

# Grant and Cooperative Agreement

CHOOSE ONE:  
 COOPERATIVE AGREEMENT  
 GRANT

CHOOSE ONE:  EDUCATION     FACILITIES     RESEARCH     SDCR     TRAINING

1. GRANT/COOPERATIVE AGREEMENT NUMBER NRC-HQ-60-17-G-0005	2. SUPPLEMENT NUMBER	3. EFFECTIVE DATE 06/30/2017	4. COMPLETION DATE
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5. ISSUED TO NAME/ADDRESS OF RECIPIENT (No., Street, City/County, State, Zip) COLORADO STATE UNIVERSITY 601 S HOWES ST FORT COLLINS CO 805212807	6. ISSUED BY    U.S. NRC - HQ <b>Mailing Address:</b> Acquisition Management Division Mail Stop: TWFN-8E06M Washington DC 20555-0001
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7. TAXPAYER IDENTIFICATION NO. (TIN)	9. PRINCIPAL INVESTIGATOR/ORGANIZATION'S PROJECT OR PROGRAM MGR. (Name & Phone) [REDACTED]
8. COMMERCIAL & GOVERNMENT ENTITY (CAGE) NO.	

10. RESEARCH, PROJECT OR PROGRAM TITLE  
Colorado State University Fuel Cycle Radiochemistry Fellowship Program

11. PURPOSE  
See Schedule

12. PERIOD OF PERFORMANCE (Approximately)  
06/30/2017 through 06/29/2021

13A.	AWARD HISTORY	13B.	FUNDING HISTORY
PREVIOUS	\$0.00	PREVIOUS	\$0.00
THIS ACTION	\$400,000.00	THIS ACTION	\$400,000.00
CASH SHARE	\$0.00	<b>TOTAL</b>	\$400,000.00
NON-CASH SHARE	\$0.00		
RECIPIENT SHARE	[REDACTED]		
<b>TOTAL</b>	\$400,000.00		

14. ACCOUNTING AND APPROPRIATION DATA  
2017-X0200-IUPMRU-60-60D099-52-S-164-1148-4110

PURCHASE REQUEST NO.	JOB ORDER NO.	AMOUNT	STATUS
RES-17-0154			

15. POINTS OF CONTACT

	NAME	MAIL STOP	TELEPHONE	E-MAIL ADDRESS
TECHNICAL OFFICER	NANCY V. HEBRON-ISREAL	TWFN/10B56	301-415-6996	Nancy.Hebron-Isreal@nrc.gov
NEGOTIATOR				
ADMINISTRATOR	M'LITA R. CARR		301-415-6869	MLita.Carr@nrc.gov
PAYMENTS				

16. THIS AWARD IS MADE UNDER THE AUTHORITY OF:  
PURSUANT TO SECTION 31B AND 141B OF THE ATOMIC ENGERGY ACT OF 1954, AS AMENDED.

17. APPLICABLE STATEMENT(S), IF CHECKED: <input type="checkbox"/> NO CHANGE IS MADE TO EXISTING PROVISIONS <input type="checkbox"/> FDP TERMS AND CONDITIONS AND THE AGENCY-SPECIFIC REQUIREMENTS APPLY TO THIS GRANT	18. APPLICABLE ENCLOSURE(S), IF CHECKED: <input type="checkbox"/> PROVISIONS <input type="checkbox"/> SPECIAL CONDITIONS <input type="checkbox"/> REQUIRED PUBLICATIONS AND REPORTS
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<b>UNITED STATES OF AMERICA</b>	<b>COOPERATIVE AGREEMENT RECIPIENT</b>
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CONTRACTING/GRANT OFFICER ERIKA EAM	DATE 06/28/2017	AUTHORIZED REPRESENTATIVE	DATE
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# Grant and Cooperative Agreement

ITEM NO. (A)	ITEM OR SERVICE (Include Specifications and Special Instructions) (B)	QUANTITY (C)	UNIT (D)	ESTIMATED COST	
				UNIT PRICE (E)	AMOUNT (F)
	<p>CFDA Number: 77.008</p> <p>DUNS Number: 785979618</p> <p>Payment will be made through the Automated Standard Application for Payment (ASAP.gov) unless the recipient has failed to comply with the program objectives, award conditions, Federal reporting requirements or other conditions specified in 2 CFR 200.</p> <p>Delivery: 06/29/2021</p> <p>Delivery Location Code: NRCHQ</p> <p>NUCLEAR REGULATORY COMMISSION</p> <p>NUCLEAR REGULATORY COMMISSION</p> <p>WASHINGTON DC 20555-0001 USA</p> <p>Payment:</p> <p style="padding-left: 40px;">ASAP GRANT FUNDS REIMBURSEMENT SYS</p> <p style="padding-left: 40px;">US TREASURY</p> <p>Period of Performance: 06/30/2017 to 06/29/2021</p> <p>NRC-HQ-60-17-FOA-0001</p>				

**Attachment A - Schedule****A.1 PURPOSE OF GRANT**

The purpose of this Grant is to provide support to the "Colorado State University Fuel Cycle Radiochemistry Fellowship Program" as described in Attachment B entitled "Program Description".

**A.2 PERIOD OF GRANT**

1. The effective date of this Grant is June 30, 2017. The estimated completion date of this Grant is June 29, 2021.

2. Funds obligated hereunder are available for program expenditures for the estimated period: June 30, 2017 – June 29, 2021.

**A.3 GENERAL**

1. Total Estimated NRC Amount:	\$400,000.00
2. Total Obligated Amount:	\$400,000.00
3. Cost-Sharing Amount:	[REDACTED]
4. Activity Title:	Colorado State University Fuel Cycle Radiochemistry Fellowship Program
5. NRC Project Officer:	Nancy Hebron-Isreal
6. DUNS No.:	785979618

**A.4 AMOUNT OF AWARD AND PAYMENT PROCEDURES**

[REDACTED]

2. NRC hereby obligates the amount of \$400,000.00 for program expenditures during the period set forth above and in support of the Budget above. NRC is not obligated to reimburse the Grantee for the expenditure of amounts in excess of the total obligated amount.

3. Payment shall be made to the Recipient in accordance with procedures set forth in the Automated Standard Application for Payments (ASAP) Procedures set forth below.

**A.5 BUDGET**

Revisions to the grant award budget shall be made in accordance with Revision of Grant Budget in accordance with [2 CFR § 200.308](#).

**SECTION B - BUDGET CATEGORIES**

6. Object Class Categories	GRANT PROGRAM, FUNCTION OR ACTIVITY				Total (5)
	(1)	(2)	(3)	(4)	
	NRC-HQ-60-17- FOA-0001				
a. Personnel	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]
b. Fringe Benefits	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
c. Travel	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
d. Equipment					
e. Supplies	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
f. Contractual					
g. Construction					
h. Other	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
i. Total Direct Charges (sum of 6a-6h)	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	\$ [REDACTED]
j. Indirect Charges	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	\$ [REDACTED]
k. TOTALS (sum of 6i and 6j)	\$ 100,000.00	\$ 100,000.00	\$ 100,000.00	\$ 100,000.00	\$ 400,000.00
7. Program Income	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]

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## **ATTACHMENT B - PROJECT DESCRIPTION**

### **Project Title: Colorado State University Fuel Cycle Radiochemistry Fellowship Program**

The objective of the Colorado State University Fuel Cycle Radiochemistry Fellowship program is to provide funding to support two graduate students per year over the course of four years to allow for their education and training in the radiochemistry relating to the nuclear fuel cycle.

Over the last few years it has become evident that a severe shortage exists of scientists with nuclear expertise and training in radiochemistry, as well the handling of highly radioactive substances. The need for additional radiochemists and nuclear scientists has been extensively documented in reports published by the American Chemical Society, the American Physical Society, the Nuclear Regulatory Commission and most recently the National Academy of Sciences. A report prepared by the Committee on Assuring a Future U.S.-Based Nuclear Chemistry Expertise and published by the NAS in 2012 estimated that approximately 93 trained students and 301 Ph.D. students would be required to meet the demand for radiochemistry expertise in the U.S. over the course of the next five years. At the same time the projected supply would only consist of 55 radiochemists at the M.S. level and 65 with a Ph.D.

The shortage is even more problematic in the light of recent considerations regarding a continued need for energy, impact on national security and changing strategies for the disposal of radioactive waste. A continuous pipeline providing students trained in all aspects of nuclear sciences is required to fill a large number of positions in areas related to nuclear energy, environmental management and nuclear safeguards. These positions will become vacant in the near future as the current workforce reaches retirement age and cannot be filled without an available pool of well-trained students. The Radiation and Protection Measurement Section in the Department of Environmental & Radiological Health Sciences at Colorado State University has a long tradition in training students in health physics, radiation protection and radiochemistry. The section has a significant number of students enrolled in both the M.S. and the Ph.D. programs and has an excellent track record of graduating students that go on to work at regulatory agencies, at national laboratories or in the nuclear industry.

Traditionally, the Radiation and Protection Measurement Section at CSU has recruited many of its students from the nuclear industry. Several of the students currently enrolled in the program have previously worked at nuclear power plants. These students are already well versed in operational health physics and routine procedures at a nuclear power plant. Support through the fellowship program would provide a unique opportunity to train these students in other areas of interest to regulatory agencies and the energy industry by educating them in the applications of radiochemistry in the fuel cycle. In addition, Colorado State University is located in close vicinity to a variety of former uranium mining and milling sites. This provides a unique opportunity to give the students a close look at the role of chemical procedures in the fuel cycle.

The students supported by the fellowship program will conduct research in several different areas of radiochemistry associated with the nuclear fuel cycle. Students previously advised by the PI worked on projects related to the development of novel separation techniques for recycling of used nuclear fuel, the design of advanced radioanalytical methods for safeguards and the detection and study of man-made radionuclides in the environment. The work performed by the students in the laboratory will be complemented through classes in radiochemical separations, fuel cycle chemistry, nuclear safeguards and radioecology. The research is carried out in close collaboration with national laboratories actively engaged in nuclear fuel cycle studies. Several students advised by the PI have been awarded summer internships at Idaho National Laboratory, Lawrence Livermore National Laboratory and Los

Alamos National Laboratory. These interaction with the DOE laboratories will further expand the educational opportunities for students and provide them the chance to gain firsthand knowledge of the critical national issues related to radiochemistry. In addition the graduate students involved in this research will be able to interact with other scientists working on projects related to the nuclear fuel cycle and environmental management. Training young scientists in these areas is necessary to establish a secured work force for many years to come.

**Describe the proposed program including the number and size of the fellowships.**

Over the course of the funding period, the goals of the fellowship program are to address the workforce problem in Fuel Cycle Radiochemistry by taking the following actions:

[REDACTED]

2. Enhance the current curriculum to meet the challenges and changing responsibilities of the nuclear fuel cycle in the 21st century, in particular the management of radioactive waste, recycling of used nuclear fuel, nuclear safeguards and nonproliferation, as well as emergency response to nuclear accidents.
3. Extend current collaborations for practicum studies, research visits and summer internships to include collaborations in the USA and with our partner, Fukushima University, in Japan.

The Fuel Cycle Radiochemistry Fellowship Program at CSU will be used to support a total of four Masters of Science (MS) and/or PhD students over the next four years. Their training and research will focus on the nuclear fuel cycle in particular in addition to the normal curriculum required for them to complete their degree. Two MS or PhD students will start in the program during Year 01. The MS students are expected to graduate at the conclusion of Year 02 of the program and two additional MS students will be started in Year 03. Any PhD student supported by the program will be funded until graduation, which is typically after 3 years, whereupon additional graduate students will be supported.

CSU has previously been awarded similar fellowship grants [REDACTED]. In the course of the previous program period from 2010 to 2014, the CSU Radiation Protection and Measurement (Health Physics) Section and the CSU Department of Environmental and Radiological Health Sciences were able to leverage NRC funding to fully support 6 and partially support 8 students, and had only anticipated supporting 4 students. All supported students graduated and are successfully employed in their field.

**Recruitment activities and specific marketing strategies designed to attract a large and diverse pool of applicants.**

The recruiting activities conducted by the CSU Radiation Protection and Measurement (Health Physics) Section are a dynamic and dedicated effort. The existing practices are constantly evaluated and new means of attracting superior students that are representative of the diverse population of the United States are persistently sought. Some of the specific recruiting activities that were undertaken in addition to the university and college activities, included but were not limited to:

1. The section head worked directly with faculty members at Alcorn State University (an HBCU) to identify candidates to apply for CSU's graduate programs. As a result of these efforts two students from Alcorn are currently attend the graduate program at CSU.
2. Faculty members and graduate students from the Radiation Protection and Management Section at CSU visited and gave presentations at local high schools (e.g., Fort Collins

High School, Poudre High School, Loveland Classical School, German School Fort Collins, and Resurrection Christian School) and undergraduate programs at other colleges in other area colleges (e.g., University of Northern Colorado, Air Force Academy) to increase awareness of our program and discuss graduate school opportunities in nuclear science and radiochemistry. Additional outreach activities involved regional youth associations, such as Colorado Boy Scout Troops.

3. Valuable referrals to the program have been solicited through the extensive alumni network.
4. CSU and the College have provided a new and innovative internet environment to support external relations and recruiting. The website of the section has been one of the most important factors in attracting new applicants to the program.
5. Several years ago, CSU implemented a "Track III" program to identify outstanding students as undergraduates, and to provide a means for these students to obtain both their B.S. and M.S. degrees in five years. Several highly qualified undergraduate students have taken this opportunity and received their M.S. degree in Health Physics with a concentration in radiochemistry through this program.

CSU is a part of the Colorado Louis Stokes Alliance for Minority Participation (CO-AMP). The purpose of this program is to attract and prepare minority population students for careers in Science, Technology, Engineering, and Mathematics (STEM). Within the College of Veterinary Medicine and Biomedical Sciences (the home college for our department), the RADAR program (Recruitment, Advising, Diversity, and Retention) also seeks to increase student population diversity and the number of under-represented students in the departments.

The PI has carried out a number of additional recruiting efforts and will continue these in the future. He has previously been associated with the Nuclear Science & Security Consortium that was established by the National Nuclear Security Administration to develop a pipeline to replenish the workforce at various national laboratories. He also routinely gives guest lectures at the ACS Nuclear Chemistry Summer School, the Nuclear Forensics Undergraduate Summer School and the Fuel Cycle Chemistry Undergraduate Summer School. In addition he has also taught webinars on a variety of topics in radioanalytical chemistry through the National Analytical Monitoring Program supported by the U.S. Department of Energy.

**Describe the selection process that will ensure the most qualified applicants are selected based on academic merit, with consideration given to financial need and the goal of promoting the participation of minorities and women and persons with disabilities.**

CSU's entrance criterion for graduate study is a 3.0/4.0 cumulative GPA from an accredited 4-year undergraduate institution. After this minimum requirement is met, the Radiation Protection and Measurements Section faculty charged with student admission [REDACTED] carefully review all completed applications to ensure that pre-requisite classes, including calculus, general physics, biology, and chemistry, have been taken. The students' statements of purpose are also considered together with the three letters of recommendation submitted by their references. The entire application package of each candidate is judiciously evaluated and the academic skills, work experience, financial need, and the overall qualifications are considered. Those candidates that do not meet the pre-requisites, but are otherwise deemed outstanding candidates, are given the opportunity to take the courses that they lack concurrently with graduate coursework. Only the highest qualified candidates are selected for fellowships and support.

Recipients of fellowships are selected through a competitive process primarily on the basis of academic merit, with consideration given to financial need and the goal of promoting the participation of individuals identified in Sections 33 or 34 of the Science and Engineering Equal Opportunities Act (42 U.S.C. 1885a, 1885b).

CSU provides tracking of minority enrollment for the Radiation Protection and Measurement section, but unfortunately so few students have been able to be attracted to specialize in radiochemistry (due to a lack of funding for this specialty) that no formal information is currently available in this area. Currently, three minority students are admitted in the Radiation Protection and Measurement section (African American and Pacific Islander); however, the program, over the years, has supported and trained several minority students.

As a part of the ABET accreditation in health physics, a method for monitoring and ensuring that adequate academic progress is made by each student is already in place in the program. Compliance monitoring in accordance with NRC guidelines is already carried out by [REDACTED] for Health Physics Students. Each advisor is required to meet with students at least once per semester to discuss their progress and GPA; this is documented in the student's ABET portfolio. At this time, the faculty member ensures that the grade requirements of the NRC fellowship program have been met. The additional requirement for a 3.3/4.0 GPA has been easily accommodated within the already existing academic assessment system and was administratively added to the students who were awarded fellowships. The average GPA for students in the CSU Radiation Protection and Measurement section is > 3.5/4.0. Semiannual progress reports will be submitted electronically to the NRC Project Manager, beginning six months after the project start date and coinciding with the end of each semester. Progress reports will detail activities that have occurred during the reporting period and that correspond with the fellowship goals and objectives, and will provide specific research project-related information. During the final semester, the advisor will ensure that the student completes any appropriate NRC employment application paperwork.

In addition to the documented and formal review of student progress, students typically meet weekly with their advisor to informally discuss their progress. Students are required to maintain a minimum course load of nine credit hours per semester to be considered full time students.

#### **State the management structure and the capability for administering the program.**

The PI, [REDACTED] will serve as director of the training program in Fuel Cycle Radiochemistry. He has the overall responsibility for the administration of the award and interactions with the granting agency. He will be responsible for financial management of the project and administrative supervision of the student receiving the fellowship. He will also coordinate their placement with research faculty and mentor them in their thesis research. [REDACTED] will be assisted by other faculty members from the Radiation Protection and Measurement Section, [REDACTED]. [REDACTED] will assist with the administrative supervision and mentoring of the student receiving the fellowship. In addition to those directly associated with the core curriculum, there are numerous other members of the faculty that provide special lectures and serve on committees for graduate students.

#### **Identify an evaluation plan that will provide information on the effectiveness of the project in attracting, preparing and retaining individuals in nuclear careers.**

Tracking of student progress during graduate school is achieved as part of the existing process for maintaining ABET accreditation, which requires a minimum of one student meeting per semester. The existing program also requires tracking students at two years and five years post-graduation using surveys. This process provides feedback that is used to improve the

program and to measure its impact in attracting, preparing, and retaining students in the radiochemistry profession. It will also provide a response to how well the fellowship program is meeting the needs of the NRC and how many students pursue a career in the field. The fellowship program will be considered successful if students are hired and retained in positions that support NRC or agreement state licensed activities beyond the obligatory years.

**Provide a schedule of tuition fees and other pertinent costs for students.**

Please find the costs for students in the budget narrative and the attached fee schedule.

**State whether or not these fellowships are contemplated as an integrated element of a State or regional strategic plan.**

This fellowship program will be integrated with the Mountain and Plains Education and Research Center (MAP ERC). As a Center within the Colorado School of Public Health Initiative, the program shares an established track record of commitment to training, research, and continuing education.

The MAP ERC has already demonstrated the strength of this collaboration by hosting numerous professional radiochemistry/health physics meetings, including a Uranium Technical Symposium, aimed at educating the public on the health and environmental aspects of uranium mining and milling operations, and a National Nuclear Security Symposium on emerging threats to national security requiring radiochemistry expertise. Additionally, the MAP ERC serves to expand the knowledge base of students. One of the major activities sponsored by the MAP ERC is to arrange for students to tour a uranium mill and learn the radiochemical processes that occur on an industrial scale. An ISL uranium mine (Smith Ranch) has also been visited on several occasions, given students the opportunity to experience the application of chemistry to the front-end of the fuel cycle. In addition multiple expert speakers were featured in seminars that were open to the public, to provide scientific information on the nuclear fuel cycle to all.

**State any arrangements with other non-Federal entities (State, local government or private), that provide additional support.**

None.

**Institutions must require individual fellowship students to accept the NRC service agreement terms.**

CSU and the Radiation Protection and Measurement section faculty are fully committed to ensuring the students' success in obtaining their graduate degree and providing our country with the well-qualified scientists with an expertise in Fuel Cycle Radiochemistry necessary to meet the demands of the 21st Century. All students will be obligated as delineated in the announcement regarding NRC employment. Suitable pre-fellowship contracts have been developed for previous fellowship programs at CSU and will be signed by student fellows prior to their entry into the program.

## ATTACHMENT C – STANDARD TERMS AND CONDITIONS

### The Nuclear Regulatory Commission's Standard Terms and Conditions for U.S. Nongovernmental Recipients

#### Preface

This award is based on the application submitted to, and as approved by, the Nuclear Regulatory Commission (NRC) under the authorization [42 U.S.C. § 2051\(b\)](#), pursuant to section 31b and 141b of the Atomic Energy Act of 1954, as amended, and is subject to the terms and conditions incorporated either directly or by reference in the grant or cooperative agreement. The following also apply:

- Restrictions on the expenditure of Federal funds in appropriation acts, to the extent those restrictions are pertinent to the award.
- Code of Federal Regulations/Regulatory Requirements – [2 CFR Part 200 Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards](#).

Any inconsistency or conflict in terms and conditions specified in the award will be resolved according to the following order of precedence: public laws, regulations, applicable notices published in the Federal Register, Executive Orders (E.O.), Office of Management and Budget (OMB) Circulars, the NRC's Mandatory Standard Provisions, special award conditions, and standard award conditions.

Certifications and Representations: These terms incorporate the certifications and representations required by statute, executive order, or regulation that were submitted with the SF424B application through [GRANTS.GOV](#).

#### **I. Mandatory General Requirements**

The order of these requirements does not make one requirement more important than any other requirement.

##### **1. Applicability of 2 CFR Part 200**

All provisions of 2 CFR Part 200 and all Standard Provisions attached to this grant/cooperative agreement are applicable to the Recipient and to sub-recipients which meet the definition of "Recipient" in 2 Part [§200.86](#), unless a section specifically excludes a sub-recipient from coverage. The Recipient and any sub-recipients must, in addition to the assurances made as part of the application, comply and require each of its sub-awardees employed in the completion of the project to comply with [Subpart D](#) of [2 CFR Part 200](#) and include this term in lower-tier (sub-award) covered transactions.

Recipients must comply with monitoring procedures and audit requirements in accordance with [2 CFR Part 200, Subpart F—AUDIT REQUIREMENTS](#).

##### **2. Award Package**

The Recipient is obligated to conduct project oversight as may be appropriate, to manage the funds with prudence, and to comply with the provisions outlined in [2 CFR Part 200](#). Within this framework, the Principal Investigator (PI) named on the award face page, is responsible for the scientific or technical direction of the project and for preparation of the

project performance reports. This award is funded on a cost-reimbursement basis, not to exceed the amount awarded as indicated on the face page, and is subject to a refund of unexpended grant funds to the NRC.

The non-Federal entity alone must be responsible, in accordance with good administrative practice and sound business judgment, for the settlement of all contractual and administrative issues arising out of procurements related to its grant award. These issues include, but are not limited to, source evaluation, protests, disputes, and claims. These standards do not relieve the non-Federal entity of any financial or fiduciary responsibilities or obligations arising under its grant, including sub-contracts and sub-awards, or any other contractual or financial obligation. The Federal awarding agency will not substitute its judgment for that of the non-Federal entity unless the matter is primarily a Federal concern. Violations of law will be referred to the local, State, or Federal authority having proper jurisdiction. See [2 CFR § 200.318\(k\)](#), General Procurement Standards.

### **Subawards**

[Appendix II to Part 200](#) Contract Provisions for Non-Federal Entity Contracts Under Federal Awards

Sub-recipients, sub-awardees, and contractors have no relationship with NRC under the terms of this grant/cooperative agreement. All required NRC approvals must be directed through the Recipient to NRC. See [2 CFR § 200.318](#).

### **Nondiscrimination**

This provision is applicable when work under the grant/cooperative agreement is performed in the U.S. or when employees are recruited in the U.S.

The Recipient agrees to comply with the non-discrimination requirements below:

- Title VI of the Civil Rights Act of 1964 (42 U.S.C. §§ 2000d et seq.), which prohibits discrimination on the grounds of race, color, or national origin in any program or activity receiving federal financial assistance.
- Title IX of the Education Amendments of 1972 (20 U.S.C. §§ 1681 et seq.), which prohibits discrimination on the basis of sex in any education program or activity receiving federal financial assistance.
- Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. § 794), which prohibits discrimination on the basis of disability in any program or activity receiving federal financial assistance.
- The Age Discrimination Act of 1975, as amended (42 U.S.C. §§ 6101 et seq.), which prohibits discrimination on the basis of age in any program receiving federal financial assistance.
- The Americans with Disabilities Act of 1990 (42 U.S.C. §§ 12101 et seq.), which prohibits recipients from discriminating on the basis of disability in employment (Title I); State and local government services (Title II); and places of public accommodation and commercial facilities (Title III).
- Parts II and III of E.O. 11246, as amended by E.O. 11375, 11478, 12086, 12107, 13279, 13665, and 13672, which prohibits federal contractors and federally assisted construction contractors and subcontractors, who do over \$10,000 in Government business in one year, from discriminating in employment decisions on the basis of race, color, religion, sex, or national origin and requires that

government contractors take affirmative action to ensure that equal opportunity is provided in all aspects of their employment.

- E.O.13166, "Improving Access to Services for Persons with Limited English Proficiency," which clarifies that national origin discrimination under Title VI includes discrimination on the basis of limited English proficiency (LEP) and requires that the recipient take reasonable steps to ensure that LEP persons have meaningful access to programs and activities.
- Any other applicable non-discrimination law(s).

Generally, Title VII of the Civil Rights Act of 1964, 42 U.S.C. § 2000e et seq, provides that it shall be an unlawful employment practice for an employer to discharge any individual or otherwise to discriminate against an individual with respect to compensation, terms, conditions, or privileges of employment because of such individual's race, color, religion, sex, or national origin. However, Title VII, 42 U.S.C. § 2000e-1(a), expressly exempts from the prohibition against discrimination on the basis of religion, a religious corporation, association, educational institution, or society with respect to the employment of individuals of a particular religion to perform work connected with the carrying on by such corporation, association, educational institution, or society of its activities.

Applicants must ensure that individuals selected as beneficiaries of support under this grant meet the legal requirements consistent with Supreme Court Decisions including *Fisher, Gratz, and Grutter*.

#### **Modifications/Prior Approval**

NRC's prior written approval may be required before a Recipient makes certain budget modifications or undertakes particular activities. If NRC approval is required for changes in the grant or cooperative agreement, it must be requested and obtained from the NRC Grants Officer in advance of the change or obligation of funds. All requests for NRC prior approval, including requests for extensions to the period of performance, must be made, in writing (which includes submission by e-mail), to the designated Grants Officer at least 30 days before the proposed change. The request must be signed by the authorized organizational official. Failure to obtain prior approval, when required, from the NRC Grants Officer, may result in the disallowance of costs, or other enforcement action within NRC's authority.

#### **Lobbying Restrictions**

The Recipient will comply, as applicable, with provisions of the Hatch Act (5 U.S.C. §§ 1501-1508 and 7324-7328) which limits the political activities of employees whose principal employment activities are funded in whole or in part with Federal funds.

The Recipient will comply with provisions of 31 U.S.C § 1352. This provision generally prohibits the use of Federal funds for lobbying in the Executive or Legislative Branches of the Federal Government in connection with the award, and requires disclosure of the use of non-Federal funds for lobbying.

The Recipient shall submit, at the time of application, a completed "Certification Regarding Lobbying" form, regardless of dollar value.

If applicable, the Recipient receiving in excess of \$100,000.00 in Federal funding shall submit a completed Standard Form (SF-LLL), "Disclosure of Lobbying Activities" for any

persons engaged in lobbying activities, as discussed at 31 U.S. Code § 1352 – Limitation on use of appropriated funds to influence certain Federal contracting and financial transactions. The form concerns the use of non-Federal funds for lobbying within 30 days following the end of the calendar quarter in which there occurs any event that requires disclosure or that materially affects the accuracy of the information contained in any disclosure form previously filed. If the Recipient must submit the SF-LLL, including those received from sub-recipients, contractors, and subcontractors, to the Grants Officer.

**Debarment And Suspension** – (See [2 CFR Part 180](#); [2 CFR § 200.205](#); [2 CFR § 200.113](#); and [2 CFR Part 200, Appendix II](#).)

The Recipient agrees to notify the Grants Officer immediately upon learning that it or any of its principals:

- (1) Are presently excluded or disqualified from covered transactions by any Federal department or agency;
- (2) Have been convicted, within the preceding three-year period preceding this proposal, of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State, or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, tax evasion, receiving stolen property, making false claims, or obstruction of justice; commission of any other offense indicating a lack of business integrity or business honesty that seriously and directly affects the recipient's present responsibility;
- (3) Are presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State, or local) with commission of any of the offenses enumerated in paragraph (1)(b); or
- (4) Have had one or more public transactions (Federal, State, or local) terminated for cause or default within the preceding three years.
- (5) The Recipient agrees that, unless authorized by the Grants Officer, it will not knowingly enter into any subaward or contracts under this grant/cooperative agreement with a person or entity that is not included on the System for Award Management (SAM) (<https://www.sam.gov>).

The Recipient further agrees to include the following provision in any subaward or contracts entered into under this award:

#### Debarment, Suspension, Ineligibility, and Voluntary Exclusion

The Recipient certifies that neither it nor its principals is presently excluded or disqualified from participation in this transaction by any Federal department or agency. The policies and procedures applicable to debarment, suspension, and ineligibility under NRC-financed transactions are set forth [2 CFR Part 180](#) and [2 CFR Part 200](#).

**Drug-Free Workplace**

The Recipient must be in compliance with The Federal Drug Free Workplace Act of 1988. The policies and procedures applicable to violations of these requirements are set forth in [41 U.S.C. §§ 8101-8106](#).

**Implementation of E.O.13224 – Executive Order on Terrorist Financing**

The Recipient is reminded that U.S. Executive Orders and U.S. law prohibits transactions with, and the provision of resources and support to, individuals and organizations associated with terrorism. It is the legal responsibility of the Recipient to ensure compliance with these Executive Orders and laws. This provision must be included in all contracts/sub-awards issued under this grant/cooperative agreement.

The Recipient must comply with E.O. 13224, Blocking Property and Prohibiting Transactions with Persons who Commit, Threaten to Commit, or Support Terrorism. Information about this Executive Order can be found at:

[Implementation of Executive Order 13224 Blocking Property and Prohibiting Transactions With Persons Who Commit, Threaten To Commit, or Support Terrorism amended by E.O. 13268, 13284, and 13372.](#)

**Procurement Standards - 2 CFR §§ 200.318-200.326**

Sections 200.318 - 200.326 set forth standards for use by Recipients in establishing procedures for the procurement of supplies and other expendable property, equipment, real property and other services with Federal funds. These standards are furnished to ensure that such materials and services are obtained in an effective manner and in compliance with the provisions of applicable Federal statutes and executive orders. No additional procurement standards or requirements will be imposed by the Federal awarding agencies upon Recipients, unless specifically required by Federal statute, executive order, or approved by OMB.

**Travel and Transportation**

Travel must be in accordance with the Recipient's Travel Regulations or the U.S. Government Travel Policy and Regulations at: <http://www.gsa.gov/portal/category/21222> and the per diem rates set forth at: <http://www.gsa.gov/portal/content/104877>, absent Recipient's travel regulations. Travel and transportation costs for the grant must be consistent with provisions as established in [2 CFR § 200.473-474](#).

All other travel, domestic or international, must not increase the total estimated award amount for the grant.

The Recipient will comply with the provisions of the Fly America Act (49 U.S.C 40118), as implemented at 41 CFR §§ 301-10.131 through 301-10.143.

Federal funds may not be used to travel to countries identified as "Foreign Policy Restricted Countries", as identified by the U.S. Department of State or the U.S. Agency for International Development.

**Property Standards**

Property standards of this award shall follow provisions as established [2 CFR §§ 200.310-200.316](#).

**Intangible Property**

Intangible and intellectual property of this award shall generally follow provisions established in [2 CFR § 200.315](#).

**Inventions Report** - The Bayh-Dole Act (P.L. 96-517) affords Recipients the right to elect and retain title to inventions they develop with funding under an NRC grant award ("subject inventions"). In accepting an award, the Recipient agrees to comply with applicable NRC policies, the Bayh-Dole Act, and its Government-wide implementing regulations found at Title 37, Code of Federal Regulations (CFR) Part 401. A significant part of the regulations require that the Recipient report all subject inventions to the awarding agency (NRC) as well as include an acknowledgement of federal support in any patents.

**Patent Notification Procedures** - If the NRC or its Recipients, without making a patent search, knows (or has demonstrable reasonable grounds to know) that technology covered by a valid United States patent has been or will be used without a license from the owner, E.O.12889 requires NRC to notify the owner. If the Recipient uses or has used patented technology under this award without license or permission from the owner, the Recipient must notify the Grants Officer. This notice does not imply that the Government authorizes and consents to any copyright or patent infringement occurring under the financial assistance.

**Data, Databases, and Software** - The rights to any work produced or purchased under a NRC federal financial assistance award, such as data, databases or software are determined by [Subpart D](#) of [2 CFR Part 200](#). The Recipient owns any work produced or purchased under a NRC federal financial assistance award subject to NRC's right to obtain, reproduce, publish or otherwise use the work or authorize others to receive, reproduce, publish or otherwise use the data for Government purposes.

**Copyright** - The Recipient may copyright any work produced under a NRC federal financial assistance award subject to NRC's royalty-free nonexclusive and irrevocable right to reproduce, publish or otherwise use the work or authorize others to do so for Government purposes. Works jointly authored by NRC and Recipient employees may be copyrighted, but only the part authored by the Recipient is protected because, under [17 U.S.C. § 105](#), works produced by Government employees are not copyrightable in the United States. On occasion, NRC may ask the Recipient to transfer to NRC its copyright in a particular work when NRC is undertaking the primary dissemination of the work. Ownership of copyright by the Government through assignment is permitted under [17 U.S.C. § 105](#).

**Record Retention and Access**

Recipient shall follow established provisions in [2 CFR §§ 200.333-337](#).

**Conflict Of Interest**

Conflict of Interest standards for this award will follow the Organizational Conflict of Interest (OCOI) requirements set forth in Section 170A of the Atomic Energy Act of 1954, as amended, and provisions set forth at [2 CFR § 200.112](#), Conflict of Interest.

**Dispute Review Procedures**

- a. Any request for review of a notice of termination or other adverse decision should be addressed to the Grants Officer. It must be postmarked or transmitted electronically no later than 30 days after the postmarked date of such termination or adverse decision from the Grants Officer.
- b. The request for review must contain a full statement of the Recipient's position and the pertinent facts and reasons in support of such position.
- c. The Grants Officer will promptly acknowledge receipt of the request for review and shall forward it to the Director, Office of Acquisition Management Division, unless otherwise delegated, who shall appoint an intra-agency Appeal Board to review a recipient appeal of an agency action, if required, which will consist of the program office director, the Deputy Director of Office of Administration, and the Office of General Counsel, or their designees.
- d. Pending resolution of the request for review, the NRC may withhold or defer payments under the award during the review proceedings.
- e. The review committee will request the Grants Officer who issued the notice of termination or adverse action to provide copies of all relevant background materials and documents. The committee may, at its discretion, invite representatives of the Recipient and the NRC program office to discuss pertinent issues and to submit such additional information as it deems appropriate. The chairman of the review committee will insure that all review activities or proceedings are adequately documented.
- f. Based on its review, the committee will prepare its recommendation to the Director, Office of Administration, who will advise the parties concerned of his/her decision.

**Remedies for Noncompliance**

Termination of this award will follow provisions as established and described above in "Dispute Review Process" in [2 CFR §§ 200.338-342](#).

**Performance and Financial Monitoring and Reporting - 2 CFR §§ 200.327-329**

Recipient Financial Management systems must comply with the provisions in [2 CFR § 200.302](#).

- Payment – [2 CFR § 200.305](#)
- Cost Share or Matching – [2 CFR § 200.306](#)
  - Recipients are to be careful with providing excessive cost share or match since at the end of the grant, if the identified match has not been provided, then a portion of the federal share may be required to be returned to the Government.
- Program Income – [2 CFR § 200.307](#)
  - Earned program income, if any, will be added to funds committed to the project by the NRC and Recipient and used to further eligible project or program objectives or be deducted from the total project cost for the grant, as directed by the Grants Officer or indicated in the terms and conditions of the award.
- Revision of Budget and Program Plans – [2 CFR § 200.308](#)

- The Recipient is required to report deviations from the approved budget and program descriptions in accordance with – [2 CFR § 200.308\(b\)](#) and request prior written approval from the Project Officer and the Grants Officer.
  - The Recipient is not authorized to re-budget between direct costs and indirect costs without written prior approval of the Grants Officer.
  - The Recipient is authorized to transfer funds among direct cost categories up to a cumulative 10 percent of the total approved budget. The Recipient is not allowed to transfer funds if the transfer would cause any Federal appropriation to be used for purposes other than those consistent with the original intent of the appropriation.
  - Allowable Costs – [2 CFR §§ 200.403](#)
- See section [2 CFR §§ 200.330-332](#) for Subrecipient Monitoring and Management.

### **FEDERAL FINANCIAL REPORTS**

Federal Financial Reports (SF-425) are semi-annually, for the periods ending March 31 and September 30. Reports are due within 30 calendar days following the end of the reporting period and must be emailed to the Project Officer at the email address indicated in the Notice of Award, and to the Grants Officer at: [Grants\\_FFR.Resource@nrc.gov](mailto:Grants_FFR.Resource@nrc.gov). (NOTE: There is an underscore between Grants and FFR in the email address.) The SF-425 form and instructions are available at the following URL: [http://www.whitehouse.gov/omb/grants\\_forms/](http://www.whitehouse.gov/omb/grants_forms/).

### **PERFORMANCE PROGRESS REPORTS**

The performance (technical) reports indicated below are subject to [2 CFR §200.328](#).

#### **Fellowship Programs**

Performance Progress reports must be submitted annually, for the period ending September 30, or any portion thereof, regardless of the award date. Reports are due within 30 days following the end of each reporting period and must be emailed to the Project Officer at the email address indicated in the Notice of Award, and to the Grants Officer at: [Grants\\_PPR.Resource@nrc.gov](mailto:Grants_PPR.Resource@nrc.gov). (NOTE: There is an underscore between Grants and PPR in the email address.)

Final Reports - The Recipient is required to submit final reports, both Financial (SF-425) and Performance (SF-PPR, SF-PPR-B, SF-PPR-E) within 90 days of the grant expiration. In addition to these reports, a final SF-428, Tangible property report, is also required, if applicable. The final PPR (for Scholarship, Fellowship, and Trade School and Community College Scholarship awards) must include the names of all students with up to date contact information (mailing address, telephone/cell phone, email address). The reports must be emailed to the Project Officer at the email address indicated in the Notice of Award, and to the Grants Officer at: [Grants\\_FFR.Resource@nrc.gov](mailto:Grants_FFR.Resource@nrc.gov) and [Grants\\_PPR.Resource@nrc.gov](mailto:Grants_PPR.Resource@nrc.gov). (NOTE: There is an underscore between Grants and FFR and Grants and PPR in the email addresses.)

For grant awards that are modified to add additional Program Descriptions, the recipient is required to address the applicable grant performance metrics associated with all programs. Further, these metrics should be broken out by individual program (e.g. Program A and Program B). This can be done utilizing Block 10, Performance Narrative, of the SF-PPR form. If this block does not have sufficient space, additional pages will be accepted. Sf-PPR-B and SF-PPR-E should be used to address both programs as well.

### **Period of Performance – 2 CFR § 200.309**

The recipient may charge to the Federal award only allowable costs incurred during the period of performance and any costs incurred before the NRC or pass-through entity made the Federal award that was authorized by the NRC or pass through entity.

Unless otherwise authorized in [2 CFR Part 200](#) or by special award condition, any extension of the award period can only be authorized by the Grants Officer in writing. Assurances of funding from other than the Grants Officer shall not constitute authority to obligate funds for programmatic activities beyond the expiration date.

The NRC Grant Officer may authorize a no cost extension of the period of performance. The recipient must submit a no cost extension request no less than 30 days prior to the award end date. Any request for a no cost extension after the grant has expired will not be approved. However, the NRC has no obligation to provide any additional prospective or incremental funding. Any modification of the award to increase funding and/or to extend the period of performance is at the sole discretion of the NRC.

### **Automated Standard Application For Payments (ASAP) Procedures**

Unless otherwise stated, Recipient payments are made using the Department of Treasury's Automated Standard Application for Payment (ASAP) system, [ASAP.gov](#), through preauthorized electronic funds transfers. To receive payments, Recipients are required to enroll with the Department of Treasury, Financial Management Service, and Regional Financial Centers, which allows them to use the on-line method of withdrawing funds from their ASAP established accounts. The following information is required to make ASAP withdrawals: (1) ASAP account number – the award number found on the cover sheet of the award; (2) Agency Location Code (ALC) – 31000001; and Region Code. Recipients enrolled in the ASAP system do not need to submit a "Request for Advance or Reimbursement" (SF-270).

## **II. Audit Requirements**

### **Audits**

Organization-wide or program-specific audits are performed in accordance with the Single Audit Act of 1996, as amended, and as implemented by [2 CFR Part 200, Subpart F—AUDIT REQUIREMENTS](#). Recipients are subject to the provisions of this subpart if they expend \$750,000 or more in a year in Federal awards. See [2 CFR 200.501](#).

The Form SF-SAC and the Single Audit Reporting packages for fiscal periods ending on or after January 1, 2008 are submitted online, as follows:

1. Create the recipient's online report ID at:  
<http://harvester.census.gov/fac/collect/ddeindex.html>;

2. Complete the Form SF-SAC;
3. Upload the Single Audit;
4. Certify the Submission; and
5. Click "Submit."

Organizations expending less than \$750,000 a year are not required to have an annual audit for that year but must make their grant-related records available to NRC or other designated officials for review or audit.

### **III. Programmatic Requirements**

The recipient is responsible for providing documentation to the NRC that tracks each student's progress in achievement of the academic program for which federal funds were provided. This includes: (1) ensuring the service agreement is signed by the student prior to providing support; (2) providing the NRC with student contact information upon student entry into the program, upon completion or withdrawal from the program, and upon request by the NRC; and (3) monitoring the student's fulfillment of the service agreement for the duration of the award. The NRC shall be notified immediately if a student is not fulfilling the academic program or the service agreement.

#### **Grant Performance Metrics**

The Office of Management and Budget requires all Federal Agencies providing funding for educational scholarships and fellowships as well as other educational related funding to report on specific metrics. These metrics are part of the Academic Competitiveness Council's (ACC) 2007 report and specifically relates to Science, Technology, Engineering, and Mathematics (STEM) curricula.

As part of the OMB requirements indicated above (for metric reporting), the recipient shall address the following questions and submit responses with the required progress reports:

#### **Fellowship Metrics:**

1. How many graduate students have been sponsored by NRC funding?
  - a. Response is the number of students, for this reporting period and cumulative to the grant.
2. How many students, supported by NRC funding, have received M.S. or equivalent degrees?
  - a. Response is the number of students, for this reporting period and cumulative to the grant.
3. How many students, supported by NRC funding, have received Ph.D. or equivalent degrees?
  - a. Response is the number of students, for this reporting period and cumulative to the grant.
4. How many students, supported by NRC funding, have accepted a job and are employed in the nuclear industry?
  - a. Response is the number of students, for this reporting period and cumulative to the grant.

5. How many items have students produced, for example, Professional Journal articles, publications, patents, or conference reports?
  - a. Response is the type and number of items (not a bibliography), for this reporting period and cumulative to the grant.

As part of the PPR, include the following information for each student supported under this award:

1. Student Name
2. Years of Support
3. Cumulative Support in Dollars
4. Estimated Graduation Date
5. Status
6. Up to date student contact information (mailing address, telephone/cell phone, email address) for students no longer participating in the program, i.e. transferred programs, graduated, withdrew, etc.
7. Up to date student contact information, for all students at time of grant expiration, i.e. Final PPR.

Examples of status could be:

“Employed in Nuclear Industry”, if so, where;

“Looking for employment”, if so, how long;

“Deferred due to continuing education”, if so, what degree;

“Employed by Non-Nuclear”, if so, where; and

“Dropped out of program”

### **Unsatisfactory Performance**

Failure to perform the work in accordance with the terms of the award and maintain at least a satisfactory performance rating may result in designation of the Recipient as high risk and the assignment of special award conditions. Further action may be required as specified in the standard term and condition entitled “Remedies for Noncompliance.”

Failure to comply with the award provisions may result in a negative impact on future NRC funding. In addition, the Grants Officer may withhold payments; change the method of payment from advance to reimbursement; impose special award conditions; suspend or terminate the grant.

### **Other Federal Awards With Similar Programmatic Activities**

The Recipient will immediately notify the Project Officer and the Grants Officer in writing if after award, other financial assistance is received to support or fund any portion of the program description stated in the NRC award. NRC will not pay for costs that are funded by other sources.

### **Prohibition Against Assignment By The Recipient**

The Recipient will not transfer, pledge, mortgage, or otherwise assign the award, or any interest to the award, or any claim arising under the award, to any party, banks, trust companies, or other financing or financial institutions without the written approval of the Grants Officer.

**Site Visits**

The NRC, through authorized representatives, has the right to make site visits to review project accomplishments and management control systems and to provide technical assistance as required. If any site visit is made by the NRC on the premises of the Recipient or contractor under an award, the Recipient shall provide and shall require his/her contractors to provide reasonable access to all facilities and provide necessary assistance for the safety and convenience of the Government representative in the performance of his/her official duties.

**IV. Additional Requirements****Criminal and Prohibited Activities**

The Program Fraud Civil Remedies Act ([31 U.S.C. §§ 3801-3812](#)), provides for the imposition of civil penalties against persons who make false, fictitious, or fraudulent claims to the Federal government for money (including money representing grant/cooperative agreements, loans, or other benefits).

False statements ([18 U.S.C. § 287](#)), provides that whoever makes or presents any false, fictitious, or fraudulent statements, representations, or claims against the United States shall be subject to imprisonment of not more than five years and shall be subject to a fine in the amount provided by 18 USC §287.

False Claims Act ([31 U.S.C. § 3729 et seq.](#)), provides that suits under this Act can be brought by the government, or a person on behalf of the government, for false claims under federal assistance programs.

Copeland "Anti-Kickback" Act ([18 U.S.C. § 874](#)), prohibits a person or organization engaged in a federally supported project from enticing an employee working on the project from giving up a part of his compensation under an employment contract.

**American-Made Equipment and Products**

Recipients are encouraged to purchase American-made equipment and products with funding provided under this award.

**Increasing Seat Belt Use in the United States**

E.O. 13043, amended by E.O. 13652, requires Recipients to encourage employees and contractors to enforce on-the-job seat belt policies and programs when operating company-owned, rented or personally-owned vehicle.

**Federal Leadership of Reducing Text Messaging While Driving**

E.O. 13513 requires Recipients to encourage employees, sub-awardees, and contractors to adopt and enforce policies that ban text messaging while driving company-owned, rented vehicles or privately owned vehicles when on official Government business or when performing any work for or on behalf of the Federal Government.

**Federal Employee Expenses**

Federal agencies are barred from accepting funds from a Recipient to pay transportation, travel, or other expenses for any Federal employee unless specifically approved in the terms of the award. Use of award funds (Federal or non-Federal) or the Recipient's

provision of in-kind goods or services, for the purposes of transportation, travel, or any other expenses for any Federal employee may raise appropriation augmentation issues. In addition, NRC policy prohibits the acceptance of gifts, including travel payments for Federal employees, from Recipients or applicants regardless of the source.

### **Minority Serving Institutions (MSIs) Initiative**

Pursuant to E.O.s 13230 and 13270, [amended by E.O. 13316](#) and [13385](#), 13532, 13592, 13555, 13515, and 13621, NRC is strongly committed to broadening the participation of MSIs in its financial assistance program. NRC's goals include achieving full participation of MSIs in order to advance the development of human potential, strengthen the Nation's capacity to provide high-quality education, and increase opportunities for MSIs to participate in and benefit from Federal financial assistance programs. NRC encourages all applicants and Recipients to include meaningful participations of MSIs. Institutions eligible to be considered MSIs are listed on the Department of Education website:

<http://www.ed.gov/about/offices/list/ocr/edlite-minorityinst.html>

### **Research Misconduct**

Scientific or research misconduct refers to the fabrication, falsification, or plagiarism in proposing, performing, or reviewing research, or in reporting research results. It does not include honest errors or differences of opinions. The Recipient organization has the primary responsibility to investigate allegations and provide reports to the Federal Government. Funds expended on an activity that is determined to be invalid or unreliable because of scientific misconduct may result in a disallowance of costs for which the institution may be liable for repayment to the awarding agency. The Office of Science and Technology Policy at the White House published in the Federal Register on December 6, 2000, a final policy that addressed research misconduct. The policy was developed by the National Science and Technology Council ([65 FR 76260](#)). The NRC requires that any allegation be submitted to the Grants Officer, who will also notify the OIG of such allegation. Generally, the Recipient organization shall investigate the allegation and submit its findings to the Grants Officer. The NRC may accept the Recipient's findings or proceed with its own investigation. The Grants Officer shall inform the Recipient of the NRC's final determination.

### **Publications, Videos, and Acknowledgment of Sponsorship**

Publication of the results or findings of a research project in appropriate professional journals and production of video or other media is encouraged as an important method of recording and reporting scientific information. It is also a constructive means to expand access to federally funded research. The Recipient is required to submit a copy to the NRC and when releasing information related to a funded project include a statement that the project or effort undertaken was or is sponsored by the NRC. The Recipient is also responsible for assuring that every publication of material (including Internet sites and videos) based on or developed under an award, except scientific articles or papers appearing in scientific, technical or professional journals, contains the following disclaimer:

"This **[report/video]** was prepared by **[Recipient name]** under award **[number]** from **[name of operating unit]**, Nuclear Regulatory Commission. The statements, findings, conclusions, and recommendations are those of the author(s) and do not necessarily reflect the view of the **[name of operating unit]** or the US Nuclear Regulatory Commission."

**Trafficking In Victims Protection Act Of 2000 (as amended by the Trafficking Victims Protection Reauthorization Act of 2003)**

Section 106(g) of the Trafficking In Victims Protection Act Of 2000 (as amended as amended, directs on a government-wide basis that:

“...any grant, contract, or cooperative agreement provided or entered into by a Federal department or agency under which funds are to be provided to a private entity, in whole or in part, shall include a condition that authorizes the department or agency to terminate the grant, contract, or cooperative agreement, without penalty, if the recipient or any subrecipient, or the contractor or any subcontractor (i) engages in severe forms of trafficking in persons or has procured a commercial sex act during the period of time that the grant, contract, or cooperative agreement is in effect, or (ii) uses forced labor in the performance of the grant, contract, or cooperative agreement.” (See 22 U.S.C. §7104(g).)

**EXECUTIVE COMPENSATION REPORTING**

2 CFR § 170.220 directs agencies to include the following text to each grant award to a non-federal entity if the total funding is \$25,000 or more in Federal funding.

Reporting Subawards and Executive Compensation.

*a. Reporting of first-tier subawards.*

1. *Applicability.* Unless you are exempt as provided in paragraph d. of this award term, you must report each action that obligates \$25,000.00 or more in Federal funds that does not include Recovery funds (as defined in section 1512(a)(2) of the American Recovery and Reinvestment Act of 2009, Pub. L. 111–5) for a subaward to an entity (see definitions in paragraph e. of this award term).

2. *Where and when to report.*

i. You must report each obligating action described in paragraph a.1. of this award term to <http://www.fsrs.gov>.

ii. For subaward information, report no later than the end of the month following the month in which the obligation was made. (For example, if the obligation was made on November 7, 2010, the obligation must be reported by no later than December 31, 2010.)

3. *What to report.* You must report the information about each obligating action that the submission instructions posted at <http://www.fsrs.gov> specify.

*b. Reporting Total Compensation of Recipient Executives.*

1. *Applicability and what to report.* You must report total compensation for each of your five most highly compensated executives for the preceding completed fiscal year, if—

i. the total Federal funding authorized to date under this award is \$25,000.00 or more;

ii. in the preceding fiscal year, you received—

(A) 80 percent or more of your annual gross revenues from Federal procurement contracts (and subcontracts) and Federal financial assistance subject to the Transparency Act, as defined at [2 CFR § 170.320](#) (and subawards); and

(B) \$25,000,000 or more in annual gross revenues from Federal procurement contracts (and subcontracts) and Federal financial assistance subject to the Transparency Act, as defined at [2 CFR § 170.320](#) (and subawards); and

iii. The public does not have access to information about the compensation of the executives through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a), 78o(d)) or section 6104 of the Internal Revenue Code of 1986. (To determine if the public has access to the compensation information, see the U.S. Security and Exchange Commission total compensation filings at <http://www.sec.gov/answers/execomp.htm>.)

2. *Where and when to report.* You must report executive total compensation described in paragraph b.1. of this award term:

i. As part of your registration profile at <http://www.sam.gov>.

ii. By the end of the month following the month in which this award is made, and annually thereafter.

c. *Reporting of Total Compensation of Subrecipient Executives.*

1. *Applicability and what to report.* Unless you are exempt as provided in paragraph d. of this award term, for each first-tier subrecipient under this award, you shall report the names and total compensation of each of the subrecipient's five most highly compensated executives for the subrecipient's preceding completed fiscal year, if—

i. in the subrecipient's preceding fiscal year, the subrecipient received—

(A) 80 percent or more of its annual gross revenues from Federal procurement contracts (and subcontracts) and Federal financial assistance subject to the Transparency Act, as defined at [2 CFR § 170.320](#) (and subawards); and

(B) \$25,000,000 or more in annual gross revenues from Federal procurement contracts (and subcontracts), and Federal financial assistance subject to the Transparency Act (and subawards); and

ii. The public does not have access to information about the compensation of the executives through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a), 78o(d)) or section 6104 of the Internal Revenue Code of 1986. (To determine if the public has access to the compensation information, see the U.S. Security and Exchange Commission total compensation filings at <http://www.sec.gov/answers/execomp.htm>.)

2. *Where and when to report.* You must report subrecipient executive total compensation described in paragraph c.1. of this award term:

i. To the recipient.

ii. By the end of the month following the month during which you make the subaward. For example, if a subaward is obligated on any date during the month of October of a given year (*i.e.*, between October 1 and 31), you must report any required compensation information of the subrecipient by November 30 of that year.

d. *Exemptions*

If, in the previous tax year, you had gross income, from all sources, under \$300,000.00, you are exempt from the requirements to report:

i. Subawards,

and

ii. The total compensation of the five most highly compensated executives of any subrecipient.

e. *Definitions*. For purposes of this award term:

1. *Entity* means all of the following, as defined in 2 CFR Part 25:

i. A Governmental organization, which is a State, local government, or Indian tribe;

ii. A foreign public entity;

iii. A domestic or foreign nonprofit organization;

iv. A domestic or foreign for-profit organization;

v. A Federal agency, but only as a subrecipient under an award or subaward to a non-Federal entity.

2. *Executive* means officers, managing partners, or any other employees in management positions.

3. *Subaward*:

i. This term means a legal instrument to provide support for the performance of any portion of the substantive project or program for which you received this award and that you as the recipient award to an eligible subrecipient.

ii. The term does not include your procurement of property and services needed to carry out the project or program (for further explanation, see Sec. \_\_ .210 of the attachment to OMB Circular A-133, "Audits of States, Local Governments, and Non-Profit Organizations")

iii. A subaward may be provided through any legal agreement, including an agreement that you or a subrecipient considers a contract.

4. *Subrecipient* means an entity that:

i. Receives a subaward from you (the recipient) under this award; and

ii. Is accountable to you for the use of the Federal funds provided by the subaward.

5. *Total compensation* means the cash and noncash dollar value earned by the executive during the recipient's or subrecipient's preceding fiscal year and includes the following (for more information see [17 CFR § 229.402\(c\)\(2\)](#)):

i. *Salary and bonus.*

ii. *Awards of stock, stock options, and stock appreciation rights.* Use the dollar amount recognized for financial statement reporting purposes with respect to the fiscal year in accordance with the Statement of Financial Accounting Standards No. 123 (Revised 2004) (FAS 123R), Shared Based Payments.

iii. *Earnings for services under non-equity incentive plans.* This does not include group life, health, hospitalization or medical reimbursement plans that do not discriminate in favor of executives, and are available generally to all salaried employees.

iv. *Change in pension value.* This is the change in present value of defined benefit and actuarial pension plans.

v. *Above-market earnings on deferred compensation which is not tax-qualified.*

vi. Other compensation, if the aggregate value of all such other compensation (e.g., severance, termination payments, value of life insurance paid on behalf of the employee, perquisites or property) for the executive exceeds \$10,000.00.