

NATIONAL SCIENCE FOUNDATION
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**OFFICE OF
INSPECTOR GENERAL**

MEMORANDUM

DATE: March 25, 2011

TO: Martha A. Rubenstein
Director and Chief Financial Officer
Office of Budget, Finance, and Award Management (BFA/OAD)

FROM: Dr. Brett M. Baker /s/
Assistant Inspector General for Audit

SUBJECT: Limited Scope Review of Recovery Act Quarterly Reporting Processes –
Institute of Global Environment and Society, OIG Report No. 11-1-006

As part of our oversight responsibilities, the Office of Inspector General (OIG) has conducted reviews of institutions that have received National Science Foundation (NSF) grants funded by the American Recovery and Reinvestment Act (ARRA or Recovery Act) to assess the overall quality of required quarterly reporting. Such quarterly reports contain detailed information on ARRA projects and activities and are the primary means for keeping the public informed about the way funds are spent and the outcomes that are achieved. Our review objectives were to determine whether the Institute of Global Environment and Society (IGES or the Institute) had established an adequate system of internal controls to provide reasonable assurance that (1) Recovery Act funds were segregated and separately tracked in its project cost accounting system and (2) quarterly reporting was timely, accurate, and fully compliant with Section 1512 ARRA reporting requirements. Detailed description of background, objectives, scope, and methodology can be found in Appendix A.

Results of Review

Our review found that IGES had properly segregated the \$7.2 million in NSF funds awarded for its single ARRA grant in its accounting system and submitted Recovery Act quarterly reports in a timely manner. However, the Institute lacked a thorough understanding of the intricacies of ARRA reporting requirements to ensure the most complete and accurate data is reported and fully compliant with Section 1512

requirements. As a result, our review of the March and June 2010 quarterly reports disclosed that five of the eight data elements we reviewed were correctly reported while the other three data elements were incorrectly reported. Specifically, IGES accurately reported the following five data elements: funds received/invoiced, sub-award amounts, quarterly activities/project description, project status, and final report status. However, the Institute had not established adequate processes to accurately report the number of ARRA jobs, vendor payments, and expenditures. In addition, IGES needed to improve its process for checking the suspension and debarment status of vendors for ARRA grants.

The exceptions identified during our review occurred primarily due to a lack of comprehensive understanding of the OMB reporting requirements. Given the volume and complexity of the OMB guidance, the last minute changes to the guidance each quarter, and the volume of ARRA data required to be reported within 10 days after the end of each quarter, this was understandably a difficult process for any ARRA grant recipient. As a small recipient with only a single Recovery Act award and no additional personnel to handle the increased responsibility of reading, interpreting, and properly applying the reporting guidance, this was undoubtedly a daunting challenge.

Nevertheless, given the unprecedented Recovery Act accountability and transparency goals, the development of effective processes for ensuring ARRA data quality are critical factors for fulfilling the Institute's responsibilities under its NSF award agreement. Without complete and accurate reporting of ARRA project information and activities, the public and other stakeholders cannot clearly determine whether Recovery Act funds are being spent as intended, thus undermining the integrity of the stimulus funding and refuting its promise of increased accountability and transparency.

A draft of this memorandum was provided to IGES management for its review and comment. In addition, a written outline of the review results was presented to management at the completion of our onsite review work so that timely actions could be taken to implement improvements needed to promote the highest degree of transparency and accountability over Recovery Act funds. IGES generally agreed that the audit findings were factually accurate and has taken actions to implement all audit recommendations. However, the Institute did not agree that the ARRA reporting errors we identified were caused by a lack of thorough understanding of federal reporting requirements. Rather, it believed that the three key ARRA data elements incorrectly reported were caused by "relatively minor procedural errors." We have provided our response to IGES' comments in this regard after recommendation 1.2a to reaffirm our audit conclusion. The Institute's written comments in their entirety are included in Appendix B.

To help ensure the recommendations are resolved within six months of audit report issuance pursuant to Office of Management and Budget Circular A-50, please provide the audit resolution memorandum for our review when NSF has received an acceptable IGES Corrective Action Plan. Each audit recommendation should not be closed until NSF, in coordination with the audit oversight agency, the National

Aeronautics and Space Administration (NASA), determines that IGES has adequately addressed the recommendations and proposed corrective actions have been satisfactorily implemented. Please note that we have sent a copy of the audit report under separate cover to Ms. Debra Pettitt, NASA-OIG.

We appreciate the cooperation that was extended to us during our review. If you have any questions, please free to contact Joyce Werking at extension 8097 or Kenneth Lish at extension 5004.

cc: Mary Santonastasso, Division Director, DIAS
Dale Bell, Deputy Division Director, DIAS
Alex Wynnyk, Branch Chief, CAAR/DIAS
Debra Pettitt, Deputy Assistant Inspector General for Audits, NASA

Audit Findings and Recommendations

1. Improvements Needed in Reporting of ARRA Jobs, Vendor Payments, and Expenditures

IGES incorrectly reported three of the eight data elements we reviewed in its March and June 2010 quarterly ARRA reports. For the March reporting period, the Institute did not correctly report the number of jobs, vendor payments, and expenditures. The reporting errors for the number of jobs and vendor payments continued into the June 2010 reporting period.

Job Estimates Reported Need to Be Complete and Accurate

Section 5.2.2 of OMB Memorandum M-10-08¹ requires prime recipients to estimate the total number of jobs funded or paid for by Recovery Act funding in each reporting period. In addition, section 5.7 requires recipients to generate estimates of jobs impact by directly collecting specific data from subrecipients and vendors on the total jobs created or retained by ARRA-funded projects and activities.

Contrary to the OMB requirements, IGES incorrectly reported the jobs numbers in the March and June 2010 ARRA reports because it did not calculate estimates using the “jobs funded/ paid” methodology and did not include vendor jobs. Specifically, the Institute mistakenly reported jobs based on the budgeted instead of actual number of hours each employee worked on the ARRA grant. As a result, IGES over-reported jobs by 1.78 full-time equivalents (FTE) in March 2010 and under-reported jobs by 1.24 FTEs in June 2010, or 37 percent and 18 percent, respectively.

In addition, IGES had not established a process for obtaining job estimates from vendors because officials were not aware of this specific OMB reporting requirement. As of June 30, 2010, the Institute had not requested any jobs reporting for 27 vendor payments totaling \$70,130. While our review disclosed that these vendor payments likely did not result in any ARRA jobs required to be reported, it is nevertheless important for IGES to establish appropriate processes to be fully compliant with OMB requirements to ensure any future vendor jobs are properly reported.

¹ OMB Memorandum M-10-08, *Updated Guidance on the American Recovery and Reinvestment Act – Data Quality, Non-Reporting Recipients, and Reporting of Job Estimates*, issued December 18, 2009.

Vendor Payments Need To Be Accurately Reported

Section 2.4 of OMB Memorandum M-09-21² requires prime recipients to report on a cumulative basis the total number and dollar of vendor payments under \$25,000 in each quarterly report. However, IGES did not report its vendor payment information on a cumulative basis, but mistakenly reported the data on a quarterly basis. As a result, the Institute under-reported six vendor payments totaling \$9,037 in the March 2010 report and under-reported 23 payments totaling \$65,956 in the June 2010 report.³

ARRA Expenditures Reported Need To Be Accurate

Section 4.2 of OMB Memorandum M-09-21 states “Prime recipients, as owners of the data submitted, have the principal responsibility for the quality of the information submitted.” Specifically, the prime recipient is responsible for (a) implementing internal control measures to ensure accurate and complete information and (b) performing data quality reviews to identify reporting errors and making appropriate and timely corrections. However, IGES did not establish a sufficient data quality review process to ensure all ARRA data elements were accurate and complete. As a result, ARRA expenditures in the March 2010 report were under-reported by \$885 due to a human error in posting the information into the quarterly report template.

Increased Public Scrutiny on the Use of Recovery Act Funds

As a result of the errors identified in the three key ARRA data fields, IGES had not effectively achieved the unprecedented accountability and transparency goals required by the Recovery Act. While the Institute only has one ARRA grant, the award totaling \$7.2 million is a significant amount of its NSF funding, thus it is essential that the American public and other stakeholders be provided accurate information on the number of ARRA jobs created or retained, vendor payments, and the total amount of funds expended. Pursuant to its NSF grant terms and conditions, IGES is obligated to provide accurate and complete reporting each quarter on how ARRA funds are utilized to help stimulate the country's economic recovery.

Factors Contributing to ARRA Reporting Errors

These reporting errors occurred because IGES lacked (i) a thorough understanding of the intricacies of federal ARRA reporting requirements, (ii) formal established procedures for key ARRA reporting fields, and (iii) an adequate data quality review process to preclude reporting errors. According to cognizant IGES officials, the volume and vagueness of OMB reporting guidance were obstacles for developing a

² OMB Memorandum M-09-21, *Implementing Guidance for the Reports on Use of Funds Pursuant to the American Recovery and Reinvestment Act of 2009*, issued June 22, 2009.

³ For the June 2010 quarter, IGES corrected the vendor payments error during the continuous correction period. However, IGES was not able to correct the vendor payments error for March 2010 because the continuous correction period had already closed for that quarter.

proficiency in ARRA reporting. As a small recipient, officials were faced with the challenge of how to handle the increased responsibility of reading, interpreting, and correctly applying the extensive OMB and supplemental NSF ARRA reporting guidance without any additional grants management staff.

Although the Institute had developed basic ARRA policies and procedures, it lacked formal guidance for reporting and complying with key ARRA grant requirements. Since IGES has only one ARRA award, it is not expected that the Institute would develop extensive policies and procedures for compiling and reporting ARRA data. However, there does need to be some guidance, albeit limited guidance, added to provide adequate internal control measures to meet the enhanced Recovery Act accountability and transparency goals.

Furthermore, IGES' independent review process for its quarterly ARRA report was not complete and comprehensive because the reviewer only checked for blank fields and "obvious errors" in the report template. Without validating the reported data fields to source documentation maintained in its ARRA files, the IGES review process lacked assurance that the calculations made were correct or that there were no transposition errors that occurred while posting the data.

Recommendations:

We recommend that the NSF Director of the Division of Institution and Award Support, coordinate with the cognizant audit agency, as needed, to require IGES to:

1.1 Establish and implement a policy to ensure staff members responsible for ARRA reporting stay informed of OMB and NSF changes and updates to Recovery Act reporting requirements and seek OMB and/or NSF technical assistance for clarification of any ambiguities.

Institute of Global Environment and Society Response:

IGES concurred with the recommendation and stated a policy has been created to ensure staff review changes and updates to ARRA reporting requirements one month prior to the due date for quarterly reporting.

OIG Comments:

IGES' response met the intent of the recommendation. However, the Institute should note that in the past, some OMB and NSF guidance was updated only one or two weeks prior to the end of the ARRA reporting quarter. Thus, IGES needs to ensure staff check for last minute changes and updates to the Recovery Act reporting requirements.

1.2 Improve its internal controls for ARRA reporting as follows:

- a. Develop policies and procedures covering key aspects of ARRA reporting. At a minimum, such guidance should include processes for ARRA jobs reporting, including vendor job estimates, and cumulative reporting of vendor payments.

Institute of Global Environment and Society Response:

IGES concurred with the recommendation and stated that it has already developed ARRA reporting policies and procedures. However, officials disagreed with our audit conclusion that the Institute lacked a thorough understanding of the intricacies of federal ARRA reporting requirements. Rather, IGES believed that “relatively minor procedural errors were responsible for the errors in the reports.”

OIG Comments:

Although IGES disagreed with certain aspects of the audit finding, the Institute’s actions taken to develop and implement formal ARRA reporting policies and procedures are fully responsive to our recommendation. Such written guidance will help ensure accurate, complete, and compliant Recovery Act reporting in the future.

With regards to the Institute’s position that the ARRA reporting errors identified were caused by “relatively minor procedural errors” and not a lack of thorough understanding of the OMB reporting requirements, we reiterate that it is the responsibility of the prime grant recipient to ensure the reported data was accurate. As such, sound internal controls required IGES to establish written procedures for compliant ARRA reporting and adequate monitoring to ensure the established procedures were correctly implemented. However, our review disclosed that IGES lacked sufficient written procedures to ensure compliant ARRA reporting. Without such guidance, it incorrectly reported Recovery Act jobs and vendor payments. Therefore, we reaffirm our conclusion that these “procedural errors” occurred because of a lack of comprehensive understanding of the federal ARRA reporting requirements.

- b. Establish a formal data quality review process to ensure ARRA quarterly reports are accurate, complete, and fully compliant with OMB reporting requirements.

Institute of Global Environment and Society Response:

IGES concurred with the recommendation and stated that a formal data quality process has been instituted.

OIG Comments:

IGES' actions taken are responsive to the recommendation.

2. Procedures Needed for Ensuring ARRA Vendors Are Not Suspended or Debarred

OMB federal grant regulations⁴ and NSF terms and conditions restrict grant recipient sub-awards and contracts to certain parties that are debarred, suspended, or otherwise excluded from participating in federal assistance programs or activities. Accordingly, for contracts over \$25,000 and all sub-awards, prime recipients are required to check the entity's Excluded Parties List System (EPLS)⁵ status or obtain a certification from the entity regarding its EPLS status and that of its principal employees prior to contract award.

However, IGES had not established a process to check the entity's EPLS status or obtain the entity's EPLS certification. While the Institute did not have any ARRA vendor contracts over \$25,000 at the time of our review, the lack of procedures for consistently performing such checks increases the risk that ARRA funds could be potentially awarded to debarred or suspended parties in the future.

Verifying EPLS status is imperative as the credibility and integrity of Recovery Act projects, as well as other projects funded by NSF, can be compromised if business is being conducted with persons and/or entities debarred or suspended. Given the unprecedented accountability goals of the Recovery Act, such a risk is not acceptable. This control weakness occurred because IGES officials were unfamiliar with the specific requirements to check the entity's EPLS status or obtain certifications for vendor contracts over \$25,000 and all subawards prior to contract award.

⁴ 2 CFR Part 215.13, *Debarment and suspension, Uniform Administrative Requirements for Grants and Agreements with Institutions of Higher Education, Hospitals, and Other Non-profit Organizations* (Formerly OMB Circular A-110).

⁵ EPLS provides a single comprehensive list of individuals and firms excluded by federal government agencies from receiving federal contracts, federally-approved subcontracts, and certain types of federal financial and nonfinancial assistance programs.

Recommendation:

2. We recommend that the NSF Director of the Division of Institution and Award Support, coordinate with the cognizant audit agency, as needed, to require IGES to establish formal procedures requiring that the EPLS be reviewed and the status documented for all vendor contracts over \$25,000.

Institute of Global Environment and Society Response:

IGES has established and implemented a procedure for checking EPLS vendor debarment status as part of its standard procurement sequence. Therefore, the Institute disagreed with the recommendation; stating it had already been implemented.

OIG Comments:

IGES' actions taken are responsive to the audit recommendation. However, the recommendation remains open until NSF determines during the formal audit resolution process whether IGES corrective actions taken are appropriate. Therefore, the Institute should provide NSF with documentation of its revised procedure on the subject matter as part of its Corrective Action Plan.

Background, Objectives, Scope, and Methodology

Background:

Recovery Act Reporting Requirements:

On February 17, 2009, the American Recovery and Reinvestment Act of 2009 (Recovery Act or ARRA) was enacted to help the nation recover from a severe economic downturn. The Recovery Act emphasizes unprecedented levels of accountability and transparency over the \$787 billion of public funds committed by Congress, of which \$3 billion was received by NSF. The public expects that the use of ARRA funds will result in a positive impact to our nation's economy, including jobs creation and retention. Accordingly, Section 1512 of the Recovery Act requires recipients to submit reports on ARRA activity no later than 10 days after the end of each reporting quarter. The first ARRA quarterly report was required to be submitted for the period ending September 30, 2009.

ARRA reporting instructions are contained in the Office of Management and Budget (OMB) guidance. OMB is the primary agency responsible for providing Section 1512 reporting guidance used by federal agencies, grant recipients, and grant subrecipients. The federal guidance clearly establishes that recipients have primary responsibility for the quality of the data submitted. In addition, NSF issued supplemental guidance to its recipients for ARRA reporting.

OMB published a Recipient Reporting Data Model to define the 99 data elements required to be reported for each ARRA grant on June 22, 2009. Clarifications to the elements were published by OMB as a set of *Frequently Asked Questions* with extensive updates published to address both recipient and federal agency concerns; many of which were issued only a short time prior to the end of each ARRA reporting quarter. Some of the key data elements required to be reported include award number; quarterly award activities; funds received/invoiced; award expenditures; funds received/invoiced; number of and description of jobs created or retained; number and dollar of sub-awards and vendor payments; project status; and final report indicator.

NSF Recipient Information:

The Institute of Global Environment and Society, Inc, (IGES) is a non-profit, tax exempt research institute, incorporated in the State of Maryland. The Institute was established to improve the understanding and prediction of the variation of the Earth's climate through scientific research on climate variability and predictability. IGES has received federal grants from NSF, National Oceanic and Atmospheric Administration⁶ (NOAA), and National Aeronautics and Space Administration (NASA) to fund a

⁶ NOAA is an agency within the U. S. Department of Commerce.

multi-year basic research project for a team of scientists working together at its Center for Ocean-Land-Atmosphere Studies (COLA) on the basic problem of the predictability of the present climate. With continuing multi-agency support, COLA has become a national center of excellence for research on climate variability and predictability.

The Institute has been awarded one NSF ARRA grant for \$7.2 million, which accounted for almost half of its total NSF grant portfolio of seven awards totaling \$15.7 million. As of June 30, 2010, ARRA expenditures totaled \$731,340 (10.2 percent of ARRA funding). IGES had neither issued nor received any ARRA sub-awards funded by NSF at the time of our review.

Review Objectives:

Our review objectives were to determine whether IGES had established an adequate system of internal controls to provide reasonable assurance that (1) Recovery Act funds were segregated and separately tracked in its project cost accounting system and (2) quarterly reporting was timely, accurate, and fully compliant with Section 1512 reporting requirements.

Scope and Methodology:

Our review focused on IGES' March 2010 ARRA report, but included review of its June 2010 report to assess the organization's progress and improvements made in reporting processes. We reviewed the organization's processes for compiling and reporting Recovery Act data elements. Of the 99 data fields required to be reported for each ARRA grant, we selected key data elements that were either deemed critical to ensuring transparency or that were considered more at risk of being reported inconsistently or inaccurately. Accordingly, our review focused on the following eight data elements: the number of jobs created or retained, funds received/invoiced, expenditures, vendor payments, sub-award amounts, quarterly activities/project description, project status indicator, and final report status. To gain an understanding of IGES' processes for compiling and reporting of the ARRA data elements, we conducted a limited review of internal controls related to our audit objectives. Our review included the following steps:

- Reviewed criteria for ARRA reporting including Section 1512 of the Recovery Act and OMB and NSF guidance.
- Reviewed IGES policies, procedures, and processes for collecting, compiling, reviewing, and reporting ARRA data.
- Interviewed cognizant IGES officials, including Principal Investigators, to gain an understanding of their role in the ARRA project management and reporting process.

- Performed analytical procedures to understand and evaluate IGES' Recovery Act reporting processes and related controls. This included the process for reporting quarterly activities/project description, project status, and final report status indicator; and ensuring ARRA funds were not awarded to debarred or suspended parties.
- Performed non-statistical sampling procedures to determine the reasonableness of the reported data elements when compared to supporting documentation for funds received/invoiced, expenditures, vendor payments, and sub-award amounts.
- Reconciled the number of jobs created or retained to payroll records to determine the reasonableness of the number of jobs reported for the ARRA grant.
- Discussed fieldwork results with IGES management officials.

The onsite IGES review work was performed from July 12-14, 2010, with additional information obtained through February 2011. We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan the review to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for the findings and conclusions contained in the report.

To obtain a copy of the Auditee Response to this report,

Please contact us at oig@nsf.gov or at (703) 292 7100.

In your request please specify the audit title and report number.