



Department of Energy
National Nuclear Security Administration
Washington, DC 20585



MEMORANDUM FOR ROBERT NASSIF
ACTING ASSOCIATE ADMINISTRATOR
FOR MANAGEMENT AND BUDGET

JM CHRONOLOGY
JM RECEIVED 12/19/14
OUT FOR REVIEW 1/5/15
DRB DISCUSSION 1/15/15

THROUGH: INGRID A. KOLB
DIRECTOR
OFFICE OF MANAGEMENT

FROM: JAMES J. MCCONNELL *James J. McConnell*
ACTING ASSOCIATE ADMINISTRATOR
FOR INFRASTRUCTURE AND OPERATIONS

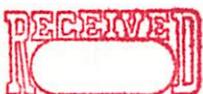
SUBJECT: Notice of Intent to Revise Department of Energy Order 461.1B,
*Packaging and Transportation for Offsite Shipment of Materials of
National Security Interest*

PURPOSE: The purpose of this memorandum is to provide justification for the proposed revision of DOE Order 461.1B, *Packaging and Transportation for Offsite Shipment of Materials of National Security Interest*, dated 12-16-2010, as part of the quadrennial review and recertification as required by DOE O 251.1C, *Departmental Directives Program*.

JUSTIFICATION: The Department of Energy (DOE) exercises the authority to authorize and make shipments of hazardous materials and to certify fissile and Type B packages for the purpose of national security as provided for in DOE Order 461.1B.

The National Nuclear Security Administration (NNSA) Office of Packaging and Transportation (NNSA-OPT) is the Department's Office of Primary Interest (OPI) for DOE Order 461.1B. The NNSA-OPT is also the NNSA OPI for DOE Order 460.1C, *Packaging and Transportation Safety*.

DOE Order 461.1B has been in effect for almost four years and the Department has undergone several reorganizations during this period. Therefore, many of the organizations currently assigned responsibilities by this Order no longer exist. This coupled with feedback received from the packaging and transportation community and Federal senior managers indicate the need for this Order to be revised to clarify and realign packaging and transportation requirements, roles and responsibilities for materials of national security interest.



The revision of this Order and DOE Order 460.1C will also provide the opportunity to better leverage resources of both offices (DOE and NNSA OPTs) and remove barriers leading to a successful implementation of the DOE/NNSA mission.

There are no valid external, consensus or other "Standards" (e.g., ISO, VPP, etc.) available which can be used in place of this directive. Although this Order invokes and references standards, it is the only mechanism presently in place that specifies DOE requirements and assigns responsibilities for ensuring the safety of packaging and offsite transportation of materials of national security interest.

IMPACT: The proposed directive does not duplicate existing laws, regulations or national standards and it does not create an undue burden on the Department. The revision is expected to improve and clarify an existing order. The impact on Headquarter, field, and contractor staff is expected to be minimal.

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Ingrid Kolb
Director
Office of Management (MA-1):

Concur:  Non Concur: _____ Date: 1-15-15

Robert Nassif
Acting Associate Administrator
Management & Budget (NA-MB-1):

Concur:  Non Concur: _____ Date: 1-21-15

Unless determined otherwise by the Directives Review Board (DRB), writers will have up to 60 days in which to develop their first draft and submit to the Office of Information Resources, MA-90

<u>Standard Schedule for Directives Development</u>	<u>Days</u>
Draft Development	Up to 60 days
Review and Comment (RevCom)	30
Comment Resolution	30 60
Final Review	30
Total	180

Risk Identification and Assessment

Proposed Revision to DOE 461.1B, Packaging and Transportation for Offsite Shipment of Materials of National Security Interest

The DOE has broad authority under the Atomic Energy Act of 1954, as amended, to regulate all aspects of activities involving radioactive materials that are undertaken by the DOE or on its behalf, including the transportation of radioactive materials. Department of Transportation regulation 49 CFR 173.7(b) states that hazardous material shipments made by or under the supervision of DOE, for the purpose of national security are not subject to the Hazardous Material Regulations however the purpose of DOE O 461.1B is to make clear that the packaging and transportation of all offsite shipments of materials of national security interest for DOE must be conducted in accordance with DOT and NRC regulations that would be applicable to comparable commercial shipments, except where an alternate course of action is identified in DOE O 461.1.

Risk	Probability	Impact	Risk Level
People			
1. The current version of DOE O 461.1B must be revised to address inconsistencies in the requirements, provide clarification of Certification authorities and correct process descriptions. The risk that continued operations under the current version will impact the well-being of a worker or the public is minimal.	Rare	Low	Minor
Mission			
2. 10 CFR 830, Nuclear Safety Management identifies DOE O 461.1, or successor document, as providing the approved methodology for documenting a safety analysis for the offsite transportation of materials of national security interest, however DOE O 461.1B does not provide any guidance or direction on the development of a DSA for transportation operations. There is an increased level of risk to the Department’s mission without the definition of an approved DSA methodology. The Office of Secure Transportation has had to develop their own methodology in an attempt to address this gap.	Likely	Low	Moderate
Assets			
3. The current version of DOE O 461.1B must be revised to better define a “material of national security interest.” This clarification will help to ensure that NNSA secure transportation assets are efficiently utilized and not subjected to unnecessary wear. There is also an increased level of risk associated with the security and safeguarding of NNSA material that are not appropriately categorized as material of national security interest.	Possible	Low	Moderate

Financial			
4. There is an increased level of risk to DOE/NNSA assets leading to increased operations and maintenance costs if DOE O 461.1B is not revised. Without an approved safety analysis methodology, the cost for the Office of Secure Transportation to develop, implement, and maintain a Documented Safety Analysis could be increased and increased costs could also occur from the operational impacts of mischaracterized materials of national security interest.	Possible	Low	Moderate
Customer and Public Trust			
5. The current version of DOE O 461.1B must be revised to address inconsistencies in the requirements, provide clarification of Certification authorities and correct process descriptions. Failure to revise the Order will continue to have a negative impact on DOE contractors primarily due to the inconsistencies between the requirements in the body of the order and those identified in the CRDs. The potential impact from materials of national security interest being transported inappropriately could also be significant with respect to the public's trust of the DOE/NNSA.	Likely	Low	Moderate

Gap Analysis of Existing Risks and Controls

Type of Control	Control	Gap Analysis
Laws	Atomic Energy Act	Provides DOE broad authority to regulate packaging and transportation of materials of national security interest and DOE's process must be clearly defined in the Order.
External Regulation	10 CFR Part 71 and 49 CFR 171-180	Inconsistencies with or inadequate implementation of external regulations may lead to regulatory action by the external agencies.
DOE Regulation	<i>10 CFR 830, Nuclear Safety Management, (Safe Harbor provisions)</i>	10 CFR 830 specifies O 461.1B as a safe harbor but the order does not give direction or specifics on how to use that safe harbor, thereby preventing compliance with 830
DOE Orders	DOE O 460.1C and O 461.1B	Inconsistencies may lead to confusion and may cause non-compliance with the Orders.
Contract Controls	Existing CRDs in DOE O 461.1B and DOE O 460.1C	Inconsistencies may lead to confusion and may cause non-compliance with the Orders.

Risk Mitigation Techniques

Risk Assessment for DOE O 461.1B Revision					
Risk/Opportunity	Risk Level	Potential Cost/Benefit	External Control(s)	Proposed Mitigation Technique	Internal Control (if needed)
Clarify Order requirements, clarify roles and responsibilities, correct process descriptions and definitions	Low	<p>Expected Benefits:</p> <p>(1) Expectations will be clarified and confusion with requirements in the DOE O 460.1C will be eliminated;</p> <p>(2) OST will have an approved methodology for developing a Documented Safety Analysis ensuring compliance with 10 CFR 830;</p> <p>(3) Confidence will be increased that DOE is properly ensuring packaging and transportation safety, leading to adequate protection of the worker, the public and Environment.</p>		<p>MITIGATION—</p> <p>NNSA has issued Safety Guidance to help clarify inconsistencies in the Order</p> <p>NNSA OST has developed a methodology for their Documented Safety Analysis</p> <p>Revise DOE O 461.1B</p>	DOE O 461.1C