

U.S. Department of Energy
Washington, D.C.

ORDER

DOE O 411.2A

Approved: 08-05-2026

SUBJECT: SCIENTIFIC INTEGRITY

1. PURPOSE. This Order establishes requirements and assigns responsibilities to protect, support, and institutionalize scientific integrity in the United States Department of Energy (DOE), including DOE-funded or DOE-managed scientific and technical work and the public communication of that work.

DOE elements and contractors must comply with DOE Policy 411.2C, *DOE Scientific Integrity Policy*, and applicable authority cited therein and integrate the nine tenets of Gold Standard Science in the conduct, management, and communication of scientific and technical work, consistent with Executive Order 14303, Restoring Gold Standard Science, and implementing Office of Science and Technology Policy (OSTP) guidance.

2. CANCELS/SUPERSEDES. DOE O 411.2, *Scientific Integrity*, dated January 4, 2017.

Cancellation of a directive does not, by itself, modify or otherwise affect any contractual or regulatory obligation to comply with the directive. Contractor Requirements Documents (CRDs) that have been incorporated into a contract remain in effect throughout the term of the contract unless and until the contract or regulatory commitment is modified to either eliminate requirements that are no longer applicable or substitute a new set of requirements.

3. APPLICABILITY.

- a. Departmental Applicability. This Order applies to DOE Departmental Elements and Field Elements that conduct, manage, fund, oversee, or communicate scientific and technical work, including associated institutional public communications.

For purposes of this Order, “covered personnel” includes federal employees and, where specified, contractor personnel performing work under DOE awards or contracts.

- b. National Nuclear Security Administration (NNSA). The administrator of NNSA must ensure that NNSA employees comply with their responsibilities under this Order. Nothing in this Order must be construed to interfere with the NNSA Administrator’s authority under Section 3212(d) of Public Law 106-65, National Defense Authorization Act for Fiscal Year 2000, to establish Administration-specific policies, unless disapproved by the Secretary.

c. DOE Contractors.

- (1) This Order applies to DOE contractors and subcontractors at any tier to the extent the contract, award, or assistance instrument requires compliance with DOE directives (including via Department of Energy Acquisition Regulation [DEAR] clauses, flow-down provisions, or equivalent contractual mechanisms).
- (2) Contractors must flow-down applicable scientific integrity requirements to subcontractors at any tier to the extent necessary to ensure contractor compliance with this Order.

d. Exemptions. Equivalencies and exemptions to this Order must be processed in accordance with DOE O 251.1, *Departmental Directives Program*.4. REQUIREMENTS.a. Scientific Integrity—Core Protections.

- (1) Prohibition on Suppression, Coercion, or Alteration of Scientific Findings. Covered personnel must not suppress or alter scientific or technological findings or intimidate or coerce others to alter or censor scientific or technological findings or conclusions.
- (2) Alternative Scientific Opinions. Covered personnel must not suppress or deter consideration of alternative scientific opinions.
- (3) Free Flow and Dissemination of Scientific and Technological Information.
 - (a) Covered personnel must facilitate the free flow of scientific and technological information, consistent with applicable controls for classified, proprietary, privacy-protected, and otherwise protected information.
 - (b) Covered personnel must facilitate the free flow of different or dissenting viewpoints.

b. Research Integrity.

- (1) Covered personnel must not engage in scientific misconduct, as defined in Section 2(c) of Executive Order 14303, or research misconduct, as defined in Title 10 Code of Federal Regulations (CFR) § 733, Allegations of Research Misconduct, nor knowingly rely on information resulting from scientific misconduct and/or research misconduct.
- (2) Covered personnel must conduct research in accordance with DOE Policy 411.2C and must integrate the nine tenets of Gold Standard Science. Conflicts of interest must be managed and disclosed in accordance with 2 CFR § 200.112, Conflict of Interest.

- (3) Research misconduct allegations and proceedings for DOE-funded or DOE-managed work must be handled in accordance with 10 CFR § 733 and 2 CFR § 910, Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards, as applicable.

c. Public Communications and Media.

(1) Expressing Opinions on Policy Matters.

- (a) Covered personnel expressing personal opinions must include a disclaimer that such views do not represent DOE or the United States government.
- (b) Public representation of government or DOE positions or policies by covered personnel must be coordinated through their program management.

- (2) Media and Institutional Coordination. Covered personnel may respond to media requests based on their expertise with notice to their management and public affairs office.

d. Accuracy, Review, and Corrections.

- (1) Organizations must provide an opportunity for technical accuracy review prior to release of institutional scientific communications.
- (2) When information disseminated by DOE contains incorrect scientific or technical information, the issuing organization must correct the error in a timely manner.

e. Federal Ethics. Public communications by federal employees concerning scientific and technological matters must comply with 5 CFR § 2635, Standards of Ethical Conduct for Employees of the Executive Branch, and other applicable laws and regulations.

f. Classified and Other Protected Information.

- (1) The dissemination of scientific and technical information may be restricted by applicable statutes, regulations, Executive Orders, and DOE directives.
- (2) Covered personnel must not use classification to suppress scientific results.

g. Scientific Integrity Dispute Resolution. Covered personnel must have access to a process for raising and resolving scientific integrity concerns.

5. RESPONSIBILITIES.

- a. Secretary of Energy must designate a Scientific Integrity Official (SIO).
- b. SIO must provide advice or facilitation regarding scientific integrity concerns.

6. INVOKED STANDARDS. This Order does not invoke any DOE technical standards or industry standards as required methods. Note: DOE O 251.1, current version, provides a definition for “invoked technical standard.”7. REFERENCES.

- a. Public Law 106-65, *National Defense Authorization Act for Fiscal Year 2000*.
- b. 2 CFR § 200.112, *Conflict of Interest*.
- c. 2 CFR § 910, *Research Misconduct*.
- d. 5 CFR § 2635, *Standards of Ethical Conduct for Employees of the Executive Branch*.
- e. 10 CFR § 733, *Allegations of Research Misconduct*.
- f. Executive Order 13526, “Classified National Security Information.”
- g. Executive Order 14303, “Restoring Gold Standard Science.”
- h. Memorandum for the Heads of Executive Departments and Agencies on Scientific Integrity, March 9, 2009.
- i. Memorandum on Scientific Integrity from the Office of Science and Technology Policy, December 17, 2010.
- j. Memorandum for the Heads of Executive Departments and Agencies: Agency Guidance for Implementing Gold Standard Science in the Conduct & Management of Scientific Activities, June 23, 2025.
- k. DOE P 411.2C, *Scientific Integrity Policy*, current version
- l. DOE O 442.1A, *Department of Energy Employee Concerns Program*, current version.

8. CONTACT. The DOE Office of Science at (202) 586-5430.

BY ORDER OF THE SECRETARY OF ENERGY:



JAMES P. DANLY
Deputy Secretary

ATTACHMENT 1
CONTRACTOR REQUIREMENTS DOCUMENT
DOE O 411.2A, *SCIENTIFIC INTEGRITY*

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.

1. RESPONSIBILITIES. DOE Contractors must comply with DOE Policy 411.2C, and applicable authorities cited therein, and implement the nine tenets of Gold Standard Science consistent with Executive Order 14303, implementing OSTP guidance, and this Directive.