

SUBJECT: SCIENTIFIC INTEGRITY

1. **PURPOSE.** This Order implements DOE Policy 411.2A which replaces and expands on the previous Policy 411.2. Both the Policy and this Order codify the DOE Secretarial memorandum from March 23, 2012, created in response to the President's March 9, 2009, *Memorandum for the Heads of Executive Departments and Agencies on Scientific Integrity*, and the subsequent Office of Science and Technology Policy (OSTP) memorandum on scientific integrity published on December 17, 2010. Following the guidance provided in the OSTP Memorandum, this Order sets forth responsibilities and requirements that are intended to:
 - a. Ensure a culture of scientific integrity,
 - b. Strengthen the credibility of the Federal Government and Federal Government-sponsored research,
 - c. Facilitate the free flow of scientific and technical information, consistent with privacy and classification standards, and any applicable regulations and laws, and
 - d. Establish principles for conveying scientific and technological information to the public.
2. **CANCELLATION.** DOE P 411.2, *Secretarial Policy Statement on Scientific Integrity*, dated 6-2-2014.
3. **APPLICABILITY.**
 - a. **Departmental Applicability.** This order applies to all DOE elements that conduct or support research and development (R&D) activities. It applies to all federal staff, all federal supervisors, those working at the DOE under the Intergovernmental Personnel Act, political appointees, and any other personnel that are involved with scientific and technical information (covered personnel). Other than public communication, this order applies to all other aspects of classified, proprietary, or otherwise protected research conducted by covered personnel.

The Administrator of the National Nuclear Security Administration (NNSA) must assure that NNSA employees comply with their responsibilities under this directive. Nothing in this directive will be construed to interfere with the NNSA Administrator's authority under section 3212(d) of Public Law (P.L.) 106-65 to establish Administration-specific policies, unless disapproved by the Secretary.

b. DOE Contractors.

- (1) The Contractor Requirements Document (CRD), Attachment 1, sets forth requirements of this Order that will apply to contracts that include the CRD.
- (2) The CRD must be included in contracts that include in the scope of work any scientific or technical research and development activities, and/or the dissemination of scientific and technical information resulting from these activities or from another source.

c. Exemptions. None.4. REQUIREMENTS.

- a. Expressing Opinions on Policy Matters. When expressing opinions on policy matters to the public and media, covered personnel must make it clear that they are expressing their personal views, rather than those of the Department, the United States Government, or their respective institutions. Public representation of Government or DOE positions or policies must be cleared through their program management to include DOE headquarters.
- b. Media Requests. All federal staff who receive requests from media outlets for interview or comment based on their scientific or technical expertise are free to comment but must notify their organizations' public affairs office.
- c. Prohibition on Requests to Alter Scientific Findings. Covered personnel, including public affairs officers, must not ask or direct researchers to alter scientific findings.
- d. Corrections to Scientific and Technical Information.
 - (1) For any institutional public communication (e.g., DOE or laboratory report, press release), the responsible public affairs officer must provide covered personnel with an opportunity to review technical information that significantly relies on their research, identifies them as authors or contributors, or proposes to represent their scientific opinions (“right to review”) prior to publication or release.
 - (2) In the event that an institutional public communication is published with an error, the responsible public affairs officer must provide covered personnel an opportunity to correct the error. Depending on the context in which the information is released, a correction may be publicized via a letter to the editor of a media outlet, technical or non-technical periodical, the use of digital media, or other appropriate mechanisms.

e. Social Media.

- (1) DOE offices responsible for posting to official DOE accounts must:
 - (a) Provide draft text for a social media post prior to release to appropriate agency scientists and engineers whose work is included to ensure the accuracy of the scientific information being communicated on such platforms.
 - (b) Issue correction statements if incorrect technical information is released on social media platforms.
- (2) In expressing their personal scientific and technical views and related policy positions via digital media, covered personnel:
 - (a) Do not need to obtain permission or approval from their supervisors or management to use digital media in a personal capacity.
 - (b) Must include in social media profiles that reference an official title, position, or DOE affiliation, a disclaimer stating that opinions expressed are personal and not representative of the positions or policies of DOE or the U.S. Government.
 - (c) Will not suppress or alter the social media posts of covered personnel that express scientific and technical opinions or related policy opinions.
 - (d) Must comply with the DOE policy regarding the use of Government equipment for personal use and the Standards of Ethical Conduct for Employees of the Executive Branch regarding the use of official time to perform official duties.¹

f. Federal Ethics Laws and Regulations. Public communications by federal employees concerning scientific and technological matters must comply with the Standards of Ethical Conduct for Employees of the Executive Branch ([5 CFR Part 2635](#)) and other applicable laws and regulations, including any DOE regulations and policies.

g. Classified and other Protected Information.

- (1) The dissemination of scientific and technical information may be restricted by laws, regulations, and DOE directives governing classified, privacy, proprietary, and other protected information. Documents in a classified

¹ See [DOE Order 203.1, Limited Personal Use of Government Office Equipment including Information Technology](#) and [Standards of Ethical Conduct for Employees of the Executive Branch](#) at 5 CFR 2635.704.

subject area must be reviewed in accordance with DOE O 475.2b, *Identifying Classified Information*, prior to public release.

- (2) DOE is responsible for the generation, use, safeguarding, and archiving of scientific and technical information classified or controlled under the Atomic Energy Act (information concerning the design, manufacture or utilization of nuclear weapons, the production of special nuclear material, or the use of special nuclear material in the production of energy, and Unclassified Controlled Nuclear Information) or classified as National Security Information under Executive Order 13526.²
 - (3) Covered personnel will not use classification to suppress scientific results, but information that may affect the National Security of the United States must remain classified unless and until it is determined to no longer affect National Security and has been officially declassified.
5. **RESPONSIBILITIES.** The Department's scientific integrity policy specifies distinct rights and responsibilities for each category of performer.
- a. **Secretary of Energy.**
 - (1) Designate a Scientific Integrity Official (SIO) within the Office of the Deputy Secretary of Energy to serve as an ombudsperson for matters related to scientific integrity within the Department. The designated SIO should have scientific or technical qualifications consistent with graduate-level study in the sciences or engineering.
 - (2) The Secretary will have final authority over resolution of disputes within the Department.
 - b. **Designated Scientific Integrity Official (SIO).**
 - (1) Has and maintains scientific or technical qualifications consistent with graduate-level study in the sciences or engineering.
 - (2) Is familiar with this Order and with the Scientific Integrity Policy (DOE P 411.2A).
 - (3) Provides information, advice, or informal mediation services to covered personnel who reach out with concerns or issues regarding scientific integrity and other professional disputes.

² The DOE's "No Comment" Policy is explained in 10 CFR 1045.22 – No Comment Policy, and Classification Bulletin GEN-16, Revision 2, "No Comment" Policy on Classified Information in the Open Literature dated September 23, 2014.

c. Under Secretary.

- (1) The cognizant Under Secretary within the Department is responsible for handling federal staff appeals to disputes resolved by the head of the relevant departmental element or field element.
- (2) Ensure policies that facilitate the free flow of scientific and technological information and laws, regulations, and DOE directives governing classified, privacy, proprietary, or otherwise protected information are followed.

d. Federal Supervisors.

- (1) Select and retain candidates for scientific and engineering positions based primarily on their scientific and technological knowledge, credentials, experience, and integrity.
- (2) Ensure that data and research used to support policy decisions is of high scientific and technical quality and objectivity. Scientific and technical objectivity should be supported through independent peer review by qualified experts, where feasible and appropriate, and consistent with law.
- (3) Follow all applicable conflict of interest laws, regulations, and policies.
- (4) Will neither suppress nor alter scientific or technological findings and will not intimidate or coerce federal staff, contractors, recipients of financial assistance awards, or any others, to suppress or alter scientific or technological findings or conclusions.
- (5) Consistent with the Federal Government's commitment to transparency, the DOE's Open Government Plan, DOE O 241.1B – Scientific and Technical Information Management, and section 4.g – Classified Information - of this order, federal supervisors and any other responsible personnel will use the DOE website and the resources of the Department's Office of Scientific and Technical Information to help make research findings available to the public in a timely manner and in an accessible format.

e. Heads of Departmental Elements and Heads of Field Elements.

- (1) Notify cognizant contracting officers of those existing or future contracts to which the directive and its CRD applies.
- (2) Ensure appropriate oversight of Contractor implementation.

f. Federal staff.

- (1) Facilitate the free flow of scientific and technological information, consistent with privacy and classification standards for treatment of classified, proprietary, or otherwise protected information.
- (2) Ensure that their federal titles or positions are not given more prominence than other significant biographical details when sharing personal opinions on scientific and technical topics or related policies in a public forum. This applies to opinions shared either when speaking publicly or in published writing.
- (3) In connection with an article published in a scientific or professional journal, provide a reasonably prominent disclaimer when using their title or position in the piece. An example disclaimer satisfactory to the DOE would be: “The views expressed in the article do not necessarily represent the views of the U.S. Department of Energy or the United States Government.”
- (4) Engage the head of the relevant department element or field element and/or the SIO to facilitate discussion and, if possible, identify a mutually agreeable resolution to any dispute that is not covered by the Employee Concerns Program³ or the Differing Professional Opinions order.⁴
- (5) Coordinate with DOE’s Office of Congressional and Intergovernmental Affairs on all official communications with Congressional offices.

g. Public Affairs Officers.

Public affairs officers are responsible for ensuring that covered personnel are provided with a right to review any institutional publication that significantly relies on their research, identifies them as an author or contributor, or proposes to represent their scientific opinion.

h. Contracting Officers.

- (1) Upon notification of its applicability, incorporate the CRD into applicable contracts that contain Department of Energy Acquisition Regulation (DEAR) clause 970.5204-2, Laws, Regulations, and DOE Directives, via the process set forth in DEAR clause 970.5204-2.

³ [DOE O 442.1A](#), *Employee Concerns Program*, dated 6-6-2001.

⁴ [DOE O 442.2 Chg 1](#), *Differing Professional Opinions for Technical Issues Involving Environment, Safety and Health*, dated 6-29-2011

- (2) Upon notification of its applicability, incorporate applicable CRD requirements in the contract terms and conditions of new and existing contracts not subject to DEAR clause 970.5204-2, as appropriate.

6. REFERENCES.

- a. [Memorandum for the Heads of Executive Departments and Agencies on Scientific Integrity](#), March 9, 2009.
- b. [Memorandum on Scientific Integrity](#) from the Office of Science and Technology Policy, December 17th, 2010.
- c. [Public Law 106-65](#) - National Defense Authorization Act for Fiscal Year 2000.
- d. [DOE O 203.1](#), *Limited Personal Use of Government Office Equipment including Information Technology*, dated 1-7-2005.
- e. [DOE O 241.1B Chg 1](#), *Scientific and Technical Information Management*, dated 12-13, 2010.
- f. Standards of Ethical Conduct for Employees of the Executive Branch ([5 CFR Part 2635](#))
- g. [Executive Order 13526](#), Classified National Security Information
- h. [Classification Bulletin GEN-16, Revision 2, "No Comment" Policy on Classified Information in the Open Literature](#) dated September 23, 2014
- i. [10 CFR 1045.22](#) - "No Comment" Policy
- j. 10 CFR 1017 – *Identification and Protection of Unclassified Controlled Nuclear Information*
- k. DOE Order 471.1B – *Identification and Protection of Unclassified Controlled Nuclear Information*
- l. [DOE O 475.2B](#), *Identifying Classified Information*, dated 10-3-2014.
- m. [DOE Open Government Plan 3.0](#), June 2014.
- n. [DOE O 442.1A](#), *Department of Energy Employee Concerns Program*, dated 6-6-2001.
- o. [DOE O 442.2 Chg 1](#), *Differing Professional Opinions for Technical Issues Involving Environment, Safety and Health*, dated 6-9-2011.
- p. [Public Law 109-58](#), Energy Policy Act of 2005, as amended.

7. DEFINITIONS.a. Covered personnel.

- (1) All federal staff, including the heads of departmental elements and heads of field elements; political appointees; those working at the DOE under the Intergovernmental Personnel Act; National Nuclear Security Administration personnel, federal research scientists and engineers directly employed by the DOE; and any other personnel that are involved with scientific information.
- (2) Contractors covered under the accompanying Contractor Requirements Document, Attachment 1.

b. Federal Financial Assistance. Payment, grant, disbursement of Federal funds, property, or services received or administered by a non-Federal entity to accomplish a public purpose of support or stimulation as authorized by Federal statute. For the purposes of this policy, the forms of assistance are those given in [2 CFR 200.40\(a\)](#), Federal Financial Assistance.⁵

c. Digital Media. In general, on-demand mass communication distributed digitally, typically through the internet. Examples of digital media can include, but are not limited to, blogs, wikis, online newspapers, video games, podcasts, and social media.

d. Peer review. An independent assessment of the scientific merit of research by experts having knowledge of the research area equivalent to that of the performers of the work.

e. Program Manager. An individual employed by a federal agency with oversight responsibility for the management and development of a research project or portfolio of related research projects that are financially supported by the federal government.

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

BY ORDER OF THE SECRETARY OF ENERGY:



ELIZABETH SHERWOOD RANDALL
Deputy Secretary

⁵ DOE financial assistance rules are codified in 2 CFR Part 910 – Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards, as well as other regulations specific to individual DOE programs. More information on DOE financial assistance can be found on the [DOE website](#).

CONTRACTOR REQUIREMENTS DOCUMENT
DOE O 411.2, *SCIENTIFIC INTEGRITY*

1. RESPONSIBILITIES.

- a. Contractor. Regardless of the performer of the work, the contractor is responsible for
- (1) Complying with the requirements of this Contractor Requirements Document (CRD);
 - (2) 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;
 - (3) Monitoring and evaluating all work performed under the contracts, including the work of subcontractors, to ensure that performance meets the applicable requirements of scientific integrity, including open discussion and dissemination of non-classified scientific and technical work and personal opinions on policy related to this work; public communication of scientific and technical work, including on digital and social media platforms; whistleblower protection; dispute resolution; and research misconduct.
 - (4) Identifying and safeguarding scientific and technical information classified or controlled under the Atomic Energy Act (information concerning the design, manufacture or utilization of nuclear weapons, the production of special nuclear material, or the use of special nuclear material in the production of energy, and Unclassified Controlled Nuclear Information) or classified as National Security Information under Executive Order 13526.
 - (5) For disputes concerning scientific integrity, including media communication of scientific or technical information, facilitating discussion and, if possible, identifying a mutually agreeable resolution to disputes not covered by the Employee Concerns Program or the Differing Professional Opinions order. Appeals should be made through line management, with ultimate authority for dispute resolution resting with the laboratory director.
 - (6) Ensuring policies that facilitate the free flow of scientific and technological information and laws, regulations, and DOE directives governing classified, privacy, proprietary, or otherwise protected information are followed.
- b. Research Personnel.
- (1) Facilitate the free flow of scientific and technological information, consistent with privacy and classification standards for treatment of classified, proprietary, or otherwise protected information.

- (2) Ensure that when sharing personal opinions on scientific and technical topics or related policies in a public forum they do not represent their views as those of the U.S. Government or their institution.
- (3) In connection with an article published in a scientific or professional journal, provide a reasonably prominent disclaimer when using their title or position in the piece. An example of an appropriate disclaimer would be: “The views expressed in the article do not necessarily represent the views of the U.S. Department of Energy or the United States Government.”
- (4) Engage an immediate supervisor and/or the DOE Scientific Integrity Official (SIO) to facilitate discussion and, if possible, identify a mutually agreeable resolution to any dispute covering scientific integrity, including media communication of scientific or technical information that is not covered by the Employee Concerns Program⁶ or the Differing Professional Opinions order.⁷ The SIO, designated by the Secretary of Energy and located in the Office of the Deputy Secretary, serves as an ombudsperson for matters related to scientific integrity within the Department, including the DOE National Laboratories.

2. REQUIREMENTS.

- a. When expressing opinions on policy matters to the public and media, research personnel must make it clear when they are expressing their personal views, rather than those of the Department, the U.S. Government, or their respective institutions. Public representation of Government or DOE positions or policies must be cleared through their program management to include DOE headquarters.
- b. Management must not suppress or alter scientific or technological findings, nor intimidate or coerce research personnel, subcontractors, or others to alter or censor scientific or technological findings or conclusions.
- c. Public communication and media guidance:
 - (1) Research personnel must notify their institution’s management and public affairs offices on interactions with the news media.
 - (2) If a media inquiry or a planned response to an inquiry from a contractor goes beyond the findings and conclusions of science and technology R&D and touches on issues of public policy or, in the case of national

⁶ [DOE O 442.1A](#), *Employee Concerns Program*, dated 6-6-2001.

⁷ [DOE O 442.2](#), *Differing Professional Opinions for Technical Issues Involving Environment, Safety and Health*, dated 6-29-2011.

laboratories or field sites, operational issues, (e.g. health and safety), the contractor's public affairs office must coordinate with DOE headquarters prior to the response.

- (3) Public representation of Government or DOE positions or policies must be cleared through line management at DOE headquarters.
 - (4) Under the provisions of [DEAR 952.204-75](#) (Public Affairs), contractor personnel must obtain prior approval of news releases from DOE before issuing them. News releases issued by contractors are considered to be institutional rather than individual researcher communications and hence reflect upon both the contractor that issues the news release and the DOE.
 - (5) The dissemination of scientific and technical information may be restricted by laws, regulations, and DOE directives governing classified, privacy, proprietary, and other protected information. Documents in a classified subject area must be reviewed in accordance with DOE O 475.2B, Identifying Classified Information, prior to public release.
- d. Management must adhere to all conflict of interest requirements stipulated in the contract governing operation of their laboratory and ensure adherence by personnel in accordance with the contract.
- e. Digital and Social Media:
- (1) Contractor personnel do not need to seek DOE headquarters approval to use digital media in their personal capacity. Threats, harassment, and other behaviors made by personnel on social or digital media are addressed elsewhere, and not in this policy.
 - (2) Management personnel or public affairs must not suppress or alter the social media posts of personnel that express scientific and technical opinions or related policy opinions.
- f. Under Federal and DOE policy, the contractor is responsible for maintaining the integrity of research performed pursuant to its DOE award including the prevention, detection, and remediation of research misconduct as defined under the Federal and DOE policy, and the conduct of inquiries, investigations, and adjudication of allegations of research misconduct in accordance with the requirements of Federal and DOE policy and procedures. DOE implementing procedures for DOE contractors are provided in DEAR 952.235-71 – Research Misconduct.
- g. Management must provide personnel an opportunity to review, prior to publication or release, any institutional public communication (e.g. laboratory report or press release) that substantially relies on their research or is released under their name.

- h. In general, any policies impacting the professional development activities of personnel are the purview of the contractor, with the exception that personnel and management must follow applicable DOE guidance on conference attendance⁸ and management of scientific and technical information in accordance with the contract.⁹

⁸ The current DOE policy on conference attendance is provided in the [August 17, 2015 memorandum from the Deputy Secretary titled *Updated Guidance on Conference-Related Activities and Spending*](#).

⁹ [DOE O 241.1B Chg 1, *Scientific and Technical Information Management*](#), dated 12-13-2010, applies to publications by contractors as set forth in the Contractor Requirements Document (CRD) (DOE O 241.1B Attachment 1). The [DOE Scientific and Technical Information Program website](#) provides information to assist in implementing the requirements for this CRD.