



**Department of Energy**  
**National Nuclear Security Administration**  
 Washington, DC 20585

April 19, 2005

RECEIVED  
 2005 APR 20 PM 1:21

The Honorable A. J. Eggenberger  
 Acting Chairman  
 Defense Nuclear Facilities Safety Board  
 625 Indiana Avenue, NW.  
 Suite 700  
 Washington, D.C. 20004

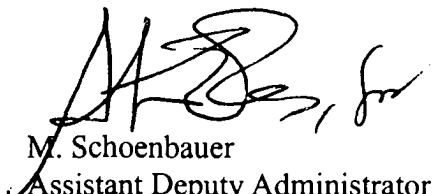
Dear Dr. Eggenberger:

Consistent with the Department's Implementation Plan (IP) for the Defense Nuclear Facilities Safety Board (DNFSB) Recommendation 2002-2, "Weapons Laboratory Support of the Defense Nuclear Complex," enclosed is the final deliverable.

Commitment 4.1.2, "Replace obsolete DOE Order 5600.1," the Department of Energy (DOE) Order 452.X, "Management of the Department of Energy Nuclear Weapons Complex," will replace DOE Order 5600.1. Your staff has reviewed this document and their comments have been satisfactorily resolved. The final draft has been submitted for final approval and issuance. This is the last deliverable for the Recommendation 2002-2 IP. The National Nuclear Security Administration (NNSA) will ensure continued attention to the processes that have been established under this recommendation. The NNSA has completed the actions identified under this commitment and proposes closure of the commitment.

If you have questions, please contact me at 202-586-4879 or Mr. Michael J. Brown at 505-845-6258.

Sincerely,

  
 M. Schoenbauer  
 Assistant Deputy Administrator  
 for Military Application and  
 Stockpile Operations  
 Defense Programs

2 Enclosures:

Letter to M.B. Whitaker, DR-1, from  
 the DNFSB, dated March 25, 2005  
 Draft DOE Order 452.X

cc w/enclosures:

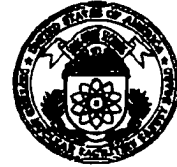
K. Fortenberry, DNFSB  
 R. Tontodonato, DNFSB  
 A. Matteucci, DNFSB  
 M. Whitaker, DR-1



John T. Conway, Chairman  
A.J. Eggenberger, Vice Chairman  
Joseph F. Bader  
John E. Mansfield  
R. Bruce Matthews

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

625 Indiana Avenue, NW, Suite 700, Washington, D.C. 20004-2901  
(202) 694-7000



March 25, 2005

Mr. Mark B. Whitaker, Jr., DR-1  
Departmental Representative to the  
Defense Nuclear Facilities Safety Board  
Department of Energy  
1000 Independence Avenue, SW  
Washington, DC 20585-1000

Dear Mr. Whitaker:

The Board's staff has reviewed the comment resolution to the Department of Energy (DOE) Order 452.X, *Management of the Department of Energy Nuclear Weapons Complex*. The staff has no further comments on this directive, and no objections to its final processing and publication.

If you have any questions or comments, please contact me at (202) 694-7148.

Sincerely,

A handwritten signature in black ink, appearing to read "Timothy J. Dwyer", is written over a horizontal line. The signature is stylized and somewhat cursive.

Timothy J. Dwyer  
Directives Lead

SEPARATION

PAGE

# 1. U.S. Department of Energy

## Washington, D.C.

**ORDER**

|                                    |
|------------------------------------|
| <b>DRAFT</b><br><b>DOE O 452.X</b> |
|------------------------------------|

Approved: XX-XX-03  
Expires: XX-XX-07

**SUBJECT:** MANAGEMENT OF THE DEPARTMENT OF ENERGY NUCLEAR  
WEAPONS COMPLEX

---

1. OBJECTIVES.

- a. To establish the authorities and responsibilities of the National Nuclear Security Administration (NNSA) for the management of the Department of Energy (DOE) Nuclear Weapons Complex (NWC).
- b. To emphasize that the management of the United States (U.S.) nuclear weapons stockpile is the DOE's highest priority for the NNSA and DOE Nuclear Weapons Complex.
- c. To affirm the authority and responsibility of the NNSA to sustain and improve the capabilities, technical expertise, and infrastructure of the NWC to maintain and enhance the safety, reliability and performance of the nuclear weapons stockpile in accordance with Presidential Directives and the Atomic Energy Act of 1954 as amended.
- d. To promote an effective and efficient use of the DOE Nuclear Weapons Complex capabilities and resources to manage the stewardship of the U.S. nuclear weapons stockpile.
- e. To establish NNSA authority and responsibility to ensure by means of policy directives and administrative procedures that the use of NWC capabilities and resources employed in support of DOE's non-weapon responsibilities or other programs of national interest will not adversely impact or impede the stockpile stewardship activities and the management of the nuclear weapons stockpile.

2. CANCELLATION. DOE O 5600.1, *Management of the Department of Energy Weapon Program and Weapons Complex*, dated 6-27-79. Cancellation of an Order does not, by itself, modify or otherwise affect any contractual obligation to comply with the Order. Canceled Orders that are incorporated by reference in a contract remain in effect until the contract is modified to delete the references to the requirements in the canceled Orders.

3. APPLICABILITY.

- a. DOE Elements. This Order applies to National Nuclear Security Administration employees and contractors, and other DOE elements that are involved in or interact with the management of the Nuclear Weapons Complex. The NNSA Administrator will ensure that NNSA employees and its Management and Operating contractors comply with their respective requirements under this Order.
- b. Management and Operating (M&O) Contractors. The Contractor Requirements Document (CRD), Attachment 1, sets forth requirements to be applied to contractors that are involved in or have interaction with the management of the Nuclear Weapons Complex. Regardless of the performer of the work, contractors are responsible for compliance with the requirements of this Order. Contractors are responsible for promulgating the requirements of this Order to subcontractors at any tier to the extent necessary to ensure the contractor's compliance with the Order's requirements. The applicability of this Order to a contractor is dependent on incorporation of the CRD into the relevant contract.
- c. Exclusions. Activities conducted under the authority of the Director, Naval Nuclear Propulsion Program, pursuant to Executive Order 12344, as set forth in Public Law 98-525 and Public Law 106-65.

4. REQUIREMENTS.

- a. The U.S. nuclear weapons stockpile will be the highest priority in the planning, programming, budgeting, execution, and evaluation of the DOE Nuclear Weapons Complex work. The NNSA Administrator will ensure that NNSA employees and M&O contractors comply with the respective requirements under this Order.
- b. In accordance with the Homeland Security Act of 2002, [Public Law (P.L.)107-296, section 309, (a)(2), as quoted below], Department of Homeland Security (DHS) projects will be prioritized on an equal basis with the nuclear weapons program and given higher priority status than Work-For-Others (WFO).

“Notwithstanding any other law governing the administration, mission, use, or operations of any of the Department of Energy national laboratories and sites, such laboratories and sites are authorized to accept and perform work for the Secretary, consistent with resources provided, and perform such work on an equal basis to other missions at the laboratory and not on a noninterference basis with other missions of such laboratory or site.”

- c. Requests for NWC capabilities and resources in support of non-weapon missions or other programs of national interest will be accepted and conducted in such a manner as to avoid adverse impact or impediments to the management of the U.S. nuclear weapons stockpile. Situations in which conflicts arise over competing priorities for limited technical resources between DHS and the nuclear weapons

program will be brought to the attention of NA-1 through NA-10 for coordination and resolution with S-1 and DHS.

- d. The DOE Nuclear Weapons Complex national security mission requirements will be prioritized in consideration of the following:
- (1) Maintain and enhance the existing nuclear weapons stockpile in accordance with Presidential Directives and the President's annual Nuclear Weapons Stockpile Memorandum in accordance with DOE Orders 452.1, 452.2, 452.4 and DOE Order 414.1.
  - (2) Preserve NWC research and development and infrastructure to support applied research, development, testing, and production capabilities necessary to maintain the nuclear weapons stockpile, support the annual stockpile assessment and to address scientific and engineering issues pertinent to stockpile stewardship.
  - (3) Use the established Work-For-Others administrative processes to confirm that projects requested by other Federal agencies through WFO channels will not interfere with nuclear weapons programs or create a detrimental future burden on NNSA resources.
  - (4) Meet the immediate needs of the nuclear weapons stockpile as directed by the Production and Planning Directive including -
    - (a) Replacement of limited-life components.
    - (b) Repairing weapons.
    - (c) Provide safe and secure transport of warheads, components, and nuclear materials.
  - (5) Conduct surveillance of the stockpile to assess the safety, security, and reliability of the warheads including disassembly and inspection of weapons, conducting flight and laboratory tests, developing enhanced surveillance techniques, and supporting Annual Stockpile Assessment.
  - (6) Develop and maintain the responsive infrastructure necessary to support National Security needs.

- (7) Develop and apply comprehensive assessment methodologies, plans and experimental tools to advance the understanding of scientific and technical issues affecting the safety, reliability or performance of nuclear weapons.
  - (8) Safely and securely store and dismantle nuclear weapons removed from the stockpile.
  - (9) Manage the monitored storage and disposition of legacy and newly generated waste within the Nuclear Weapons Complex in compliance with applicable Federal laws and regulations pertaining to protecting the environment, safety, and health.
- e. The DOE Nuclear Weapons Complex resources or capabilities will be effectively and efficiently managed to achieve the national security mission requirements.
  - f. The Memorandum of Agreement executed between DOE and the Department of Homeland Security states that appropriate mechanisms will be established to resolve any issues relating to prioritization of work. These mechanisms will be administered by using the WFO review process in order to identify instances of constraint in resource availability between the nuclear weapons program and DHS so that the resource availability conflict can be resolved in a timely manner by the appropriate level of NNSA management.
  - g. Non-weapon work sponsored by the Department of Defense, agencies of the Intelligence Community, and the Nuclear Regulatory Commission will be given priority consideration when the work relates to national security.

## 5. RESPONSIBILITIES.

### a. The Secretary of Energy

- (1) Ensures that the primary mission of the Nuclear Weapons Complex remains the management of the nuclear weapon program in accordance with Presidential directives and the annual Nuclear Weapons Stockpile Memorandum.
- (2) Ensures that other programs within the Nuclear Weapons Complex do not adversely impact the nuclear weapon program mission and responsibilities.
- (3) Establishes lines of authority for direction and management of the Nuclear Weapons Complex through the Administrator, NNSA, to the Deputy Administrator for Defense Programs.
- (4) Resolves NWC management issues that are of overriding importance to the interests of the national security.

- (5) Serves as the final decision-maker in the resolution of conflicts between NNSA and DHS relating to prioritized assignment of limited scientific and technical resources of the national weapons laboratories between requirements of stockpile stewardship and the DHS.

b. Administrator, National Nuclear Security Administration

- (1) Develops overall strategy and program management review procedures to ensure that the U.S. nuclear weapons stockpile is given the highest priority in the planning, programming, budgeting, execution and evaluation of the DOE Nuclear Weapons Complex work.
- (2) Ensures that the DOE Nuclear Weapons Complex work will be managed in accordance with NNSA Program Management policy to sustain and improve its capability to maintain and enhance the safety, reliability, and performance of the U.S. nuclear weapons stockpile, including the ability to design, assess, produce, and test existing, modified, or new weapons in order to meet national security requirements.
- (3) Ensures that all DOE Nuclear Weapons Complex work is performed consistent with the policies and principles of security, protection of the environment, and safeguarding the safety and health of the public and of the workforce.
- (4) Ensures that the NWC technical capabilities and resources in support of responsibilities not related to the nuclear weapons program do not adversely impact or impede the management of the U.S. nuclear weapons stockpile.
- (5) Notwithstanding this order or any other law governing the administration, mission use, or operations of any of the Department of Energy national laboratories and sites, such laboratories and sites are authorized to accept and perform work for the Secretary of Homeland Security consistent with the resources provided, and perform such work on an equal basis to other missions at the laboratory or site and not on a noninterference basis with other missions of such laboratories or sites.
- (6) Ensures that priority consideration is given when non-weapon work sponsored by the Department of Defense, the Nuclear Regulatory Commission (NRC), or U.S. Intelligence Community is related to compelling national security concern.
- (7) Administers DOE Nuclear Weapons Complex contracts, including the management and operations of nuclear weapons production facilities and the national laboratories.



- (8) Involves Site Office Managers with policy and planning for the DOE Nuclear Weapons Complex.
- (9) Ensures that procedures are established and enforced at all sites of the NWC to ensure highly effective levels of protection and accountability for classified information in custody of laboratories, plants and facilities of the NWC.

c. Deputy Administrator for Defense Programs, NNSA

- (1) Ensures that the DOE Nuclear Weapons Complex continues to fulfill the nuclear weapons and national security mission requirements through the Planning, Programming, Budgeting, and Execution and Evaluation Cycle.
- (2) Ensures that all NWC work is performed in accordance with the policies and principles for maintaining security and accountability for classified information and nuclear materials, protecting the environment, and safeguarding the safety and health of the public and the workforce.
- (3) Reports to the NNSA Administrator any potential for or actual adverse impact on the work of the NWC nuclear weapons stockpile mission that might result from the allocation of technical resources and capabilities to ongoing, new or proposed WFO projects.
- (4) Uses the WFO administrative procedures to evaluate and set priorities for work related to national security and sponsored by the DHS, the Department of Defense, the Nuclear Regulatory Commission, or the Intelligence Community.
- (5) Provides priority consideration when non-weapon work sponsored by the Department of Defense, the Nuclear Regulatory Commission, or Intelligence Community is related to national security.
- (6) Ensures that the DOE Nuclear Weapons Complex program priorities, strategic objectives, and work authorizations are identified and communicated, and that programs are managed in accordance with the guidelines established by the NNSA Program Management Policy.
- (7) In coordination with the Manager of the NNSA Service Center and the Managers of the NNSA site offices, ensure that the administrative oversight and tracking of WFO projects within NWC is in place to assure that WFO projects are properly monitored, and that the resources required to support WFO projects do not adversely affect the performance of nuclear weapons program responsibilities.

- (8) Promotes the seamless integration of the DOE Nuclear Weapons Complex agencies to meet national security mission requirements.
- (9) Reports directly to the Administrator in a timely manner all matters pertaining to availability of NWC resources, constraints, capabilities, performance and mission and actual or potential conflicts in priorities to meet national security requirements.
- (10) Ensures that facilities of the NWC maintain compliance and accountability with security, safety and environmental regulations and meet accepted standards for waste management, industrial health and safety, and environmental protection.
- (11) Oversees and assures effective compliance with security assessments, safety assessments, environmental assessments; waste management practices; industrial/radiological health, and safety and environmental practices for the Nuclear Weapons Complex.
- (12) Reviews and concurs in proposed DOE directives and Department-wide Orders that may apply to the DOE NWC.

d. The Associate Administrator for Defense National Security (NA-70)

- (1) Responsible for development and implementation of security programs for the NWC, including protection control and accountability of materials and for all physical and cyber security activities.
- (2) Oversees and ensures effective compliance with safeguards and security policy in accordance with the Master Safeguards and Security Agreement (Reference P.L. 106-65, Section 3232c. 50 USC 2422 and DOE Order 5610.3).
- (3) Inform the Deputy Administrator for Defense Programs when significant changes from the current long-range projections in the security protection requirement occur with potential to adversely affect or impede the nuclear weapons stockpile activities of the Nuclear Weapons Complex.

e. Assistant Secretary for Environment, Safety and Health

- (1) Oversees and monitors NWC safety and environmental assessments and industrial/radiological health and safety and environmental practices not associated with safety of weapon design, assembly, disassembly, test and transportation.
- (2) Advises the Administrator or Deputy Administrators, as appropriate and in accordance with the Departmental policies, orders and principles for protecting the environment, and safeguarding the safety and health of the

public and the workforce, on NNSA and NWC compliance with and implementation of such policies, orders and related regulations.

- (3) Coordinates with NNSA in the review and development of comments and DOE positions and policies related to environmental, health or safety related regulations that may impact the NWC or associated operations.
- (4) Develops and maintains Quality Assurance (QA) policy requirements (including DOE Order 414.1B and 10 CFR 830 Subpart A, Quality Assurance), guides and standards for all DOE/NNSA work.
- (5) Provides advice and assistance (including QAP reviews) to NNSA program elements and contractors concerning QAP implementation.
- (6) Serves as the central point of contact for coordination within DOE/NNSA and liaison with other agencies and groups for development of QA policy, requirements, guides and standards.
- (7) Review proposed statutes, regulations, standards, DOE/NNSA directives and Defense Nuclear Facility Safety Board documents for applicability to and potential impact on DOE/NNSA quality programs.

f. Manager, NNSA Service Center

- (1) Supports Headquarters and the Managers of the Site Offices in the management and stewardship of the Nuclear Weapons Complex and assuring that the DOE Nuclear Weapons Complex continues to meet the national security mission requirements.
- (2) Supports the nuclear weapons program and national security mission requirements throughout the Department's annual planning, programming, budgeting, execution and evaluation cycle.
- (3) Provides responsive business, technical, financial, legal and management advice and services to enable NNSA to successfully accomplish the nuclear weapons stockpile stewardship mission.
- (4) Supports the oversight and integration of work-for-others activities among the sites of the NWC.

g. Managers, Site Offices (Pantex, Y-12, Kansas City, Sandia, Los Alamos, Livermore, Savannah River, Nevada)

- (1) Notify contracting officers when M&O contracts are affected by requirements of this Order.
- (2) Report to the Administrator on matters pertaining to this Order or affecting the Nuclear Weapons Complex, including the submittal of the long-range projections of work and alerting the Administrator to any potentially negative issues identified in the long-range projections for work requiring the Administrator's attention.
- (3) In coordination with NA-10 and the NNSA Service Center, provide the administrative oversight and tracking of WFO projects within the NWC to assure that WFO projects are properly monitored and that the resources required to support WFO projects do not adversely affect the performance of the nuclear weapons program responsibilities.
- (4) Ensure that organizations and contractors under their jurisdiction comply with this Order and ensure that appropriate administrative procedures are in place under the WFO program to assess all potential adverse impacts relative to acceptance of Work-for-Others.
- (5) Review and assess planned and assigned DOE Nuclear Weapons Complex work at their respective sites in accordance with this Order, NNSA policy, approved work authorizations, and related Departmental directives and guidance provided by the NNSA Administrator.
- (6) Determines whether proposals for applying NWC resources or capabilities to WFO projects will adversely affect the execution of assigned programs or will create detrimental future burden on NNSA resources.
- (7) Ensure that DOE Nuclear Weapons Complex work performed at the site is conducted in accordance with the respective contractual and legal requirements and in compliance with all applicable laws and regulations regarding safety of the public, worker health, and safety and environmental protection.
- (8) Communicate with other site offices to ensure integration of DOE Nuclear Weapons Complex work.
- (9) Ensure that the DOE Nuclear Weapons Complex program priorities, strategic objectives, and work authorizations are linked into contractor performance incentives.
- (10) Advise the Deputy Administrator for Defense Programs on policy and planning for the DOE Nuclear Weapons Complex and assure that

programs are managed in accordance with the guidelines established by NNSA Program Management Policy.

- (11) The legislation that established the Department of Homeland Security (Homeland Security Act of 2002, P.L. 107-296) mandates that DHS requirements for technical support from the NWC must be accepted on an equal priority basis to the nuclear weapons program. Site managers must monitor the WFO program and alert NA-1, through NA-10, of any actual or potential delay or adverse impact on a nuclear weapon program project caused by the acceptance of DHS support work.
  - (12) Ensure that their respective site capabilities and resources in support of DOE's non-defense responsibilities or other programs for non-DOE entities will not adversely impact execution of assigned programs of the facility and will not create a detrimental future burden on the facility.
- h. Contracting Officers. Responsible for incorporating the CRD into the contracts of affected site/facility management contractors via the laws, regulations, and DOE directives clause of the contracts.

6. DEFINITIONS.

- a. Long-Range Projections are 5 to 10-year estimates of weapon and non-weapon work to be accomplished at weapons complex facilities based on broad guidance and constraints provided by Headquarters NNSA and the President's latest budget. They include—
- (1) descriptions of the general nature and scope of the work involved;
  - (2) associated annual manpower, funding, technical expertise required; and
  - (3) new facility requirements broken down in accordance with each sponsor's area of responsibility.
  - (4) Assessment of additional resources and expertise needed to support DHS or WFO requests for support.

Capital equipment and plant facilities not required primarily for a single sponsor are categorized as general support. Details of content, format, publication, and scheduling are prescribed by the Deputy Administrator for Defense Programs. To provide commonality with other Departmental documentation, the laboratory long-range projections are identified as institutional plans.

- b. Nuclear Weapons Complex includes national security laboratories, the nuclear weapon production facilities, and any facility of the Department of Energy that the Secretary of Energy, in consultation with the Administrator of the NNSA and the Congress, determines to be consistent with the mission of the NNSA:

- (1) Lawrence Livermore National Laboratory (LLNL), Livermore, California;
- (2) Los Alamos National Laboratory (LANL), Los Alamos, New Mexico;
- (3) Sandia National Laboratories (SNL), Albuquerque, New Mexico, and Livermore, California;
- (4) Pantex Plant, Amarillo, Texas;
- (5) Kansas City Plant, Kansas City, Missouri;
- (6) Y-12 Plant, Oak Ridge, Tennessee;
- (7) Tritium operations facilities at the Savannah River Site, Aiken, South Carolina; and
- (8) Nevada Test Site, Nevada.

7. CONTACT. Questions concerning this Order should be addressed to the Office of Program Integration, at 202-586-2181.

BY ORDER OF THE SECRETARY OF ENERGY:

KYLE E. McSLARROW  
Deputy Secretary

References to Public Laws, DOE Orders, and Directives

1. National Nuclear Security Administration Act - Public Law (P.L.) 106-65, the National Defense Authorization Act for Fiscal Year 2000, Title 32, as amended by Department of Veterans Affairs and Housing and Urban Development, and Independent Agencies Appropriations Act, 2001, Public Law 106-377; Floyd D. Spence National Defense Authorization Act for Fiscal Year 2001, Public Law 106-398; National Defense Authorization Act for Fiscal Year 2002, Public Law 107-107; and the National Defense Authorization Act for Fiscal Year 2004, Public Law 108-136.
2. Economy Act of 1932, as amended (31 U.S.C. 1535), which authorizes an agency to place orders for goods and services, subject to availability, with another Government agency when the head of the ordering agency determines that it is in the best interest of the Government.
3. Atomic Energy Act of 1954, as amended (42 U.S.C. 2011 et seq.), Section 31, 32, and 33, which authorizes the conduct of research and development and certain training activities for non-DOE entities, provided that private facilities or laboratories are inadequate for that purpose. It authorizes such charges as may be appropriate for the conduct of those activities.
4. Section 205 of the Energy Reorganization Act of 1974, U.S.C. 5845, which requires Federal agencies to furnish to the NRC, on a reimbursable basis, such research services deemed necessary and requests for the performance of its function.
5. Homeland Security Act of 2002, Public Law 107-296, Section 309 on requirements relating to utilization of Department of Energy National Laboratories and Sites in Support of Homeland Security Activities.
6. Memorandum of Agreement between DOE and DHS, dated February 28, 2003. Work directly funded by DHS shall be accepted, performed, and administered in accordance with the terms of the MOA and a document entitled, "Department of Energy Reimbursable Work Procedures for the Department of Homeland Security. DOE Order 481.1B does not apply to such DHS work.
7. FAR 17.5, Interagency Acquisitions under the Economy Act, which prescribes policies and procedures for a Federal agency to obtain supplies and services from another federal agency.
8. FAR 35.017, Federally Funded Research and Development Centers (FFRDCs), which establishes Government-wide policies for review and termination of FFRDCs.
9. DOE Order 481.1B, Work-For-Others (Non-Department of Energy Funded Work). This order sets for the objectives, applicability, requirements, and responsibilities for DOE Federal employees and DOE contractor personnel performing work and/or using DOE facilities to perform work that has not been directly funded by DOE appropriations for non-DOE entities.
10. DOE Notice 481.1A, Reimbursable Work for Department of Homeland Security. Authorizes a modified process for the acceptance, performance, and administration of work from the DHS by DOE contractor and federally operated laboratories, sites, and other facilities.
11. DOE Policy 413.1, Program and Project Management Policy for the Planning, Programming, Budgeting, and Acquisition of Capital Assets and in accordance with OMB Circulars A-11, Part 3, OMB Circular A-123, OMB Circular A-127, and OMB Circular A-130.

12. NNSA Policy Letter: BOP-006.001, NNSA Program Management Policy dated August 12, 2004.
13. DOE/NNSA Weapon Quality Policy (QC-1), Rev. 10, February 10, 2004.
14. DOE Order 414.1B: Quality Assurance.
15. DOE Order 452.1: National Environmental Policy Act Compliance Program.
16. DOE Order 452.2: Safety of Nuclear Explosive Operations.
17. DOE Order 452.4: Security and Control of Nuclear Explosives and Nuclear Weapons.
18. DOE Order 5610.3 Master Safeguards and Security Agreement.
19. 10 CFR 830 Subpart A Quality Assurance



## **CONTRACTOR REQUIREMENTS DOCUMENT**

### **DOE O 452.X, MANAGEMENT OF THE DEPARTMENT OF ENERGY NUCLEAR WEAPON PROGRAM AND NUCLEAR WEAPONS COMPLEX**

This Contractor Requirements Document (CRD) establishes requirements for Department of Energy (DOE) and National Nuclear Security Administration (NNSA) contractors whose contracts involve or interact with the management of the DOE Nuclear Weapons Complex (NWC).

Regardless of the performer of the work, the contractor is responsible for complying with the requirements of this CRD. The contractor is responsible for flowing down the requirements of this CRD to subcontractors at any tier to the extent necessary to ensure the contractor's compliance with the requirements. In doing so, the contractor must not unnecessarily or imprudently flow down requirements to subcontractors. That is, the contractor will ensure that it and its subcontractors comply with the requirements of this CRD and incur only those costs that would be incurred by a prudent person in the conduct of competitive business.

1. Manage facilities and sites of NWC in accordance with DOE policies that give highest priority to U.S. nuclear weapons stockpile activities.
2. Maintain and improve the U.S. nuclear weapons stockpile safety, reliability and performance and maintain the capabilities to design, produce and test weapons to meet national security requirements in accordance with guidance, direction of NA-10.
3. Document plans and program functions and identify fiscal requirements for NWC missions to support DOE budget planning.
4. Submit to the NNSA site office long-range projections of work to be accomplished including Work-For-Others to support DOE and NNSA institutional planning requirements.
5. During Quarterly NWC Program Reviews, review the Work-For-Others activities to determine whether there is any actual or projected adverse impact on essential work for the nuclear weapons program.
6. Support, when directed, DOE's non-weapon responsibilities or other programs of national interest while assuring that this work does not impact or impede the management of the U.S. nuclear weapons stockpile.
7. Manage the NWC facilities and programs that meet the following national security mission requirements:
  - a) Recommend programs to address immediate needs of the stockpile that includes replacement of limited-life components, repairing weapons, and providing safe, secure transportation of weapons, components, and nuclear materials as directed by the Production and Planning Directive.

- b) Conduct surveillance of the stockpile to assess the safety, security, and reliability of the weapons including disassembly and inspection of weapons, conducting flight and laboratory tests, developing enhanced surveillance techniques, and supporting Annual Certification.
  - c) Develop and apply comprehensive methodologies, plans, and tools for certification; including high-energy density physics experiments, simulation, hydrodynamic testing, engineering sciences, and materials science.
  - d) Develop options for the future nuclear deterrent working with the Department of Defense.
  - e) Extend the lifetimes of weapons currently in the stockpile and incorporate modern technologies and enhanced surety features where necessary in accordance with the Nuclear Weapons Council planning.
  - f) Develop and restore required manufacturing capabilities for identified weapon priorities.
  - g) Plan, complete, and operate required NWC capital projects required to meet U.S. nuclear weapons stockpile activities.
  - h) Be ready to conduct nuclear tests.
  - i) Maintain a flexible, responsive, robust infrastructure, including Research and Development, Engineering, Production, and Testing required to support U.S. nuclear weapons stockpile activities.
  - j) Safely and securely store and dismantle nuclear weapons that have been removed from the stockpile.
8. Integrate the work to meet national security mission requirements across all sites of the DOE Nuclear Weapons Complex.
9. Conduct all DOE Nuclear Weapons Complex work consistent with the principles of protecting the environment and safeguarding the safety and health of the public and of the workforce.
10. Effectively and efficiently use the DOE Nuclear Weapons Complex capabilities and resources in managing the U.S. nuclear weapons stockpile.