

**NAVAL REACTORS
DOE DIRECTIVE IMPLEMENTATION BULLETIN
NUMBER 474.2-25 REVISION 7**

Consistent with the Naval Nuclear Propulsion Program's overall concept of operations, the following provides specific implementation guidance for DOE O 474.2 NUCLEAR MATERIAL CONTROL AND ACCOUNTABILITY, for those U.S. Department of Energy (DOE) facilities under the Director's cognizance. DOE Order 474.2 is implemented subject to the modifications provided below.

1. Oversight and evaluation of NUCLEAR MATERIAL CONTROL AND ACCOUNTABILITY matters under the Director's cognizance will be conducted by the Naval Reactors Laboratory Field Office (NRLFO) with additional oversight and direction provided by NR Headquarters.
2. Requests for waivers or exceptions to specific requirements of DOE Order 474.2 or this IB will be submitted via NRLFO to NR Headquarters for review and approval.
3. NRLFO will provide data/reports on the status of nuclear material control and accountability, malevolent acts and other reportable occurrences at contractor sites to NR Headquarters. Further dissemination of these reports will be at the discretion of NR Headquarters.
4. NR prime contractors will investigate, categorize and report unplanned events in accordance with guidelines promulgated by NR (Ser 08S/05-01744, dated 26 April 2005).
5. Special nuclear material (SNM) in the NRF Materials Balance Area is not attractive to theft or diversion because of form, size, weight and radioactivity. NRF maintains a material control and accountability system consistent with the graded safeguards concept. Physical inventories of highly irradiated materials at NRF shall be performed every four years, in consideration of the additional control measures afforded-by the inherent nature of the material. Consistent with maintaining the graded safeguards concept, NRF shall maintain and execute sampling plans for inventories at assurance and confidence levels approved by NRLFO.
6. NRLFO will maintain Department of Defense (DoD) memorandum inventory accounts for all non-weapon transfers of SNM to and from DoD pursuant to 42 U.S.C. §2121(b). To support maintaining these accounts, Bettis Laboratory will provide the following reports:
 - a. Annually, by October 30, a report with the following information as of September 30: (1) all Program non-weapon SNM quantities shipped to DoD; (2) all Program non-weapon SNM quantities returned to DOE; (3) all Program non-weapon

Enclosure (1) to
Ser 08Z/13-02265

SNM quantities determined to have been consumed or lost and; (4) all Program PuBe source inventories by location.

b. Biannually, on July 15 and November 1, a report showing the Uranium and U-235 Inventory and U-235 Financial Information for Nuclear Material In the Department of Defense Navy Memorandum Account.

7. "QZD" material in transit and outbound from an activity at the end of a reporting period should be left on the inventory of the activity and included in the activity's material balance report until the material is physically delivered and custody is transferred to the receiver. "QZD" material in transit and inbound to an activity at the end of a reporting period should not be included in the activity's material balance report until the material is physically delivered and custody is accepted. DoD Memorandum Inventory Accounts shall be maintained and reported consistent with this policy (i.e., the DoD Memorandum Inventory Account shall record the transaction as occurring when the activity receives the shipment).

8. Shipper/receiver difference data for shipments and receipts of SNM at NR prime contractors shall be subject to trend analysis as determined by NRLFO. Individual shipper/receiver differences shall continue to be reviewed for their significance and reported to NRLFO as necessary

9. At NR prime contractors, Material Control and Accountability plan approvals remain in effect until such time NR withdraws approval.

10. At NR prime contractors, the site nuclear material representative (NMR) can approve requests to terminate regulatory control of nuclear materials that meets attractiveness level "E" criteria per DOE-STD-1194-2011. When considering terminating controls on SNM other than attractiveness level "E", approval shall be obtained from NRLFO.

11. At NR prime contractors, safeguards termination surveys of a nuclear material facility will be conducted by the prime contractor per DOE Order 474.2 and submitted to NRLFO for review and approval with additional oversight and direction from NR Headquarters.

12. Approvals and/or oversight required by offices within the DOE and/or DOE line management will be provided by NRLFO with additional oversight and direction from Naval Reactors Headquarters.

Enclosure (1)