procedures to be used.

10 CFR 835: 204 (d) (2)

STATUS: Full Compliance

REQUIREMENT STATEMENT:

Prior to a planned special exposure, written consent shall be obtained from each individual involved. Each such written consent SHALL include:

The estimated doses and associated potential risks and specific radiological conditions and other hazards which might be involved in performing the task; and

DESCRIPTION OF COMPLIANCE STATUS:

Prior to a planned special exposure, Bechtel Jacobs will obtain written consent from each individual involved. Each such written consent will include the estimated doses, associated potential risks, specific radiological conditions, and other hazards which might be involved in performing the task.

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10 CFR 835: 204 (d) (3)STATUS: Full Compliance

REQUIREMENT STATEMENT:

Prior to a planned special exposure, written consent shall be obtained from each individual involved. Each such written consent SHALL include:

Instructions on the measures to be taken to keep the dose ALARA considering other risks that may be present.

DESCRIPTION OF COMPLIANCE STATUS:

Prior to a planned special exposure, Bechtel Jacobs will obtain written consent from each individual involved. The written consent will instruct each individual in the measures to be taken to keep the dose ALARA considering other risks that may be present.

10 CFR 835: 204 (e)STATUS: Full Compliance

REQUIREMENT STATEMENT:

Records of the conduct of a planned special exposure SHALL be maintained and a written report submitted within 30 days after the planned special exposure to the approving organizations identified in 10 CFR 835.204 (a) (3).

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs will maintain records of the conduct of a planned special exposure and will submit a written report within 30 days after the planned special exposure to the approving organizations identified in 10 CFR 835.204(a)(3).

10 CFR 835: 204 (f)STATUS: Full Compliance

REQUIREMENT STATEMENT:

The dose from planned special exposures is not to be considered in controlling future occupational dose of the individual under 10 CFR 835.202(a), but IS TO BE INCLUDED in records and reports required under this part.

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs will not use the dose from planned special exposures when controlling future occupational dose of the exposed individual under 10 CFR 835.202(a), but the planned special exposure dose will be included in records and reports required under 10 CFR 835.

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10 CFR 835: 205 (a)STATUS: Full Compliance

REQUIREMENT STATEMENT:

Non-uniform exposures of the skin from X-rays, beta radiation, and/or radioactive material on the skin ARE TO BE assessed as specified in this section.

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs assesses non-uniform exposures of the skin from X-rays, beta radiation, and/or radioactive material on the skin as specified in 10 CFR 835.205.

10 CFR 835: 205 (b) (1)STATUS: Full Compliance

REQUIREMENT STATEMENT:

For purposes of demonstrating compliance with 10 CFR 835.202 (a)(4), assessments SHALL be conducted as follows:

Area of skin irradiated is 100 cm² or more. The non-uniform dose equivalent received during the year SHALL be averaged over the 100 cm² of the skin receiving the maximum dose, added to any uniform dose equivalent also received by the skin, and recorded as the shallow dose equivalent to any extremity or skin for the year.

DESCRIPTION OF COMPLIANCE STATUS:

For purposes of demonstrating compliance with 10 CFR 835.202 (a)(4), Bechtel Jacobs assessments are conducted as follows:

If the area of skin irradiated is 100 cm² or more, then the non-uniform dose equivalent received during the year will be averaged over the 100 cm² of the skin receiving the maximum dose, added to any uniform dose equivalent also received by the skin, and recorded as the shallow dose equivalent to any extremity or skin for the year.

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10 CFR 835: 205 (b) (2)STATUS: Full Compliance

REQUIREMENT STATEMENT:

For purposes of demonstrating compliance with 10 CFR 835.202 (a)(4), assessments SHALL be conducted as follows:

Area of skin irradiated is 10 cm^2 or more, but is less than 100 cm^2 . The non-uniform dose equivalent (H) to the irradiated area received during the year SHALL be added to any uniform dose equivalent also received by the skin and recorded as the shallow dose equivalent to any extremity or skin for the year. H is the dose equivalent averaged over the 1 cm^2 of skin receiving the maximum absorbed dose, D, reduced by the fraction f, which is the irradiated area in cm^2 divided by 100 cm^2 (i.e., $H=fD$). In no case SHALL a value of f less than 0.1 be used.

DESCRIPTION OF COMPLIANCE STATUS:

For purposes of demonstrating compliance with 10 CFR 835.202 (a)(4), Bechtel Jacobs dose assessments are conducted as follows:

If the area of skin irradiated is 10 cm^2 or more, but is less than 100 cm^2 , then the non-uniform dose equivalent (H) to the irradiated area received during the year will be added to any uniform dose equivalent also received by the skin and recorded as the shallow dose equivalent to any extremity or skin for the year. H is the dose equivalent averaged over the 1 cm^2 of skin receiving the maximum absorbed dose, D, reduced by the fraction f, which is the irradiated area in cm^2 divided by 100 cm^2 (i.e., $H=fD$). The minimum value of f used will be 0.1.

10 CFR 835: 205 (b) (3)STATUS: Full Compliance

REQUIREMENT STATEMENT:

For purposes of demonstrating compliance with 10 CFR 835.202(a)(4), assessments SHALL be conducted as follows:

Area of skin irradiated is less than 10 cm^2 . The non-uniform dose equivalent SHALL be averaged over the 1 cm^2 of skin receiving the maximum dose. This dose equivalent SHALL:

- (i) Be recorded in the individual's occupational exposure history as a special entry; and
- (ii) Not be added to any other shallow dose equivalent to any extremity or skin recorded as the dose equivalent for the year.

DESCRIPTION OF COMPLIANCE STATUS:

For purposes of demonstrating compliance with 10 CFR 835.202(a)(4), Bechtel Jacobs dose assessments are conducted as follows:

If the area of skin irradiated is less than 10 cm^2 , then the non-uniform dose equivalent will be averaged over the 1 cm^2 of skin receiving the maximum dose. This dose equivalent will be recorded in the individual's occupational exposure history as a special entry and will not be added to any other shallow dose equivalent to any extremity or skin recorded as the dose equivalent for the year.

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10 CFR 835: 206 (a)

STATUS: Full Compliance

REQUIREMENT STATEMENT:

The dose equivalent limit for the embryo/fetus from the period of conception to birth, as a result of occupational exposure of a declared pregnant worker, IS 0.5 rem (0.005 sievert).

DESCRIPTION OF COMPLIANCE STATUS:

The Bechtel Jacobs dose equivalent limit for the embryo/fetus from the period of conception to birth, as a result of occupational exposure of a declared pregnant worker, is 0.5 rem (0.005 sievert).

10 CFR 835: 206 (b)

STATUS: Full Compliance

REQUIREMENT STATEMENT:

Substantial variation above a uniform exposure rate that would satisfy the limits provided in 10 CFR 835.206(a) SHALL be avoided.

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs will avoid substantial variations to the exposure rate to satisfy the limits provided in 10 CFR 835.206(a).

10 CFR 835: 206 (c)

STATUS: Full Compliance

REQUIREMENT STATEMENT:

If the dose equivalent to the embryo/fetus is determined to have already exceeded 0.5 rem (0.005 sievert) by the time a worker declares her pregnancy, the declared pregnant worker SHALL not be assigned to tasks where additional occupational exposure is likely during the remaining gestation period.

DESCRIPTION OF COMPLIANCE STATUS:

If the dose equivalent to the embryo/fetus is determined to have already exceeded 0.5 rem (0.005 sievert) by the time a worker declares her pregnancy, the declared pregnant worker will not be assigned to tasks where additional occupational exposure is likely during the remaining gestation period.

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10 CFR 835: 207STATUS: Full Compliance

REQUIREMENT STATEMENT:

The dose equivalent limits for minors occupationally exposed to radiation and/or radioactive materials at a DOE activity are 0.1 rem (0.001 sievert) total effective dose equivalent in a year and 10% of the occupational dose limits specified at 10 CFR 835.202(a)(3) and (a)(4).

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs will not occupationally expose any minor to radiation and/or radioactive material at a Bechtel Jacobs operated site or facility such that the minor exceeds a total effective dose equivalent of 0.1 rem (0.001 sievert) in a year or 10% of the occupational dose limits specified at 10 CFR 835.202(a)(3) and (a)(4).

10 CFR 835: 208STATUS: Full Compliance

REQUIREMENT STATEMENT:

The total effective dose equivalent limit for members of the public exposed to radiation and/or radioactive materials during access to a controlled area is 0.1 rem (0.001 sievert) in a year.

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs will not expose any member of the public to radiation and/or radioactive material during access to a controlled area at a Bechtel Jacobs operated site or facility such that the total effective dose equivalent exceeds 0.1 rem (0.001 sievert) in a year.

10 CFR 835: 209 (a)STATUS: Full Compliance

REQUIREMENT STATEMENT:

The derived air concentration (DAC) values given in appendices A and C of this part SHALL be used in the control of occupational exposures to airborne radioactive material.

DESCRIPTION OF COMPLIANCE STATUS:

The derived air concentration (DAC) values given in appendices A and C of 10 CFR 835 are used in the control of occupational exposures to airborne radioactive material.

**BECHTEL JACOBS COMPANY
RADIATION PROTECTION PROGRAM PLAN**

10 CFR 835: 209 (b)

STATUS: Full Compliance

REQUIREMENT STATEMENT:

The estimation of internal dose SHALL be based on bioassay data rather than air concentration values unless bioassay data are:

- (1) unavailable;
- (2) inadequate; or
- (3) internal dose estimates based on air concentration values are demonstrated to be as or more accurate.

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs bases its estimation of internal dose on bioassay data, rather than air concentration values, unless bioassay data are unavailable, inadequate, or internal dose estimates based on air concentration values are demonstrated to be as or more accurate.

10 CFR 835: 401 (a) (1)

STATUS: Full Compliance

REQUIREMENT STATEMENT:

Monitoring of individuals and areas SHALL be performed to:
Demonstrate compliance with the regulations in this part;

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs monitors individuals and areas to demonstrate compliance with the regulations in 10 CFR 835.

10 CFR 835: 401 (a) (2)

STATUS: Full Compliance

REQUIREMENT STATEMENT:

Monitoring of individuals and areas SHALL be performed to:
Document radiological conditions;

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs monitors individuals and areas to document radiological conditions.

**BECHTEL JACOBS COMPANY
RADIATION PROTECTION PROGRAM PLAN**

10 CFR 835: 401 (a) (3)

STATUS: Full Compliance

REQUIREMENT STATEMENT:

Monitoring of individuals and areas SHALL be performed to:
Detect changes in radiological conditions;

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs monitors individuals and areas to detect changes in radiological conditions.

10 CFR 835: 401 (a) (4)

STATUS: Full Compliance

REQUIREMENT STATEMENT:

Monitoring of individuals and area SHALL be performed to:
Detect the gradual buildup of radioactive material;

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs monitors individuals and areas to detect the gradual buildup of radioactive material.

10 CFR 835: 401 (a) (5)

STATUS: Full Compliance

REQUIREMENT STATEMENT:

Monitoring of individuals and areas SHALL be performed to:
Verify the effectiveness of engineering and process controls in containing radioactive material and reducing radiation exposure; and

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs monitors individuals and areas to verify the effectiveness of engineering and process controls in containing radioactive material and reducing radiation exposure.

**BECHTEL JACOBS COMPANY
RADIATION PROTECTION PROGRAM PLAN**

10 CFR 835: 401 (a)(6)

STATUS: Full Compliance

REQUIREMENT STATEMENT:

Monitoring of individuals and areas SHALL be performed to:
Identify and control potential sources of individual exposure to radiation and/or radioactive material.

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs performs monitoring of individuals and areas, as necessary, to identify and control potential sources of individual exposure to radiation and/or radioactive material.

10 CFR 835: 401 (b)(1)

STATUS: Full Compliance

REQUIREMENT STATEMENT:

Instruments and equipment used for monitoring SHALL be:
Periodically maintained and calibrated on an established frequency;

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs maintains and calibrates instruments and equipment used for monitoring on an established frequency.

10 CFR 835: 401 (b) (2)

STATUS: Full Compliance

REQUIREMENT STATEMENT:

Instruments and equipment used for monitoring SHALL be:
Appropriate for the type(s), levels, and energies of the radiation(s) encountered.

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs uses instruments and equipment for monitoring that are appropriate for the types, levels, and energies of the radiation encountered.

**BECHTEL JACOBS COMPANY
RADIATION PROTECTION PROGRAM PLAN**

10 CFR 835: 401 (b) (3)

STATUS: Full Compliance

REQUIREMENT STATEMENT:

Instruments and equipment used for monitoring SHALL be:
Appropriate for existing environmental conditions; and

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs uses instruments and equipment for monitoring that are appropriate for existing environmental conditions.

10 CFR 835: 401 (b) (4)

STATUS: Full Compliance

REQUIREMENT STATEMENT:

Instruments and equipment used for monitoring SHALL be:
Routinely tested for operability.

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs uses instruments and equipment for monitoring that are routinely tested for operability.

10 CFR 835: 402 (a) (1) (i)

STATUS: Full Compliance

REQUIREMENT STATEMENT:

For the purpose of monitoring individual exposures to external radiation, personnel dosimeters SHALL be provided to and used by:

Radiological workers who, under typical conditions, are likely to receive one or more of the following:
An effective dose equivalent to the whole body of 0.1 rem (0.001 sievert) or more in one year;

DESCRIPTION OF COMPLIANCE STATUS:

For the purpose of monitoring individual exposures to external radiation, Bechtel Jacobs provides and requires the use of personnel dosimeters by radiological workers who, under typical conditions, are likely to receive an effective dose equivalent to the whole body of 0.1 rem (0.001 sievert) or more in one year.

**BECHTEL JACOBS COMPANY
RADIATION PROTECTION PROGRAM PLAN**

10 CFR 835: 402 (a) (1) (ii)

STATUS: Full Compliance

REQUIREMENT STATEMENT:

For the purpose of monitoring individual exposures to external radiation, personnel dosimeters SHALL be provided to and used by:

Radiological workers who, under typical conditions, are likely to receive one or more of the following:
A shallow dose equivalent to the skin or to any extremity of 5 rems (0.05 sievert) or more in a year;

DESCRIPTION OF COMPLIANCE STATUS:

For the purpose of monitoring individual exposures to external radiation, Bechtel Jacobs provides and requires the use of personnel dosimeters by radiological workers who, under typical conditions, are likely to receive a shallow dose equivalent to the skin or to any extremity of 5 rem (0.05 sievert) or more in a year.

10 CFR 835: 402 (a) (1) (iii)

STATUS: Full Compliance

REQUIREMENT STATEMENT:

For the purpose of monitoring individual exposures to external radiation, personnel dosimeters SHALL be provided to and used by:

Radiological workers who, under typical conditions, are likely to receive one or more of the following:
A lens of the eye dose equivalent of 1.5 rems (0.015 sievert) or more in a year;

DESCRIPTION OF COMPLIANCE STATUS:

For the purpose of monitoring individual exposures to external radiation, Bechtel Jacobs provides and requires the use of personnel dosimeters by radiological workers who, under typical conditions, are likely to receive a lens of the eye dose equivalent of 1.5 rem (0.015 sievert) or more in a year.

**BECHTEL JACOBS COMPANY
RADIATION PROTECTION PROGRAM PLAN**

10 CFR 835: 402 (a) (2)

STATUS: Full Compliance

REQUIREMENT STATEMENT:

For the purpose of monitoring individual exposures to external radiation, personnel dosimeters SHALL be provided to and used by:

Declared pregnant workers who are likely to receive from external sources a dose equivalent to the embryo/fetus in excess of 10 percent of the applicable limit in 10 CFR 835.206(a).

DESCRIPTION OF COMPLIANCE STATUS:

For the purpose of monitoring individual exposures to external radiation, Bechtel Jacobs provides and requires the use of personnel dosimeters by declared pregnant workers who are likely to receive from external sources a dose equivalent to the embryo/fetus in excess of 10 percent of the applicable limit in 10 CFR 835.206(a) (0.5 rem).

10 CFR 835: 402 (a) (3)

STATUS: Full Compliance

REQUIREMENT STATEMENT:

For the purpose of monitoring individual exposures to external radiation, personnel dosimeters SHALL be provided to and used by:

Occupationally exposed minors likely to receive a dose in excess of 50 percent of the limit at 10 CFR 835.207 in a year from external sources.

DESCRIPTION OF COMPLIANCE STATUS:

For the purpose of monitoring individual exposures to external radiation, Bechtel Jacobs provides and requires the use of personnel dosimeters by occupationally exposed minors likely to receive, in 1 year, from external sources, a dose in excess of 50 percent of the applicable limits in 10 CFR 835.207.

**BECHTEL JACOBS COMPANY
RADIATION PROTECTION PROGRAM PLAN**

10 CFR 835: 402 (a) (4)

STATUS: Full Compliance

REQUIREMENT STATEMENT:

For the purpose of monitoring individual exposures to external radiation, personnel dosimeters SHALL be provided to and used by:

Members of the public entering a controlled area likely to receive a dose in excess of 50 percent of the limit at 10 CFR 835.208 in a year from external sources; and

DESCRIPTION OF COMPLIANCE STATUS:

For the purpose of monitoring individual exposures to external radiation, Bechtel Jacobs provides and requires the use of personnel dosimeters by members of the public entering a controlled area likely to receive a dose in excess of 50 percent of the limit at 10 CFR 835.208 in a year from external sources.

10 CFR 835: 402 (a) (5)

STATUS: Full Compliance

REQUIREMENT STATEMENT:

For the purpose of monitoring individual exposures to external radiation, personnel dosimeters SHALL be provided to and used by:

Individuals entering a high or very high radiation area.

DESCRIPTION OF COMPLIANCE STATUS:

For the purpose of monitoring individual exposures to external radiation, Bechtel Jacobs provides and requires the use of personnel dosimeters by individuals entering any high or very high radiation area.

10 CFR 835: 402 (b)(1)

STATUS: Full Compliance

REQUIREMENT STATEMENT:

External dose monitoring programs implemented to demonstrate compliance with 10 CFR 835.402(a) SHALL be adequate to demonstrate compliance with the dose limits established in subpart C of this part and shall be:

Accredited, or excepted from accreditation, in accordance with the DOE Laboratory Accreditation Program for Personnel Dosimetry; or

DESCRIPTION OF COMPLIANCE STATUS:

The Bechtel Jacobs personnel external dosimetry program is adequate to demonstrate compliance with 10 CFR 835.402 (a) and the program conforms with the requirements of the DOE Laboratory Accreditation Program for Personnel Dosimetry.

**BECHTEL JACOBS COMPANY
RADIATION PROTECTION PROGRAM PLAN**

10 CFR 835: 402 (b)(2)STATUS: Not Applicable

REQUIREMENT STATEMENT:

External dose monitoring programs implemented to demonstrate compliance with 10 CFR 835.402(a) SHALL be adequate to demonstrate compliance with the dose limits established in subpart C of this part and shall be:

Determined by the Secretarial Officer responsible for environment, safety and health matters to have performance substantially equivalent to that of programs accredited under the DOE Laboratory Accreditation Program for Personnel Dosimetry.

DESCRIPTION OF COMPLIANCE STATUS:

This is not applicable to Bechtel Jacobs at this time. The Bechtel Jacobs personnel external dosimetry program is adequate to demonstrate compliance with 10 CFR 835.402 (a) and the program conforms with the requirements of the DOE Laboratory Accreditation Program for Personnel Dosimetry.

10 CFR 835: 402 (c) (1)STATUS: Full Compliance

REQUIREMENT STATEMENT:

For the purpose of monitoring individual exposures to internal radiation, internal dosimetry programs (including routine bioassay programs) SHALL be conducted for: Radiological workers who, under typical conditions, are likely to receive a committed effective dose equivalent of 0.1 rem (0.001 sievert) or more from all occupational radionuclide intakes in a year;

DESCRIPTION OF COMPLIANCE STATUS:

For the purpose of monitoring individual exposures to internal radiation, Bechtel Jacobs uses an internal dosimetry program (including routine bioassays) for radiological workers who, under typical conditions, are likely to receive 0.1 rem (0.001 sievert) or more committed effective dose equivalent from all occupational radionuclide intakes in a year.

**BECHTEL JACOBS COMPANY
RADIATION PROTECTION PROGRAM PLAN**

10 CFR 835: 402 (c) (2)STATUS: Full Compliance

REQUIREMENT STATEMENT:

For the purpose of monitoring individual exposures to internal radiation, internal dosimetry programs (including routine bioassay programs) SHALL be conducted for: Declared pregnant workers likely to receive an intake or intakes resulting in a dose equivalent to the embryo/fetus in excess of 10 percent of the limit stated in 10 CFR 835.206(a);

DESCRIPTION OF COMPLIANCE STATUS:

For the purpose of monitoring individual exposures to internal radiation, Bechtel Jacobs provides an internal dosimetry program (including routine bioassay program) for declared pregnant workers likely to receive an intake or intakes resulting in a dose equivalent to the embryo/fetus in excess of 10 percent of the limit stated in 10 CFR 835.206(a) (0.5 rem).

10 CFR 835: 402 (c) (3)STATUS: Full Compliance

REQUIREMENT STATEMENT:

For the purpose of monitoring individual exposures to internal radiation, internal dosimetry programs (including routine bioassay programs) SHALL be conducted for:
Occupationally exposed minors who are likely to receive a dose in excess of 50 percent of the applicable limit stated at 10 CFR 835.207 from all radionuclide intakes in a year; or

DESCRIPTION OF COMPLIANCE STATUS:

For the purpose of monitoring individual exposures to internal radiation, Bechtel Jacobs conducts an internal dosimetry program (including routine bioassay program) for minors who are likely to receive, in 1 year, an intake or intakes resulting in a committed effective dose equivalent in excess of 50 percent of the limits stated in 10 CFR 835.207.

**BECHTEL JACOBS COMPANY
RADIATION PROTECTION PROGRAM PLAN**

10 CFR 835: 402 (c) (4)STATUS: Full Compliance

REQUIREMENT STATEMENT:

For the purpose of monitoring individual exposures to internal radiation, internal dosimetry programs (including routine bioassay programs) SHALL be conducted for: Members of the public entering a controlled area likely to receive a dose in excess of 50 percent of the limit stated at 10 CFR 835.208 from all radionuclide intakes in a year.

DESCRIPTION OF COMPLIANCE STATUS:

For the purpose of monitoring individual exposures to internal radiation, Bechtel Jacobs conducts an internal dosimetry program (including routine bioassay program) for members of the public entering a controlled area likely to receive a dose in excess of 50 percent of the limit stated at 10 CFR 835.208 from all radionuclide intakes in a year.

10 CFR 835: 402 (d)(1)STATUS: Full Compliance

REQUIREMENT STATEMENT:

Internal dose monitoring programs implemented to demonstrate compliance with 10 CFR 835.402(c) shall be adequate to demonstrate compliance with the dose limits established in subpart C of this part and shall be:

Accredited, or excepted from accreditation, in accordance with the DOE Laboratory Accreditation Program for Radiobioassay; or

DESCRIPTION OF COMPLIANCE STATUS:

This requirement is not applicable until January 1, 2002. The Bechtel Jacobs internal dose monitoring program is in compliance with the regulations currently in effect. Bechtel Jacobs commits to have the internal dose monitoring program accredited by January 1, 2002 as required by 10 CFR 835.101(f).

**BECHTEL JACOBS COMPANY
RADIATION PROTECTION PROGRAM PLAN**

10 CFR 835: 402 (d)(2)

STATUS: Not Applicable

REQUIREMENT STATEMENT:

Internal dose monitoring programs implemented to demonstrate compliance with 10 CFR 835.402(c) shall be adequate to demonstrate compliance with the dose limits established in subpart C of this part and shall be:

Determined by the Secretarial Officer responsible for environment, safety and health matters to have performance substantially equivalent to that of programs accredited under the DOE Laboratory Accreditation Program for Radiobioassay.

DESCRIPTION OF COMPLIANCE STATUS:

The Bechtel Jacobs internal dose monitoring program will be accredited under the DOE Laboratory Accreditation Program for Radiobioassay by January 1, 2002, as required by 10 CFR 835.101(f).

10 CFR 835: 403 (a) (1)

STATUS: Full Compliance

REQUIREMENT STATEMENT:

Monitoring of airborne radioactivity SHALL be performed:

Where an individual is likely to receive an exposure of 40 or more DAC-hours in a year; or

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs will perform monitoring of airborne radioactivity concentrations where an individual is likely to receive an exposure of 40 DAC-hours in a year.

10 CFR 835: 403 (a) (2)

STATUS: Full Compliance

REQUIREMENT STATEMENT:

Monitoring of airborne radioactivity SHALL be performed:

As necessary to characterize the airborne radioactivity hazard where respiratory protective devices for protection against airborne radionuclides have been prescribed.

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs performs monitoring of airborne radioactivity as necessary to characterize the airborne radioactivity hazard where respiratory protective devices for protection against airborne radionuclides have been prescribed.

**BECHTEL JACOBS COMPANY
RADIATION PROTECTION PROGRAM PLAN**

10 CFR 835: 403 (b)STATUS: Full Compliance

REQUIREMENT STATEMENT:

Real-time air monitoring SHALL be performed as necessary to detect and provide warning of airborne radioactivity concentrations that warrant immediate action to terminate inhalation of airborne radioactive material.

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs performs real-time air monitoring, as necessary, to detect and provide warning of airborne radioactivity concentrations that warrant immediate action to terminate inhalation of airborne radioactive material. .

10 CFR 835: 405 (a)STATUS: Full Compliance

REQUIREMENT STATEMENT:

If packages containing quantities of radioactive material in excess of a Type A quantity (as defined at 10 CFR 71.4) are expected to be received from radioactive material transportation, arrangements SHALL be made to either:

- (1) Take possession of the package when the carrier offers it for delivery; or
- (2) Receive notification as soon as practicable after arrival of the package at the carrier's terminal and to take possession of the package expeditiously after receiving such notification.

DESCRIPTION OF COMPLIANCE STATUS:

When packages containing quantities of radioactive material in excess of a Type A quantity (as defined at 10 CFR 71.4) are expected to be received from radioactive material transportation, Bechtel Jacobs will either:

- (1) Take possession of the package when the carrier offers it for delivery; or
- (2) Receive notification as soon as practicable after arrival of the package at the carrier's terminal and to take possession of the package expeditiously after receiving such notification.

**BECHTEL JACOBS COMPANY
RADIATION PROTECTION PROGRAM PLAN**

10 CFR 835: 405 (b)STATUS: Full Compliance

REQUIREMENT STATEMENT:

Upon receipt from radioactive material transportation, external surfaces of packages known to contain radioactive material SHALL be monitored if the package:

- (1) Is labeled with a Radioactive White I, Yellow II, or Yellow III label (as specified at 49 CFR 172.403 and 172,436-440); or
- (2) Has been transported as low specific activity material (as defined at 10 CFR 71.4) on an exclusive use vehicle (as defined at 10 CFR 71.4); or
- (3) Has evidence of degradation, such as packages that are crushed, wet, or damaged.

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs will, upon receipt from radioactive material transportation, monitor the external surfaces of packages known to contain radioactive material if the package:

- (1) Is labeled with a Radioactive White I, Yellow II, or Yellow III label (as specified at 49 CFR 172.403 and 172,436-440); or
- (2) Has been transported as low specific activity material (as defined at 10 CFR 71.4) on an exclusive use vehicle (as defined at 10 CFR 71.4); or
- (3) Has evidence of degradation, such as packages that are crushed, wet, or damaged.

10 CFR 835: 405 (c)(1)STATUS: Full Compliance

REQUIREMENT STATEMENT:

The monitoring required by paragraph (b) of this section SHALL include:

Measurements of removable contamination levels, unless the package contains only special form (as defined at 10 CFR 71.4) or gaseous radioactive material; and

DESCRIPTION OF COMPLIANCE STATUS:

In reference to the monitoring required by 10 CFR 835.405(b), Bechtel Jacobs will include measurements of removable contamination levels, unless the package contains only special form (as defined at 10 CFR 71.4) or gaseous radioactive material.

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10 CFR 835: 405 (c)(2)

STATUS: Full Compliance

REQUIREMENT STATEMENT:

The monitoring required by paragraph (b) of this section SHALL include:
Measurements of the radiation levels, unless the package contains less than a Type A quantity (as defined at 10 CFR 71.4) of radioactive material.

DESCRIPTION OF COMPLIANCE STATUS:

In reference to the monitoring required by 10 CFR 835.405(b), Bechtel Jacobs will include measurements of the radiation levels, unless the package contains less than a Type A quantity (as defined at 10 CFR 71.4) of radioactive material.

10 CFR 835: 405 (d)

STATUS: Full Compliance

REQUIREMENT STATEMENT:

The monitoring required by paragraph (b) of this section SHALL be completed as soon as practicable following receipt of the package, but not later than 8 hours after the beginning of the working day following receipt of the package.

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs will complete the monitoring required by 10 CFR 835.405(b) as soon as practicable following receipt of the package, but not later than 8 hours after the beginning of the working day following receipt of the package.

10 CFR 835: 501 (a)

STATUS: Full Compliance

REQUIREMENT STATEMENT:

Personnel entry control SHALL be maintained for each radiological area.

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs maintains control of personnel entering each radiological area.

**BECHTEL JACOBS COMPANY
RADIATION PROTECTION PROGRAM PLAN**

10 CFR 835: 501 (b)STATUS: Full Compliance

REQUIREMENT STATEMENT:

The degree of (personnel entry) control SHALL be commensurate with existing and potential radiological hazards within the area.

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs maintains the degree of personnel entry control (either administrative or engineered) so that it is commensurate with the existing and potential radiological hazards within the area.

10 CFR 835: 501 (c)STATUS: Full Compliance

REQUIREMENT STATEMENT:

One or more of the following methods SHALL be used to ensure (personnel entry) control:

- (1) Signs and barricades;
- (2) Control devices on entrances;
- (3) Conspicuous visual and/or audible alarms;
- (4) Locked entrance ways; or
- (5) Administrative controls.

DESCRIPTION OF COMPLIANCE STATUS:

The Bechtel Jacobs entry control program consists of one or more of the following methods:

- (1) Signs and barricades;
- (2) Control devices on entrances;
- (3) Conspicuous visual and/or audible alarms;
- (4) Locked entrance ways; or
- (5) Administrative controls.

10 CFR 835: 501 (d) .01STATUS: Full Compliance

REQUIREMENT STATEMENT:

Written authorizations SHALL be required to control entry into and perform work within radiological areas.

DESCRIPTION OF COMPLIANCE STATUS:

The Bechtel Jacobs requires written authorizations to control entry into and perform work within radiological areas.

**BECHTEL JACOBS COMPANY
RADIATION PROTECTION PROGRAM PLAN**

10 CFR 835: 501 (d) .02

STATUS: Full Compliance

REQUIREMENT STATEMENT:

These authorizations SHALL specify radiation protection measures commensurate with the existing and potential hazards.

DESCRIPTION OF COMPLIANCE STATUS:

The Bechtel Jacobs written authorizations specify radiation protection measures commensurate with the existing and potential hazards.

10 CFR 835: 501 (e)

STATUS: Full Compliance

REQUIREMENT STATEMENT:

No control(s) SHALL be installed at any radiological area exit that would prevent rapid evacuation of personnel under emergency conditions.

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs will not install any controls at any radiological area exit that would prevent rapid evacuation of personnel under emergency conditions.

10 CFR 835: 502 (a)(1)

STATUS: Full Compliance

REQUIREMENT STATEMENT:

The following measures SHALL be implemented for each entry into a high radiation area:
The area SHALL be monitored as necessary during access to determine the exposure rates to which the individuals are exposed; and

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs will, for each entry into a high radiation area, monitor the area as necessary during access to determine the exposure rates to which the individuals are exposed.

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**BECHTEL JACOBS COMPANY
RADIATION PROTECTION PROGRAM PLAN**

10 CFR 835: 502 (a)(2)

STATUS: Full Compliance

REQUIREMENT STATEMENT:

The following measures SHALL be implemented for each entry into a high radiation area:
Each individual SHALL be monitored by a supplemental dosimetry device or other means capable of providing an immediate estimate of the individual's integrated deep dose equivalent during the entry.

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs will, for each entry into a high radiation area, monitor each individual using a supplemental dosimetry device or other means capable of providing an immediate estimate of the individual's integrated deep dose equivalent during the entry.

**BECHTEL JACOBS COMPANY
RADIATION PROTECTION PROGRAM PLAN**

10 CFR 835: 502 (b)STATUS: Full Compliance

REQUIREMENT STATEMENT:

Physical controls. One or more of the following features SHALL be used for each entrance or access point to a high radiation area where radiation levels exist such that an individual could exceed a deep dose equivalent to the whole body of 1 rem (0.01 sievert) in any one hour at 30 centimeters from the source or from any surface that the radiation penetrates:

- (1) A control device that prevents entry to the area when high radiation levels exist or upon entry causes the radiation level to be reduced below that level defining a high radiation area;
- (2) A device that functions automatically to prevent use or operation of the radiation source or field while individuals are in the area;
- (3) A control device that energizes a conspicuous visible or audible alarm signal so that the individual entering the high radiation area and the supervisor of the activity are made aware of the entry;
- (4) Entryways that are locked. During periods when access to the area is required, positive control over each entry is maintained;
- (5) Continuous direct or electronic surveillance that is capable of preventing unauthorized entry;
- (6) A control device that will automatically generate audible and visual alarm signals to alert personnel in the area before use or operation of the radiation source and in sufficient time to permit evacuation of the area or activation of a secondary control device that will prevent use or operation of the source.

DESCRIPTION OF COMPLIANCE STATUS:

Physical controls. Bechtel Jacobs uses one or more of the following features at each entrance or access point to a high radiation area:

- (1) A control device that prevents entry to the area when high radiation levels exist or upon entry causes the radiation level to be reduced below that level defining a high radiation area;
- (2) A device that functions automatically to prevent use or operation of the radiation source or field while individuals are in the area;
- (3) A control device that energizes a conspicuous visible or audible alarm signal so that the individual entering the high radiation area and the supervisor of the activity are made aware of the entry;
- (4) During periods when access to the area is required, positive control over each entry is maintained (i.e., entryways that are locked).
- (5) Continuous direct or electronic surveillance that is capable of preventing unauthorized entry;
- (6) A control device that will automatically generate audible and visual alarm signals to alert personnel in the area before use or operation of the radiation source and in sufficient time to permit evacuation of the area or activation of a secondary control device that will prevent use or operation of the source.

**BECHTEL JACOBS COMPANY
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10 CFR 835: 502 (c)STATUS: Full Compliance

REQUIREMENT STATEMENT:

Very high radiation areas. In addition to the above requirements [10 CFR 835.502(b)], additional measures SHALL be implemented to ensure individuals are not able to gain unauthorized or inadvertent access to very high radiation areas.

DESCRIPTION OF COMPLIANCE STATUS:

Very high radiation areas. In addition to the above requirements [10 CFR 835.502(b)], Bechtel Jacobs will implement additional measures to ensure individuals are not able to gain unauthorized or inadvertent access to very high radiation areas.

10 CFR 835: 502 (d)STATUS: Full Compliance

REQUIREMENT STATEMENT:

No control(s) SHALL be established in a high or very high radiation area that would prevent rapid evacuation of personnel.

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs will implement no controls in a high or very high radiation area that would prevent rapid evacuation of personnel.

10 CFR 835: 601 (a)STATUS: Full Compliance

REQUIREMENT STATEMENT:

Except as otherwise provided in this subpart, postings and labels required by this subpart SHALL include the standard radiation warning trefoil in black or magenta imposed upon a yellow background.

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs uses signs and labels with a yellow background. The radiation symbol is either black or magenta.

**BECHTEL JACOBS COMPANY
RADIATION PROTECTION PROGRAM PLAN**

10 CFR 835: 601 (b) .01

STATUS: Full Compliance

REQUIREMENT STATEMENT:

Signs required by this subpart SHALL be clearly and conspicuously posted and may include radiological protection instructions.

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs posts signs that are clear and conspicuous and may include radiological protection instructions.

10 CFR 835: 601 (b) .02

STATUS: Full Compliance

REQUIREMENT STATEMENT:

Signs required by this subpart shall be clearly and conspicuously posted and MAY include radiological protection instructions.

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs posts signs that are clear and conspicuous and may include radiological protection instructions.

10 CFR 835: 601 (c).01

STATUS: Full Compliance

REQUIREMENT STATEMENT:

The posting and labeling requirements in this subpart MAY be modified to reflect the special considerations of DOE activities conducted at private residences or businesses.

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs may modify the posting and labeling requirements to reflect the special considerations of DOE activities conducted at private residences or businesses.

**BECHTEL JACOBS COMPANY
RADIATION PROTECTION PROGRAM PLAN**

10 CFR 835: 601 (c) .02STATUS: Full Compliance

REQUIREMENT STATEMENT:

Such modifications (to posting requirements) SHALL provide the same level of protection to individuals as the existing provisions in this subpart.

DESCRIPTION OF COMPLIANCE STATUS:

If Bechtel Jacobs makes modifications to posting requirements, the modifications will provide the same level of protection to individuals as the provisions in 10 CFR 835.601.

10 CFR 835: 602 (a)STATUS: Full Compliance

REQUIREMENT STATEMENT:

Each access point to a controlled area (as defined in 10 CFR 835.2) SHALL be posted whenever radiological areas or radioactive material areas exist in the area. Individuals who enter only controlled areas without entering radiological areas or radioactive materials areas are not expected to receive a total effective dose equivalent of more than 0.1rem (0.001 sievert) in a year.

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs posts each access point to a controlled area (as defined in 10 CFR 835.2), identifying it as a controlled area, whenever radiological areas or radioactive material areas exist in the area.. Individuals who enter only controlled areas without entering radiological areas or radioactive materials areas are not expected to receive a total effective dose equivalent of more than 0.1rem (0.001 sievert) in a year.

10 CFR 835: 602 (b)STATUS: Full Compliance

REQUIREMENT STATEMENT:

Signs used for this purpose MAY be selected by the contractor to avoid conflict with local security requirements.

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs may select signs to avoid conflict with local security requirements.

**BECHTEL JACOBS COMPANY
RADIATION PROTECTION PROGRAM PLAN**

10 CFR 835: 603

STATUS: Full Compliance

REQUIREMENT STATEMENT:

Each access point to radiological areas and radioactive material areas (as defined in 10 CFR 835.2) SHALL be posted with conspicuous signs bearing the wording provided in this section.

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs posts conspicuous signs at each access point to radiological areas and radioactive material areas(as defined in 10 CFR 835.2), bearing the wording provided in 10 CFR 835.603.

10 CFR 835: 603 (a)

STATUS: Full Compliance

REQUIREMENT STATEMENT:

Radiation Area. The words “Caution, Radiation Area” SHALL be posted at each radiation area.

DESCRIPTION OF COMPLIANCE STATUS:

Radiation Area. The words “Caution, Radiation Area” will be posted at each radiation area.

10 CFR 835: 603 (b)

STATUS: Full Compliance

REQUIREMENT STATEMENT:

High Radiation Area. The words “Caution, High Radiation Area” or “Danger, High Radiation Area” SHALL be posted at each high radiation area.

DESCRIPTION OF COMPLIANCE STATUS:

High Radiation Area. The words “Caution, High Radiation Area” or “Danger, High Radiation Area” will be posted at each high radiation area.

**BECHTEL JACOBS COMPANY
RADIATION PROTECTION PROGRAM PLAN**

10 CFR 835: 603 (c)

STATUS: Full Compliance

REQUIREMENT STATEMENT:

Very High Radiation Area. The words "Grave Danger, Very High Radiation Area" SHALL be posted at each very high radiation area.

DESCRIPTION OF COMPLIANCE STATUS:

Very High Radiation Area. The words "Grave Danger, Very High Radiation Area" will be posted at each very high radiation area.

10 CFR 835: 603 (d)

STATUS: Full Compliance

REQUIREMENT STATEMENT:

Airborne Radioactivity Area. The words "Caution, Airborne Radioactivity Area" or "Danger, Airborne Radioactivity Area" SHALL be posted at each airborne radioactivity area.

DESCRIPTION OF COMPLIANCE STATUS:

Airborne Radioactivity Area. The words "Caution, Airborne Radioactivity Area" or "Danger, Airborne Radioactivity Area" will be posted at each airborne radioactivity area.

10 CFR 835: 603 (e)

STATUS: Full Compliance

REQUIREMENT STATEMENT:

Contamination Area. The words "Caution, Contamination Area" SHALL be posted at each contamination area.

DESCRIPTION OF COMPLIANCE STATUS:

Contamination Area. The words "Caution, Contamination Area" will be posted at each contamination area.

**BECHTEL JACOBS COMPANY
RADIATION PROTECTION PROGRAM PLAN**

10 CFR 835: 603 (f)

STATUS: Full Compliance

REQUIREMENT STATEMENT:

High Contamination Area. The words “Caution, High Contamination Area” or “Danger, High Contamination Area” SHALL be posted at each high contamination area.

DESCRIPTION OF COMPLIANCE STATUS:

High Contamination Area. The words “Caution, High Contamination Area” or “Danger, High Contamination Area” will be posted at each high contamination area.

10 CFR 835: 603 (g)

STATUS: Full Compliance

REQUIREMENT STATEMENT:

Radioactive Material Area. The words “Caution, Radioactive Material(s) SHALL be posted at each radioactive material area.

DESCRIPTION OF COMPLIANCE STATUS:

Radioactive Material Area. The words “Caution, Radioactive Material(s) will be posted at each radioactive material area.

10 CFR 835: 604 (a)

STATUS: Full Compliance

REQUIREMENT STATEMENT:

Areas MAY be excepted from the posting requirements of 10 CFR 835.603 for periods of less than 8 continuous hours when placed under continuous observation and control of an individual knowledgeable of , and empowered to implement, required access and exposure control measures.

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs may except areas from the posting requirements of 10 CFR 835.603 for periods of less than 8 continuous hours when placed under continuous observation and control of an individual knowledgeable of , and empowered to implement, required access and exposure control measures.

**BECHTEL JACOBS COMPANY
RADIATION PROTECTION PROGRAM PLAN**

10 CFR 835: 604 (b)STATUS: Full Compliance

REQUIREMENT STATEMENT:

Areas MAY be excepted from the radioactive material area posting requirements of 10 CFR 835.603(g) when:

- (1) Posted in accordance with 10 CFR 835.603(a) through (f); or
- (2) Each item or container of radioactive material is labeled in accordance with this subpart such that individuals entering the area are made aware of the hazard; or
- (3) The radioactive material of concern consists solely of structures or installed components which have been activated (i.e., such as by being exposed to neutron radiation or particles produced in an accelerator).

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs may except areas from the radioactive material area posting requirements of 10 CFR 835.603(g) when:

- (1) Posted in accordance with 10 CFR 835.603(a) through (f); or
- (2) Each item or container of radioactive material is labeled in accordance with this subpart such that individuals entering the area are made aware of the hazard; or
- (3) The radioactive material of concern consists solely of structures or installed components which have been activated (i.e., such as by being exposed to neutron radiation or particles produced in an accelerator).

10 CFR 835: 604 (c)STATUS: Full Compliance

REQUIREMENT STATEMENT:

Areas containing only packages received from radioactive material transportation labeled and in non-degraded condition need not be posted in accordance with 10 CFR 835.603 until the packages are monitored in accordance with 10 CFR 835.405.

DESCRIPTION OF COMPLIANCE STATUS:

For areas containing only packages received from radioactive material transportation labeled and in non-degraded condition, Bechtel Jacobs need not post these areas in accordance with 10 CFR 835.603 until the packages are monitored in accordance with 10 CFR 835.405.

11/09/99

**BECHTEL JACOBS COMPANY
RADIATION PROTECTION PROGRAM PLAN**

10 CFR 835: 605 (1)

STATUS: Full Compliance

REQUIREMENT STATEMENT:

Except as provided in 10 CFR 835.606, each item or container of radioactive material SHALL bear a durable, clearly visible label bearing the standard radiation warning trefoil and the words "Caution, Radioactive Material" or "Danger, Radioactive Material."

DESCRIPTION OF COMPLIANCE STATUS:

Except as provided in 10 CFR 835.606, each item or container of radioactive material will bear a durable, clearly visible label bearing the standard radiation warning trefoil and the words "Caution, Radioactive Material" or "Danger, Radioactive Material."

10 CFR 835: 605 (2)

STATUS: Full Compliance

REQUIREMENT STATEMENT:

The label SHALL also provide sufficient information to permit individuals handling, using, or working in the vicinity of the items or containers, to take precautions to avoid or control exposures.

DESCRIPTION OF COMPLIANCE STATUS:

The label (described in 10 CFR 835.605(1)) will also provide sufficient information to permit individuals handling, using, or working in the vicinity of the items or containers, to take precautions to avoid or control exposures.

**BECHTEL JACOBS COMPANY
RADIATION PROTECTION PROGRAM PLAN**

10 CFR 835: 606 (a)STATUS: Full Compliance

REQUIREMENT STATEMENT:

Items and containers MAY be excepted from the radioactive material labeling requirements of 10 CFR 835.605 when:

- (1) Used, handled, or stored in areas posted and controlled in accordance with this subpart and sufficient information is provided to permit individuals to take precautions to avoid or control exposures; or
- (2) The quantity of radioactive material is less than one tenth of the values specified in appendix E of this part; or
- (3) Packaged, labeled, and marked in accordance with the regulations of the Department of Transportation or DOE Orders governing radioactive material transportation; or
- (4) Inaccessible, or accessible only to individuals authorized to handle or use them, or to work in the vicinity; or
- (5) Installed in manufacturing, process, or other equipment, such as reactor components, piping, and tanks.
- (6) The radioactive material consists solely of nuclear weapons or their components.

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs may except items and containers from the radioactive material labeling requirements of 10 CFR 835.605 when:

- (1) Used, handled, or stored in areas posted and controlled in accordance with this subpart and sufficient information is provided to permit individuals to take precautions to avoid or control exposures; or
- (2) The quantity of radioactive material is less than one tenth of the values specified in appendix E of this part; or
- (3) Packaged, labeled, and marked in accordance with the regulations of the Department of Transportation or DOE Orders governing radioactive material transportation; or
- (4) Inaccessible, or accessible only to individuals authorized to handle or use them, or to work in the vicinity; or
- (5) Installed in manufacturing, process, or other equipment, such as reactor components, piping, and tanks.
- (6) The radioactive material consists solely of nuclear weapons or their components.

10 CFR 835: 606 (b)STATUS: Full Compliance

REQUIREMENT STATEMENT:

Radioactive material labels applied to sealed radioactive sources MAY be excepted from the color specifications of 10 CFR 835.601(a).

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs may except the radioactive material labels applied to sealed radioactive sources, from the color specifications of 10 CFR 835.601(a).

**BECHTEL JACOBS COMPANY
RADIATION PROTECTION PROGRAM PLAN**

10 CFR 835: 701 (a)

STATUS: Full Compliance

REQUIREMENT STATEMENT:

Records SHALL be maintained to document compliance with this part and with radiation protection programs required by 10 CFR 835.101.

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs maintains records to document compliance with 10 CFR 835.701 and with radiation protection programs required by 10 CFR 835.101.

10 CFR 835: 701 (b)

STATUS: Full Compliance

REQUIREMENT STATEMENT:

Unless otherwise specified in this subpart, records SHALL be retained until final disposition is authorized by DOE.

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs maintains required records until final disposition is authorized by DOE.

10 CFR 835: 702 (a)

STATUS: Full Compliance

REQUIREMENT STATEMENT:

Records SHALL be maintained to document doses received by all individuals for whom monitoring was required pursuant to 10 CFR 835.402 and to document doses received during planned special exposures, unplanned doses exceeding the monitoring thresholds of 10 CFR 835.402, and authorized emergency exposures.

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs will maintain records to document doses received by all individuals for whom monitoring was required pursuant to 10 CFR 835.402 and to document doses received during planned special exposures, unplanned doses exceeding the monitoring thresholds of 10 CFR 835.402, and authorized emergency exposures.

**BECHTEL JACOBS COMPANY
RADIATION PROTECTION PROGRAM PLAN**

10 CFR 835: 702 (b)STATUS: Full Compliance

REQUIREMENT STATEMENT:

The results of individual external and internal dose monitoring that is performed, but not required by 10 CFR 835.402 SHALL be recorded. Recording of the non-uniform shallow dose equivalent to the skin is not required if the dose is less than 2 percent of the limit specified for the skin in 10 CFR 835.202 (a) (4).

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs will record the results of individual external and internal dose monitoring that is performed, but not required by 10 CFR 835.402. Recording of the non-uniform shallow dose equivalent to the skin is not required if the dose is less than 2 percent of the limit specified for the skin in 10 CFR 835.202 (a)(4).

10 CFR 835: 702 (c) (1)STATUS: Full Compliance

REQUIREMENT STATEMENT:

The (individual monitoring) records required by this section SHALL:
Be sufficient to evaluate compliance with subpart C of this part;

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs individual monitoring records are sufficient to evaluate compliance with Subpart C of 10 CFR 835.

10 CFR 835: 702 (c) (2)STATUS: Full Compliance

REQUIREMENT STATEMENT:

The (individual monitoring) records required by this section SHALL:
Be sufficient to provide dose information necessary to complete reports required by subpart I of this part;

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs considers the individual monitoring records required by 10 CFR 835.702 will be sufficient to provide the dose information necessary to complete reports required by 10 CFR 835.801.

**BECHTEL JACOBS COMPANY
RADIATION PROTECTION PROGRAM PLAN**

10 CFR 835: 702 (c) (3) (i)STATUS: Full Compliance

REQUIREMENT STATEMENT:

The (individual monitoring) records required by this section SHALL:
Include the following quantities for external dose received during the year:
The effective dose equivalent from external sources of radiation (deep dose equivalent MAY be used as effective dose equivalent for external exposure);

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs includes in the individual monitoring records required by 10 CFR 835.702, the effective dose equivalent from external sources of radiation (deep dose equivalent may be used as effective dose equivalent for external exposure) received during the year.

10 CFR 835: 702 (c) (3) (ii)STATUS: Full Compliance

REQUIREMENT STATEMENT:

The (individual monitoring) records required by this section SHALL:
Include the following quantities for external dose received during the year:
The lens of the eye dose equivalent;

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs includes in the individual monitoring records required by 10 CFR 835.702, the lens of the eye dose equivalent received during the year, when monitoring is required.

10 CFR 835: 702 (c) (3) (iii)STATUS: Full Compliance

REQUIREMENT STATEMENT:

The (individual monitoring) records required by this section SHALL:
Include the following quantities for external dose received during the year:
The shallow dose equivalent to the skin; and

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs includes the shallow dose equivalent to the skin received during the year, in the individual monitoring records required by 10 CFR 835.702.

**BECHTEL JACOBS COMPANY
RADIATION PROTECTION PROGRAM PLAN**

10 CFR 835: 702 (c) (3) (iv)

STATUS: Full Compliance

REQUIREMENT STATEMENT:

The (individual monitoring) records required by this section SHALL:
Include the following quantities for external dose received during the year:
The shallow dose equivalent to the extremities.

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs includes the shallow dose equivalent to the extremities received during the year, in the individual monitoring records required by 10 CFR 835.702, when extremity monitoring is required.

10 CFR 835: 702 (c) (4) (i)

STATUS: Full Compliance

REQUIREMENT STATEMENT:

The (individual monitoring) records required by this section SHALL:
Include the following information for internal dose resulting from intakes received during the year:
Committed effective dose equivalent

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs includes the committed effective dose equivalent for intakes that occur during the year, in the individual monitoring records required by 10 CFR 835.702.

10 CFR 835: 702 (c) (4) (ii)

STATUS: Full Compliance

REQUIREMENT STATEMENT:

The (individual monitoring) records required by this section SHALL:
Include the following information for internal dose resulting from intakes received during the year:
Committed dose equivalent to any organ or tissue of concern; and

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs will include in the individual monitoring records required by 10 CFR 835.702 the committed dose equivalent to any organ or tissue of concern for any intakes that occur during the year.

**BECHTEL JACOBS COMPANY
RADIATION PROTECTION PROGRAM PLAN**

10 CFR 835: 702 (c) (4) (iii)

STATUS: Full Compliance

REQUIREMENT STATEMENT:

The (individual monitoring) records required by this section SHALL:
Include the following information for internal dose resulting from intakes received during the year:
Identity of radionuclides

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs will include the identity of radionuclides from an intake that occurs during the year, in the individual monitoring records required by 10 CFR 835.702.

10 CFR 835: 702 (c) (5) (i)

STATUS: Full Compliance

REQUIREMENT STATEMENT:

The (individual monitoring) records required by this section SHALL:
Include the following quantities for the summation of the external and internal dose:
Total effective dose equivalent in a year;

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs will include in the individual monitoring records required by 10 CFR 835.702, the total effective dose equivalent in a year, which is the sum of the external and internal dose for that year.

10 CFR 835: 702 (c) (5) (ii)

STATUS: Full Compliance

REQUIREMENT STATEMENT:

The (individual monitoring) records required by this section SHALL:
Include the following quantities for the summation of the external and internal dose:
For any organ or tissue assigned an internal dose during the year, the sum of the deep dose equivalent from external exposures and the committed dose equivalent to that organ or tissue; and

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs will include in the individual monitoring records required by 10 CFR 835.702, for any organ or tissue assigned an internal dose during the year, the sum of the deep dose equivalent from external exposures and the committed dose equivalent to that organ or tissue.

**BECHTEL JACOBS COMPANY
RADIATION PROTECTION PROGRAM PLAN**

10 CFR 835: 702 (c) (5) (iii)

STATUS: Full Compliance

REQUIREMENT STATEMENT:

The (individual monitoring) records required by this section SHALL:
Include the following quantities for the summation of the external and internal dose:
Cumulative total effective dose equivalent.

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs will include in the individual monitoring records required by 10 CFR 835.702, the cumulative total effective dose equivalent received from external and internal sources.

10 CFR 835: 702 (c) (6)

STATUS: Full Compliance

REQUIREMENT STATEMENT:

The (individual monitoring) records required by this section SHALL:
Include the dose equivalent to the embryo/fetus of a declared pregnant worker.

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs will include in the individual monitoring records required by 10 CFR 835.702, the estimated dose equivalent to the embryo/fetus of a declared pregnant worker.

10 CFR 835: 702 (d) .01

STATUS: Full Compliance

REQUIREMENT STATEMENT:

Documentation of all occupational dose received during the current year, except for doses resulting from planned special exposures conducted in compliance with 10 CFR 835.204 and emergency exposures authorized in accordance with 10 CFR 835.1302(d), SHALL be obtained to demonstrate compliance with 10 CFR 835.202 (a)

DESCRIPTION OF COMPLIANCE STATUS:

To demonstrate compliance with 10 CFR 835.202(a), Bechtel Jacobs obtains all occupational exposures received during the current year, except for doses resulting from planned special exposures conducted in compliance with 10 CFR 835.204 and emergency exposures authorized in accordance with 10 CFR 835.1302(d).

**BECHTEL JACOBS COMPANY
RADIATION PROTECTION PROGRAM PLAN**

10 CFR 835: 702 (d) .02

STATUS: Full Compliance

REQUIREMENT STATEMENT:

If complete records documenting previous occupational dose during the year cannot be obtained, a written estimate signed by the individual MAY be accepted to demonstrate compliance.

DESCRIPTION OF COMPLIANCE STATUS:

If complete records documenting previous occupational dose during the year cannot be obtained, Bechtel Jacobs may accept a written estimate signed by the individual to demonstrate compliance.

10 CFR 835: 702 (e)

STATUS: Full Compliance

REQUIREMENT STATEMENT:

For radiological workers whose occupational dose is monitored in accordance with 10 CFR 835.402, reasonable efforts SHALL be made to obtain complete records of prior years occupational internal and external doses.

DESCRIPTION OF COMPLIANCE STATUS:

For radiological workers whose occupational dose is monitored in accordance with 10 CFR 835.402, Bechtel Jacobs will make reasonable efforts to obtain complete records of prior years occupational internal and external doses.

10 CFR 835: 702 (f)

STATUS: Full Compliance

REQUIREMENT STATEMENT:

The records specified in this section that are identified with a specific individual SHALL be readily available to that individual.

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs makes the records specified in 10 CFR 835.702(f) that are identified with a specific individual, readily available to that individual.

**BECHTEL JACOBS COMPANY
RADIATION PROTECTION PROGRAM PLAN**

10 CFR 835: 702 (g)

STATUS: Full Compliance

REQUIREMENT STATEMENT:

Data necessary to allow future verification or reassessment of the recorded doses SHALL be recorded.

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs records data necessary, to allow future verification or reassessment of the recorded doses.

10 CFR 835: 702 (h)

STATUS: Full Compliance

REQUIREMENT STATEMENT:

All records required by this section SHALL be transferred to the DOE upon cessation of activities at the site that could cause exposure to individuals.

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs will transfer all records required by 10 CFR 835.702(h) to the DOE upon cessation of activities at sites that could cause exposure to individuals.

10 CFR 835: 703 (a)

STATUS: Full Compliance

REQUIREMENT STATEMENT:

The following information SHALL be documented and maintained:
Results of monitoring for radiation and radioactive material as required by subparts E and L of this part, except for monitoring required by 10 CFR 835.1102(d);

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs documents and maintains the results of monitoring for radiation and radioactive material as required by subparts E and L of 10 CFR 835, except for monitoring required by 10 CFR 835.1102(d).

**BECHTEL JACOBS COMPANY
RADIATION PROTECTION PROGRAM PLAN**

10 CFR 835: 703 (b)

STATUS: Full Compliance

REQUIREMENT STATEMENT:

The following information SHALL be documented and maintained:
Results of monitoring used to determine individual occupational dose from external and internal sources;

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs documents and maintains the results of monitoring used to determine individual occupational dose from external and internal sources.

10 CFR 835: 703 (c)

STATUS: Full Compliance

REQUIREMENT STATEMENT:

The following information SHALL be documented and maintained:
Results of monitoring for the release and control of material and equipment as required by 10 CFR 835.1101; and

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs documents and maintains the results of monitoring for the release and control of material and equipment as required by 10 CFR 835.1101.

10 CFR 835: 703 (d)

STATUS: Full Compliance

REQUIREMENT STATEMENT:

The following information SHALL be documented and maintained:
Results of maintenance and calibration performed on instruments and equipment as required by 10 CFR 835.401(b);

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs documents and maintains the results of maintenance and calibration performed on instruments and equipment as required by 10 CFR 835.401(b).

**BECHTEL JACOBS COMPANY
RADIATION PROTECTION PROGRAM PLAN**

10 CFR 835: 704 (a)

STATUS: Full Compliance

REQUIREMENT STATEMENT:

Training records SHALL be maintained, as necessary, to demonstrate compliance with 10 CFR 835.901.

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs maintains training records which demonstrate compliance with sections 10 CFR 835.901.

10 CFR 835: 704 (b)

STATUS: Full Compliance

REQUIREMENT STATEMENT:

Actions taken to maintain occupational exposures as low as reasonably achievable, including the actions required for this purpose by 10 CFR 835.101, as well as facility design and control actions required by 10 CFR 835.1001, 835.1002, and 835.1003, SHALL be documented.

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs documents actions taken to maintain occupational exposures as low as reasonably achievable, including the actions required for this purpose by 10 CFR 835.101, as well as, facility design and control actions required by 10 CFR 835.1001, 835.1002, and 835.1003.

10 CFR 835: 704 (c)

STATUS: Full Compliance

REQUIREMENT STATEMENT:

Records SHALL be maintained to document the results of internal audits and other reviews of program content and implementation.

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs documents and maintains records of the results of internal audits and other reviews of program content and implementation.

**BECHTEL JACOBS COMPANY
RADIATION PROTECTION PROGRAM PLAN**

10 CFR 835: 704 (d)

STATUS: Full Compliance

REQUIREMENT STATEMENT:

Written declarations of pregnancy, including the estimated date of conception, and revocations of declarations of pregnancy SHALL be maintained.

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs maintains written declarations of pregnancy, including the estimated date of conception, and revocations of declarations of pregnancy.

10 CFR 835: 704 (e)

STATUS: Full Compliance

REQUIREMENT STATEMENT:

Changes in equipment, techniques, and procedures used for monitoring SHALL be documented.

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs documents changes in equipment, techniques, and procedures used for monitoring.

10 CFR 835: 704 (f)

STATUS: Full Compliance

REQUIREMENT STATEMENT:

Records SHALL be maintained as necessary to demonstrate compliance with the requirements of 10 CFR 835.1201 and 835.1202 for sealed radioactive source control, inventory, and source leak tests.

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs maintains records as necessary to demonstrate compliance with the requirements of 10 CFR 835.1201 and 835.1202 for sealed radioactive source control, inventory, and source leak tests.

**BECHTEL JACOBS COMPANY
RADIATION PROTECTION PROGRAM PLAN**

10 CFR 835: 801 (a) .01

STATUS: Full Compliance

REQUIREMENT STATEMENT:

Radiation exposure data for individuals monitored in accordance with 10 CFR 835.402 SHALL be reported as specified in this section.

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs reports radiation exposure data for individuals monitored in accordance with section 10 CFR 835.402, in accordance with the requirements of section 10 CFR 835.801.

10 CFR 835: 801 (a) .02

STATUS: Full Compliance

REQUIREMENT STATEMENT:

The information (radiation exposure data) SHALL include the data required under 10 CFR 835.702(c).

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs will include the data required under 10 CFR 835.702(c) in the radiation exposure data information.

10 CFR 835: 801 (a) .03

STATUS: Full Compliance

REQUIREMENT STATEMENT:

Each notification (radiation exposure data) and report SHALL be in writing and include: the DOE site or facility name, the name of the individual, and the individual's social security number, employee number, or other unique identification number.

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs will report in writing each notification (radiation exposure data) and include the Bechtel Jacobs site or facility name, the name of the individual, and the individual's social security number, employee number, or other unique identification number.

**BECHTEL JACOBS COMPANY
RADIATION PROTECTION PROGRAM PLAN**

10 CFR 835: 801 (b) .01

STATUS: Full Compliance

REQUIREMENT STATEMENT:

Upon the request from an individual terminating employment, records of exposure SHALL be provided to that individual as soon as the data are available, but not later than 90 days after termination.

DESCRIPTION OF COMPLIANCE STATUS:

Upon the request from an individual terminating employment, Bechtel Jacobs provides records of exposure to that individual as soon as the data are available, but not later than 90 days after termination.

10 CFR 835: 801 (b) .02

STATUS: Full Compliance

REQUIREMENT STATEMENT:

A written estimate of the radiation dose received by that employee based on available information SHALL be provided at the time of termination, if requested.

DESCRIPTION OF COMPLIANCE STATUS:

If requested, Bechtel Jacobs will provide a written estimate of the radiation dose received by that employee based on available information at the time of termination.

10 CFR 835: 801 (c)

STATUS: Full Compliance

REQUIREMENT STATEMENT:

Each DOE- or DOE-contractor-operated site or facility SHALL, on an annual basis, provide a radiation dose report to each individual monitored during the year at that site or facility in accordance with 10 CFR 835.402.

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs will provide, on an annual basis, a radiation dose report to each individual monitored during the year at the site or facility in accordance with 10 CFR 835.402.

**BECHTEL JACOBS COMPANY
RADIATION PROTECTION PROGRAM PLAN**

10 CFR 835: 801 (d)STATUS: Full Compliance

REQUIREMENT STATEMENT:

Detailed information concerning any individual's exposure SHALL be made available to the individual upon request of that individual, consistent with the provisions of the Privacy Act (5 U.S.C. 552a).

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs will make available detailed information concerning any individual's exposure to that individual upon request of that individual, consistent with the provisions of the Privacy Act (5 U.S.C. 552a).

10 CFR 835: 801 (e) .01STATUS: Full Compliance

REQUIREMENT STATEMENT:

When a DOE contractor is required to report to the Department, pursuant to Departmental requirements for occurrence reporting and processing, any exposure of an individual to radiation and/or radioactive material, or planned special exposure in accordance with 10 CFR 835.204(e), the contractor SHALL also provide that individual with a report on his or her exposure data included therein.

DESCRIPTION OF COMPLIANCE STATUS:

When Bechtel Jacobs is required to report to the Department, pursuant to Departmental requirements for occurrence reporting and processing, any exposure of an individual to radiation and/or radioactive material, or planned special exposure in accordance with 10 CFR 835.204(e), Bechtel Jacobs will also provide that individual with a report on his or her exposure data included therein.

10 CFR 835: 801 (e) .02STATUS: Full Compliance

REQUIREMENT STATEMENT:

Such report (radiation exposure data report) SHALL be transmitted at a time not later than the transmittal to the Department.

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs will transmit the individual's dose report at a time not later than the transmittal to the Department.

**BECHTEL JACOBS COMPANY
RADIATION PROTECTION PROGRAM PLAN**

10 CFR 835: 901 (a)STATUS: Full Compliance

REQUIREMENT STATEMENT:

Each individual SHALL complete radiation safety training on the topics established at 10 CFR 835.901(c) commensurate with the hazards in the area and the required controls;

- (1) Before being permitted unescorted access to controlled areas; and
- (2) Before receiving occupational dose during access to controlled areas at a DOE site or facility.

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs provides radiation safety training to all general employees on the topics established at 10 CFR 835.901(c) commensurate with the hazards in the area and the required controls;

- (1) Before being permitted unescorted access to controlled areas; and
- (2) Before receiving occupational dose during access to controlled areas at a Bechtel Jacobs operated site or facility.

10 CFR 835: 901 (b)STATUS: Full Compliance

REQUIREMENT STATEMENT:

Each individual SHALL demonstrate knowledge of the radiation safety training topics established in 10 CFR 835.901(c), commensurate with the hazards in the area and required controls, by successful completion of an examination and performance demonstrations:

- (1) Before being permitted unescorted access to radiological areas; and
- (2) Before performing unescorted assignments as a radiological worker.

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs requires each individual to demonstrate knowledge of the radiation safety training topics established in 10 CFR 835.901(c), commensurate with the hazards in the area and required controls, by successful completion of an examination and performance demonstrations:

- (1) Before being permitted unescorted access to radiological areas; and
- (2) Before performing unescorted assignments as a radiological worker.

**BECHTEL JACOBS COMPANY
RADIATION PROTECTION PROGRAM PLAN**

10 CFR 835: 901 (c) .01

STATUS: Full Compliance

REQUIREMENT STATEMENT:

Radiation safety training SHALL include the following topics, to the extent appropriate to each individual's prior training, work assignments, and degree of exposure to potential radiological hazards:
Risks of exposure to radiation and radioactive materials, including prenatal radiation exposure;

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs radiation safety training includes risks of exposure to radiation and radioactive materials, including prenatal radiation exposure.

10 CFR 835: 901 (c) .02

STATUS: Full Compliance

REQUIREMENT STATEMENT:

Radiation safety training SHALL include the following topics, to the extent appropriate to each individual's prior training, work assignments, and degree of exposure to potential radiological hazards:
Basic radiological fundamentals and radiation protection concepts;

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs radiation safety training includes basic radiological fundamentals and radiation protection concepts.

10 CFR 835: 901 (c) .03

STATUS: Full Compliance

REQUIREMENT STATEMENT:

Radiation safety training SHALL include the following topics, to the extent appropriate to each individual's prior training, work assignments, and degree of exposure to potential radiological hazards:
Physical design features, administrative controls, limits, policies, procedures, alarms, and other measures implemented at the facility to manage doses and maintain doses ALARA, including both routine and emergency actions;

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs radiation safety training includes physical design features, administrative controls, limits, policies, procedures, alarms, and other measures implemented at the facility to manage doses and maintain doses ALARA, including both routine and emergency actions.

**BECHTEL JACOBS COMPANY
RADIATION PROTECTION PROGRAM PLAN**

10 CFR 835: 901 (c) .04STATUS: Full Compliance

REQUIREMENT STATEMENT:

Radiation safety training SHALL include the following topics, to the extent appropriate to each individual's prior training, work assignments, and degree of exposure to potential radiological hazards:
Individual rights and responsibilities as related to implementation of the facility radiation protection program;

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs radiation safety training includes individual rights and responsibilities as related to implementation of the facility radiation protection program.

10 CFR 835: 901 (c) .05STATUS: Full Compliance

REQUIREMENT STATEMENT:

Radiation safety training SHALL include the following topics, to the extent appropriate to each individual's prior training, work assignments, and degree of exposure to potential radiological hazards:
Individual responsibilities for implementing ALARA measures required by 10 CFR 835.101; and

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs radiation safety training includes individual responsibilities for implementing ALARA measures required by 10 CFR 835.101.

10 CFR 835: 901 (c) .06STATUS: Full Compliance

REQUIREMENT STATEMENT:

Radiation safety training SHALL include the following topics, to the extent appropriate to each individual's prior training, work assignments, and degree of exposure to potential radiological hazards:
Individual exposure reports that may be requested in accordance with 10 CFR 835.801.

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs radiation safety training includes individual exposure reports that may be requested in accordance with 10 CFR 835.801.

**BECHTEL JACOBS COMPANY
RADIATION PROTECTION PROGRAM PLAN**

10 CFR 835: 901 (d) .01

STATUS: Full Compliance

REQUIREMENT STATEMENT:

When an escort is used in lieu of training in accordance with paragraph (a) or (b) of this section, the escort SHALL:

Have completed radiation safety training, examinations, and performance demonstrations required for entry to the area and performance of the work; and

DESCRIPTION OF COMPLIANCE STATUS:

When Bechtel Jacobs uses an escort used in lieu of training in accordance with 10 CFR 835. 901(a) and 835.901(b), the escort will have completed radiation safety training, examinations, and performance demonstrations required for entry to the area and performance of the work.

10 CFR 835: 901 (d) .02

STATUS: Full Compliance

REQUIREMENT STATEMENT:

When an escort is used in lieu of training in accordance with paragraph (a) or (b) of this section, the escort SHALL:

Ensure that all escorted individuals comply with the documented radiation protection program.

DESCRIPTION OF COMPLIANCE STATUS:

When Bechtel Jacobs uses an escort used in lieu of training in accordance with 10 CFR 835. 901(a) and 835.901(b), the escort will ensure that all escorted individuals comply with the documented radiation protection program.

10 CFR 835: 901 (e) .01

STATUS: Full Compliance

REQUIREMENT STATEMENT:

Radiation safety training SHALL be provided to individuals when there is a significant change to radiation protection policies and procedures that may affect the individual and at intervals not to exceed 24 months.

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs will provide radiation safety training to individuals when there is a significant change to radiation protection policies and procedures that may affect the individual and at intervals not to exceed 24 months.

**BECHTEL JACOBS COMPANY
RADIATION PROTECTION PROGRAM PLAN**

10 CFR 835: 901 (e) .02

STATUS: Full Compliance

REQUIREMENT STATEMENT:

Such training provided for individuals subject to the requirements of 10 CFR 835.901(b)(1) and (b)(2) SHALL include successful completion of an examination.

DESCRIPTION OF COMPLIANCE STATUS:

The radiation safety training Bechtel Jacobs provides for individuals subject to the requirements of 10 CFR 835.901(b)(1) and (b)(2) includes successful completion of an examination

10 CFR 835: 1001 (a) .01

STATUS: Full Compliance

REQUIREMENT STATEMENT:

Measures SHALL be taken to maintain radiation exposure in controlled areas ALARA through physical design features and administrative control.

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs will apply measures to maintain radiation exposure in controlled ALARA through physical design features and administrative control.

10 CFR 835: 1001 (a) .02

STATUS: Full Compliance

REQUIREMENT STATEMENT:

The primary methods used SHALL be physical design features (e.g., confinement, ventilation, remote handling, and shielding).

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs will take measures to maintain radiation exposure in controlled areas ALARA through physical design features and administrative control. The primary methods used are physical design features (e.g., confinement, ventilation, remote handling, and shielding).

**BECHTEL JACOBS COMPANY
RADIATION PROTECTION PROGRAM PLAN**

10 CFR 835: 1001 (a) .03

STATUS: Full Compliance

REQUIREMENT STATEMENT:

Administrative controls and procedural requirements SHALL be employed only as supplemental methods to control radiation exposure.

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs will take measures to maintain radiation exposure in controlled ALARA through physical design features and administrative control. Administrative controls and procedural requirements are employed only as supplemental methods to control radiation exposure.

10 CFR 835: 1001 (b)

STATUS: Full Compliance

REQUIREMENT STATEMENT:

For specific activities where use of physical design features is demonstrated to be impractical, administrative controls SHALL be used to maintain radiation exposures ALARA.

DESCRIPTION OF COMPLIANCE STATUS:

For specific activities where use of physical design features is demonstrated to be impractical, administrative controls will be used to maintain radiation exposures ALARA.

10 CFR 835: 1002 (a)

STATUS: Full Compliance

REQUIREMENT STATEMENT:

During the design of new facilities or modification of existing facilities, the following objectives shall be adopted:

Optimization methods SHALL be used to assure that occupational exposure is maintained ALARA in developing and justifying facility design and physical controls.

DESCRIPTION OF COMPLIANCE STATUS:

During the design of new facilities or modification of existing facilities, Bechtel Jacobs will use optimization methods to assure that occupational exposure is maintained ALARA when developing or justifying facility design and physical controls.

**BECHTEL JACOBS COMPANY
RADIATION PROTECTION PROGRAM PLAN**

10 CFR 835: 1002 (b) .01STATUS: Full Compliance

REQUIREMENT STATEMENT:

During the design of new facilities or modification of existing facilities, the following objectives shall be adopted:

The design objective for controlling personnel exposure from external sources of radiation in areas of continuous occupational occupancy (2000 hours per year) SHALL be to maintain exposure levels below an average of 0.5 mrem (5 microsieverts) per hour and as far below this average as is reasonably achievable.

DESCRIPTION OF COMPLIANCE STATUS:

During the design of new facilities or modification of existing facilities, the Bechtel Jacobs design objective for controlling personnel exposure from external sources of radiation in areas of continuous occupational occupancy (2000 hours per year) will be to maintain exposure levels below an average of 0.5 mrem (5 microsieverts) per hour and as far below this average as is reasonably achievable.

10 CFR 835: 1002 (b) .02STATUS: Full Compliance

REQUIREMENT STATEMENT:

During the design of new facilities or modification of existing facilities, the following objectives shall be adopted:

The design objectives for exposure rates for potential exposure to a radiological worker where occupancy differs from the above SHALL be ALARA and shall not exceed 20 percent of the applicable standards in 10 CFR 835.202.

DESCRIPTION OF COMPLIANCE STATUS:

During the design of new facilities or modification of existing facilities, the Bechtel Jacobs design objectives for exposure rates for potential exposure to a radiological worker, where occupancy is less than full-time (<2000 hours per year), will be ALARA and shall not exceed 20 percent of the applicable standards in 10 CFR 835.202.

**BECHTEL JACOBS COMPANY
RADIATION PROTECTION PROGRAM PLAN**

10 CFR 835: 1002 (b) .03

STATUS: Full Compliance

REQUIREMENT STATEMENT:

During the design of new facilities or modification of existing facilities, the following objectives shall be adopted:

The design objectives for exposure rates for potential exposure to a radiological worker where occupancy differs from the above shall be ALARA and SHALL not exceed 20 percent of the applicable standards in 10 CFR 835.202.

DESCRIPTION OF COMPLIANCE STATUS:

During the design of new facilities or modification of existing facilities, Bechtel Jacobs will adopt design objectives for exposure rates for potential exposure to a radiological worker where occupancy is less than full-time (<2000 hours per year) which are ALARA and will not exceed 20 percent of the applicable standards in 10 CFR 835.202.

10 CFR 835: 1002 (c) .01

STATUS: Full Compliance

REQUIREMENT STATEMENT:

During the design of new facilities or modification of existing facilities, the following objectives shall be adopted:

Regarding the control of airborne radioactive material, the design objective SHALL be, under normal conditions, to avoid releases to the workplace atmosphere and in any situation, to control the inhalation of such material by workers to levels that are ALARA;

DESCRIPTION OF COMPLIANCE STATUS:

During the design of new facilities or modification of existing facilities, Bechtel Jacobs will design for the control of airborne radioactive material, such that under normal conditions, releases to the workplace atmosphere are minimized and in any situation, inhalation of such material by workers is controlled to levels that are ALARA.

**BECHTEL JACOBS COMPANY
RADIATION PROTECTION PROGRAM PLAN**

10 CFR 835: 1002 (c) .02

STATUS: Full Compliance

REQUIREMENT STATEMENT:

During the design of new facilities or modification of existing facilities, the following objectives shall be adopted:

Regarding the control of airborne radioactive material, the design objective shall be . . . confinement and ventilation SHALL normally be used.

DESCRIPTION OF COMPLIANCE STATUS:

During the design of new facilities or modification of existing facilities, Bechtel Jacobs will adopt design objectives that normally call for confinement and ventilation of airborne radioactive material.

10 CFR 835: 1002 (d)

STATUS: Full Compliance

REQUIREMENT STATEMENT:

During the design of new facilities or modification of existing facilities, the following objectives shall be adopted:

The design or modification of a facility and the selection of materials SHALL include features that facilitate operations, maintenance, decontamination, and decommissioning.

DESCRIPTION OF COMPLIANCE STATUS:

During the design of new facilities or modification of existing facilities, Bechtel Jacobs will select materials which include features that facilitate operations, maintenance, decontamination, and decommissioning.

10 CFR 835: 1003 (a)

STATUS: Full Compliance

REQUIREMENT STATEMENT:

During routine operations, the combination of physical design features and administrative controls shall provide that:

The anticipated occupational dose to general employees SHALL not exceed the limits established at 10 CFR 835.202; and

DESCRIPTION OF COMPLIANCE STATUS:

During routine operations, the combination of Bechtel Jacobs physical design features and administrative controls will limit the occupational dose to general employees to less than the limits established at 10 CFR 835.202.

**BECHTEL JACOBS COMPANY
RADIATION PROTECTION PROGRAM PLAN**

10 CFR 835: 1003 (b)

STATUS: Full Compliance

REQUIREMENT STATEMENT:

During routine operations, the combination of physical design features and administrative controls shall provide that:

The ALARA process is utilized for personnel exposures to ionizing radiation.

DESCRIPTION OF COMPLIANCE STATUS:

During routine operations, the combination of Bechtel Jacobs physical design features and administrative controls will provide that the ALARA process is utilized for personnel exposures to ionizing radiation.

10 CFR 835: 1101 (a) (1)

STATUS: Full Compliance

REQUIREMENT STATEMENT:

Except as provided in paragraphs (b) and (c) of this section, material and equipment in contamination areas, high contamination areas, and airborne radioactivity areas, SHALL NOT be released to a controlled area if:

Removable surface contamination levels on accessible surfaces exceed the removable surface contamination values specified in appendix D of this part; or

DESCRIPTION OF COMPLIANCE STATUS:

Except as provided in paragraphs (b) and (c) of this 10 CFR 835.1101, Bechtel Jacobs will not release the material and equipment in contamination areas, high contamination areas, and airborne radioactivity areas, to controlled areas if removable surface contamination levels on accessible surfaces exceed the removable surface contamination values specified in appendix D of this part .

**BECHTEL JACOBS COMPANY
RADIATION PROTECTION PROGRAM PLAN**

10 CFR 835: 1101 (a) (2)STATUS: Full Compliance

REQUIREMENT STATEMENT:

Except as provided in paragraphs (b) and (c) of this section, material and equipment in contamination areas, high contamination areas, and airborne radioactivity areas, SHALL NOT be released to a controlled area if:

Prior use suggests that the removable surface contamination levels on inaccessible surfaces are likely to exceed the removable surface contamination values specified in Appendix D to this part.

DESCRIPTION OF COMPLIANCE STATUS:

Except as provided in paragraphs (b) and (c) of this section, Bechtel Jacobs will not release material and equipment in contamination areas, high contamination areas, and airborne radioactivity areas, to a controlled area if prior use suggests that the removable surface contamination levels on inaccessible surfaces are likely to exceed the removable surface contamination values specified in Appendix D to this part.

10 CFR 835: 1101 (b)STATUS: Full Compliance

REQUIREMENT STATEMENT:

Material and equipment exceeding the removable surface contamination values specified in appendix D of this part MAY be conditionally released for movement on-site from one radiological area for immediate placement in another radiological area only if appropriate monitoring is performed and appropriate controls for the movement are established and exercised.

DESCRIPTION OF COMPLIANCE STATUS:

Material and equipment exceeding the removable surface contamination values specified in 10 CFR 835, Appendix D may be conditionally released for movement on-site from one radiological area for immediate placement in another radiological area, if appropriate monitoring is performed and appropriate controls for the movement are established and exercised.

**BECHTEL JACOBS COMPANY
RADIATION PROTECTION PROGRAM PLAN**

10 CFR 835: 1101 (c) (1)STATUS: Full Compliance

REQUIREMENT STATEMENT:

Material and equipment with fixed contamination levels that exceed the total surface contamination values specified in appendix D of this part MAY be released for use in controlled areas outside of the radiological areas only under the following conditions: Removable surface contamination levels are below the removable surface contamination values specified in Appendix D of this part; and

DESCRIPTION OF COMPLIANCE STATUS:

Material and equipment with fixed contamination levels that exceed the total surface contamination values specified in 10 CFR 835 Appendix D may be released for use in controlled areas outside of the radiological areas if the removable surface contamination values are below the values specified in Appendix D.

10 CFR 835: 1101 (c) (2)STATUS: Full Compliance

REQUIREMENT STATEMENT:

Material and equipment with fixed contamination levels that exceed the total surface contamination values specified in Appendix D of this part MAY be released for use in controlled areas outside of the radiological areas only under the following conditions: The material or equipment is routinely monitored and clearly marked or labeled to alert personnel of the contaminated status.

DESCRIPTION OF COMPLIANCE STATUS:

Material and equipment with fixed contamination levels that exceed the total surface contamination values specified in Appendix D may be released for use in controlled areas outside of the radiological areas if the material or equipment are routinely monitored and clearly marked or labeled to alert personnel of the contaminated status.

10 CFR 835: 1102 (a)STATUS: Full Compliance

REQUIREMENT STATEMENT:

Appropriate controls SHALL be maintained and verified which prevent the inadvertent transfer of removable contamination to locations outside of radiological areas under normal operating conditions.

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs maintains and verifies appropriate controls which prevent the inadvertent transfer of removable contamination to locations outside of radiological areas under normal operating conditions.

**BECHTEL JACOBS COMPANY
RADIATION PROTECTION PROGRAM PLAN**

10 CFR 835: 1102 (b)STATUS: Full Compliance

REQUIREMENT STATEMENT:

Any area in which contamination levels exceed the values specified in appendix D of this part SHALL be controlled in a manner commensurate with the physical and chemical characteristics of the contaminant, the radionuclides present, and the fixed and removable contamination levels.

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs controls any area in which contamination levels exceed the values specified in Appendix D of 10 CFR 835 in a manner commensurate with the physical and chemical characteristics of the contaminant, the radionuclides present, and the fixed and removable contamination levels.

10 CFR 835: 1102 (c)(1)STATUS: Full Compliance

REQUIREMENT STATEMENT:

Areas accessible to individuals where the measured total surface contamination levels exceed, but the removable surface contamination levels are less than, corresponding surface contamination values specified in appendix D of this part, SHALL be controlled as follows when located outside of radiological areas:

The area SHALL be routinely monitored to ensure the removable surface contamination level remains below the removable surface contamination values specified in appendix D of this part; and

DESCRIPTION OF COMPLIANCE STATUS:

For areas accessible to individuals where the measured total surface contamination levels exceed, but the removable surface contamination levels are less than, corresponding surface contamination values specified in appendix D of 10 CFR 835, Bechtel Jacobs will perform routine monitoring to ensure the removable surface contamination level remains below the removable surface contamination values specified in appendix D.

**BECHTEL JACOBS COMPANY
RADIATION PROTECTION PROGRAM PLAN**

10 CFR 835: 1102 (c)(2)STATUS: Full Compliance

REQUIREMENT STATEMENT:

Areas accessible to individuals where the measured total surface contamination levels exceed, but the removable surface contamination levels are less than, corresponding surface contamination values specified in appendix D of this part, SHALL be controlled as follows when located outside of radiological areas:

The area SHALL be conspicuously marked to warn individuals of the contaminated status.

DESCRIPTION OF COMPLIANCE STATUS:

For areas accessible to individuals where the measured total surface contamination levels exceed, but the removable surface contamination levels are less than, corresponding surface contamination values specified in appendix D of 10 CFR 835, Bechtel Jacobs will conspicuously mark these areas to warn individuals of the contaminated status.

10 CFR 835: 1102 (d)STATUS: Full Compliance

REQUIREMENT STATEMENT:

Individuals exiting contamination, high contamination, or airborne radioactivity areas shall be monitored, as appropriate, for the presence of surface contamination.

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs will monitor for the presence of surface contamination, as appropriate, individuals exiting contamination, high contamination, or airborne radioactivity areas.

10 CFR 835: 1102 (e)STATUS: Full Compliance

REQUIREMENT STATEMENT:

Protective clothing shall be required for entry to areas in which removable contamination exists at levels exceeding the removable surface contamination values specified in appendix D of this part.

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs requires protective clothing for entry into areas in which removable contamination exists at levels exceeding the removable surface contamination values specified in Appendix D of 10 CFR 835.

**BECHTEL JACOBS COMPANY
RADIATION PROTECTION PROGRAM PLAN**

10 CFR 835: 1201

STATUS: Full Compliance

REQUIREMENT STATEMENT:

Sealed radioactive sources SHALL be used, handled, and stored in a manner commensurate with the hazards associated with the operations involving the sources.

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs will use, handle and store sealed radioactive sources in a manner commensurate with the hazards associated with the operations involving the sources.

10 CFR 835: 1202 (a)

STATUS: Full Compliance

REQUIREMENT STATEMENT:

Each accountable sealed radioactive source SHALL be inventoried at intervals not to exceed six months.

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs will inventory each accountable sealed radioactive source at intervals not to exceed six months.

10 CFR 835: 1202 (a)(1)

STATUS: Full Compliance

REQUIREMENT STATEMENT:

Each accountable sealed radioactive source shall be inventoried at intervals not to exceed six months. This inventory SHALL:
Establish the physical location of each accountable sealed radioactive source;

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs will inventory each accountable sealed radioactive source at intervals not to exceed six months. This inventory will establish the physical location of each accountable sealed radioactive source.

**BECHTEL JACOBS COMPANY
RADIATION PROTECTION PROGRAM PLAN**

10 CFR 835: 1202 (a)(2)

STATUS: Full Compliance

REQUIREMENT STATEMENT:

Each accountable sealed radioactive source shall be inventoried at intervals not to exceed six months. This inventory SHALL:

Verify the presence and adequacy of associated postings and labels; and

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs will inventory each accountable sealed radioactive source at intervals not to exceed six months. This inventory will verify the presence and adequacy of associated postings and labels.

10 CFR 835: 1202 (a)(3)

STATUS: Full Compliance

REQUIREMENT STATEMENT:

Each accountable sealed radioactive source shall be inventoried at intervals not to exceed six months. This inventory SHALL:

Establish the adequacy of storage locations, containers, and devices.

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs will inventory each accountable sealed radioactive source at intervals not to exceed six months. This inventory will establish the adequacy of storage locations, containers, and devices.

10 CFR 835: 1202 (b) .01

STATUS: Full Compliance

REQUIREMENT STATEMENT:

Except for sealed radioactive sources consisting solely of gaseous radioactive material or tritium, each accountable sealed radioactive source SHALL be subject to a source leak test upon receipt, when damage is suspected, and at intervals not to exceed six months.

DESCRIPTION OF COMPLIANCE STATUS:

Except for sealed radioactive sources consisting solely of gaseous radioactive material or tritium, Bechtel Jacobs will perform a source leak test on each accountable sealed radioactive source upon receipt, when damage is suspected, and at intervals not to exceed six months.

**BECHTEL JACOBS COMPANY
RADIATION PROTECTION PROGRAM PLAN**

10 CFR 835: 1202 (b) .02STATUS: Full Compliance

REQUIREMENT STATEMENT:

Except for sealed radioactive sources consisting solely of gaseous radioactive material or tritium, each accountable sealed radioactive source shall be subject to a source leak test upon receipt, when damage is suspected, and at intervals not to exceed six months. Source leak tests SHALL be capable of detecting radioactive material leakage equal to or exceeding 0.005 microcurie.

DESCRIPTION OF COMPLIANCE STATUS:

The source leak tests performed by Bechtel Jacobs will be capable of detecting radioactive material leakage equal to or exceeding 0.005 microcurie.

10 CFR 835: 1202 (c)STATUS: Full Compliance

REQUIREMENT STATEMENT:

Notwithstanding the requirements of paragraph (b) of this section, an accountable sealed radioactive source is not subject to periodic source leak testing if that source has been removed from service. Such sources SHALL be stored in a controlled location, subject to periodic inventory as required by paragraph (a) of this section, and subject to source leak testing prior to being returned to service.

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs will store sources that have been removed from service in a controlled location, subject to periodic inventory as required by paragraph (a) of this 10 CFR 835.1202, and subject to source leak testing prior to being returned to service.

**BECHTEL JACOBS COMPANY
RADIATION PROTECTION PROGRAM PLAN**

10 CFR 835: 1202 (d)STATUS: Full Compliance

REQUIREMENT STATEMENT:

Notwithstanding the requirements of paragraphs (a) and (b) of this section, an accountable sealed radioactive source is not subject to periodic inventory and source leak testing if that source is located in an area that is unsafe for human entry or otherwise inaccessible.

DESCRIPTION OF COMPLIANCE STATUS:

Notwithstanding the requirements of paragraphs (a) and (b) of this section, an accountable sealed radioactive source is not subject to periodic inventory and source leak testing if that source is located in an area that is unsafe for human entry or otherwise inaccessible

10 CFR 835: 1202 (e)STATUS: Full Compliance

REQUIREMENT STATEMENT:

An accountable sealed radioactive source found to be leaking radioactive material SHALL be controlled in a manner that minimizes the spread of radioactive contamination.

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs will control an accountable sealed radioactive source found to be leaking radioactive material in a manner that minimizes the spread of radioactive contamination.

10 CFR 835: 1301 (a) (1)STATUS: Full Compliance

REQUIREMENT STATEMENT:

A general employee whose occupational dose has exceeded the numerical value of any of the limits specified in 10 CFR 835.202 as a result of an authorized emergency exposure MAY be permitted to return to work in radiological areas during the current year providing that all of the following conditions are met. Approval is first obtained from the contractor management and the Head of the responsible DOE field organization;

DESCRIPTION OF COMPLIANCE STATUS:

A general employee whose occupational dose has exceeded the numerical value of any of the limits specified in 10 CFR 835.202 as a result of an authorized emergency exposure MAY be permitted to return to work in radiological areas during the current year providing approval is obtained from Bechtel Jacobs management and the Head of the responsible DOE field organization.

**BECHTEL JACOBS COMPANY
RADIATION PROTECTION PROGRAM PLAN**

10 CFR 835: 1301 (a) (2)STATUS: Full Compliance

REQUIREMENT STATEMENT:

A general employee whose occupational dose has exceeded the numerical value of any of the limits specified in 10 CFR 835.202 as a result of an authorized emergency exposure MAY be permitted to return to work in radiological areas during the current year providing that all of the following conditions are met. The individual receives counseling from radiological protection and medical personnel regarding the consequences of receiving additional occupational exposure during the year; and

DESCRIPTION OF COMPLIANCE STATUS:

A general employee whose occupational dose has exceeded the numerical value of any of the limits specified in 10 CFR 835.202 as a result of an authorized emergency exposure may be permitted to return to work in radiological areas during the current year providing the individual receives counseling from radiological protection and medical personnel regarding the consequences of receiving additional occupational exposure during the year.

10 CFR 835: 1301 (a) (3)STATUS: Full Compliance

REQUIREMENT STATEMENT:

A general employee whose occupational dose has exceeded the numerical value of any of the limits specified in 10 CFR 835.202 as a result of an authorized emergency exposure MAY be permitted to return to work in radiological areas during the current year providing that all of the following conditions are met. The affected employee agrees to return to radiological work.

DESCRIPTION OF COMPLIANCE STATUS:

A general employee whose occupational dose has exceeded the numerical value of any of the limits specified in 10 CFR 835.202 as a result of an authorized emergency exposure may be permitted to return to work in radiological areas during the current year providing the affected employee agrees to return to radiological work.

**BECHTEL JACOBS COMPANY
RADIATION PROTECTION PROGRAM PLAN**

10 CFR 835: 1301 (b)

STATUS: Full Compliance

REQUIREMENT STATEMENT:

All doses exceeding the limits specified in 10 CFR 835.202 SHALL be recorded in the affected individual's occupational dose record.

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs will record all doses exceeding the limits specified in 10 CFR 835.202 in the affected individual's occupational dose record.

10 CFR 835: 1301 (c)

STATUS: Full Compliance

REQUIREMENT STATEMENT:

When the conditions under which a dose was received in excess of the limits specified in 10 CFR 835.202, except those doses received in accordance with 10 CFR 835.204, have been eliminated, operating management SHALL notify the Head of the responsible DOE field organization.

DESCRIPTION OF COMPLIANCE STATUS:

When the conditions under which a dose was received in excess of the limits specified in 10 CFR 835.202, except those doses received in accordance with 10 CFR 835.204, have been eliminated, Bechtel Jacobs management will notify the Head of the responsible DOE field organization.

10 CFR 835: 1301 (d)

STATUS: Full Compliance

REQUIREMENT STATEMENT:

Operations after a dose was received in excess of the limits specified in 10 CFR 835.202, except those doses received in accordance with ? 835.204 MAY be resumed only with the approval of DOE.

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs may resume operations after a dose was received in excess of the limits specified in ? 835.202, except those doses received in accordance with 10 CFR 835.204, only with the approval of DOE.

**BECHTEL JACOBS COMPANY
RADIATION PROTECTION PROGRAM PLAN**

10 CFR 835: 1302 (a)

STATUS: Full Compliance

REQUIREMENT STATEMENT:

The risk of injury to those individuals involved in rescue and recovery operations SHALL be minimized.

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs will take steps to minimize the risk of injury to those individuals involved in rescue and recovery operations.

10 CFR 835: 1302 (b)

STATUS: Full Compliance

REQUIREMENT STATEMENT:

Operating management SHALL weigh actual and potential risks against the benefits to be gained.

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs will weigh actual and potential risks against the benefits to be gained.

10 CFR 835: 1302 (c)

STATUS: Full Compliance

REQUIREMENT STATEMENT:

No individual SHALL be required to perform rescue action that might involve substantial personal risk.

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs will only use volunteers to perform rescue actions that might involve substantial personal risk.

**BECHTEL JACOBS COMPANY
RADIATION PROTECTION PROGRAM PLAN**

10 CFR 835: 1302 (d)STATUS: Full Compliance

REQUIREMENT STATEMENT:

Each individual authorized to perform emergency actions likely to result in occupational doses exceeding the values of the limits provided at 10 CFR 835.202(a) SHALL be trained in accordance with 10 CFR 835.901(b) and briefed beforehand on the known or anticipated hazards to which the individual will be subjected.

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs will train each individual authorized to perform emergency actions likely to result in occupational doses exceeding the values of the limits provided at 10 CFR 835.202(a), in accordance with 10 CFR 835.901(b), and will brief them beforehand on the known or anticipated hazards to which they will be exposed.

10 CFR 835: 1304 (a)STATUS: Full Compliance

REQUIREMENT STATEMENT:

Installations possessing sufficient quantities of fissile material to potentially constitute a critical mass, such that the excessive exposure of individuals to radiation from a nuclear accident is possible, SHALL provide nuclear accident dosimetry for those individuals.

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs provides nuclear accident dosimetry for those individuals working on installations possessing sufficient quantities of fissile material to potentially constitute a critical mass, such that excessive exposure of individuals to radiation from a nuclear accident is possible.

10 CFR 835: 1304 (b) (1)STATUS: Full Compliance

REQUIREMENT STATEMENT:

Nuclear accident dosimetry SHALL include the following:
A method to conduct initial screening of individuals involved in a nuclear accident to determine whether significant exposures to radiation occurred;

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs nuclear accident dosimetry includes a method to conduct initial screening of individuals involved in a nuclear accident to determine whether significant exposures to radiation occurred.

**BECHTEL JACOBS COMPANY
RADIATION PROTECTION PROGRAM PLAN**

10 CFR 835: 1304 (b) (2)

STATUS: Full Compliance

REQUIREMENT STATEMENT:

Nuclear accident dosimetry SHALL include the following:
Methods and equipment for analysis of biological materials;

DESCRIPTION OF COMPLIANCE STATUS:

Nuclear accident dosimetry will include methods and equipment for analysis of biological materials.

10 CFR 835: 1304 (b) (3)

STATUS: Full Compliance

REQUIREMENT STATEMENT:

Nuclear accident dosimetry SHALL include the following:
A system of fixed nuclear accident dosimeter units; and

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs nuclear accident dosimetry includes a system of fixed nuclear accident dosimeters.

10 CFR 835: 1304 (b) (4)

STATUS: Full Compliance

REQUIREMENT STATEMENT:

Nuclear accident dosimetry SHALL include the following:
Personal nuclear accident dosimeters.

DESCRIPTION OF COMPLIANCE STATUS:

Bechtel Jacobs nuclear accident dosimetry includes personal nuclear accident dosimeters.

10 CFR 835: Appendices A, C, D, and E

STATUS: Full Compliance

Bechtel Jacobs commits to comply with all parts of appendices A, C, D, and E that apply to the DOE activities performed within the scope of this Radiation Protection Program as printed in the December 4, 1998 version of 10 CFR 835.