



U.S. ENVIRONMENTAL PROTECTION AGENCY

OFFICE OF INSPECTOR GENERAL

Projected Emission Reductions Overstated and Buy American Requirements Not Met Under EPA Award to the Tennessee Department of Transportation

Report No. 13-R-0321

July 19, 2013



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Report Contributors:

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Abbreviations

CFR	Code of Federal Regulations
DERA	Diesel Emissions Reduction Act
EPA	U.S. Environmental Protection Agency
FAQs	Frequently Asked Questions
FFR	Federal Financial Report
FY	Fiscal Year
NO _x	Nitrogen Oxide
OIG	Office of Inspector General
OMB	Office of Management and Budget
Recovery Act	American Recovery and Reinvestment Act of 2009
RFA	Request for Applications
TDOT	Tennessee Department of Transportation
TSE	Truck Stop Electrification

Cover photo: Truck stop electrification equipment at the North Forty Truck Stop in Holladay, Tennessee. (EPA OIG photo)

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At a Glance

Why We Did This Review

The U.S. Environmental Protection Agency (EPA), Office of Inspector General, reviewed the contracts awarded by the Tennessee Department of Transportation (TDOT) under Cooperative Agreement No. 95425709. The agreement, funded by the Diesel Emissions Reduction Act (DERA) under the American Recovery and Reinvestment Act of 2009 (Recovery Act), provided for the installation of truck stop electrification (TSE) facilities. DERA provides funds for EPA programs to achieve significant reductions in diesel emissions. The purpose of the audit was to determine whether TDOT complied with procurement requirements, monitored contract performance, achieved the objectives of the cooperative agreement, and accurately reported the results to EPA.

This report addresses the following EPA Goal or Cross-Cutting Strategy:

- *Taking action on climate change and improving air quality.*

For further information, contact our Office of Congressional and Public Affairs at (202) 566-2391.

The full report is at:
www.epa.gov/oig/reports/2013/20130719-13-R-0321.pdf

Projected Emission Reductions Overstated and Buy American Requirements Not Met Under EPA Award to the Tennessee Department of Transportation

What We Found

TDOT followed most applicable laws, regulations, and terms and conditions of the cooperative agreement in the procurement and monitoring of contracts for the TSE facilities—with the exception of the Buy American requirements of the Recovery Act. TDOT did not determine whether trusses used in the construction of TSE facilities by one contractor qualify as substantial transformation as defined in 2 CFR §176.160. This occurred because subsequent to the contract awards, EPA incorrectly determined that the Buy American requirements did not apply to the project. Consequently, there is no assurance that all iron, steel, or manufactured goods incorporated into the project were manufactured or substantially transformed in the United States, as required by Section 1605 of the Recovery Act.

TDOT complied with the cooperative agreement requirements and satisfied Region 4 requirements for projecting results. However, TDOT overstated its results. This occurred because TDOT utilized significantly overestimated usage assumptions in its projections rather than current usage. As a result, TDOT does not have reasonable assurance that the TSE project will achieve projected emissions reductions, and the expected environmental results and human health benefits. Quarterly reporting of diesel emissions reductions by the DERA program may also be overstated.

Recommendations

We recommend that EPA disallow and recover Recovery Act funds of \$1,623,049, unless TDOT can certify that the project fully complied with Buy American requirements. For those items that TDOT cannot certify, EPA should follow applicable regulations to resolve the noncompliance.

For TDOT's potential overstatement of project results, we recommend that EPA review TDOT's assumptions used to calculate projected results. If needed, EPA should work with TDOT to develop a more accurate projection of project results. EPA should also review any recalculated results, in accordance with agency policy, to determine whether TDOT achieved the objectives of the cooperative agreement. Further, EPA should adjust the DERA program reporting of TDOT project results to reflect any recalculated results.

EPA and TDOT disagreed with recommendations pertaining to the Buy American requirements. EPA and TDOT agreed with the recommendation related to project results and are working to use post-project usage data to produce updated information.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

THE INSPECTOR GENERAL

July 19, 2013

MEMORANDUM

SUBJECT: Projected Emission Reductions Overstated and Buy American Requirements Not Met Under EPA Award to the Tennessee Department of Transportation
Report No. 13-R-0321

FROM: Arthur A. Elkins Jr 

TO: Stan Meiburg, Acting Regional Administrator
Region 4

This is our report on the subject examination conducted by the Office of Inspector General of the U.S. Environmental Protection Agency. This report contains findings that describe problems the OIG has identified and corrective actions the OIG recommends. This report represents the opinion of the OIG and does not necessarily represent the final EPA position. In accordance with established audit-resolution procedures, EPA managers will make final determinations on matters in this report.

We performed this examination as part of our responsibility under the American Recovery and Reinvestment Act of 2009. The purpose of our examination was to determine whether the Tennessee Department of Transportation followed all applicable laws, regulations, and terms and conditions of the cooperative agreement in the procurement and monitoring of truck stop electrification facility contracts; achieved the objectives of the cooperative agreement; and accurately reported the results to EPA.

Action Required

In accordance with EPA Manual 2750, Chapter 3, Section 6(f), you are required to provide us with your proposed management decision for resolution of the findings contained in this report before you formally complete resolution with the recipient. Your proposed management decision is due in 120 days, or on November 18, 2013. To expedite the resolution process, please email an electronic version of your proposed management decision to adachi.robert@epa.gov.

Your response will be posted on the OIG's public website, along with our memorandum commenting on your response. Your response should be provided as an Adobe PDF file that complies with the accessibility requirements of Section 508 of the Rehabilitation Act of 1973, as amended. The final response should not contain data that you do not want released to the public. If your response contains such data, you should identify the data for redaction or removal. We have no objection to the further release of this report to the public. This report will be available at <http://www.epa.gov/oig>.

If you or your staff have any questions about this report, please contact Richard Eyermann, acting assistant inspector general for the Office of Audit, at (202) 566-0565 or eyermann.richard@epa.gov; or Robert Adachi, product line director, at (415) 947-4537 or adachi.robert@epa.gov.

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Chapter 1

Independent Attestation

As part of the Office of Inspector General's (OIG's) oversight of cooperative agreement awards made by the U.S. Environmental Protection Agency (EPA), we examined the Tennessee Department of Transportation's (TDOT's) compliance with Cooperative Agreement No. 95425709 and applicable federal requirements. These requirements include:

- The Code of Federal Regulations through 40 CFR Part 31, *Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments*.
- Title 2 CFR Part 225, *Cost Principles for State, Local, and Indian Tribal Governments* (OMB Circular A-87).
- Title 2 CFR Part 176, *Requirements for Implementing Sections 1512, 1605, and 1606 of the American Recovery and Reinvestment Act of 2009 for Financial Assistance Awards*.
- The American Recovery and Reinvestment Act of 2009 (Recovery Act).

By accepting funding provided through the cooperative agreement, TDOT is responsible for complying with these requirements. Our responsibility is to express an opinion on TDOT's compliance.

We conducted our examination in accordance with generally accepted government auditing standards issued by the Comptroller General of the United States. We also utilized the attestation standards established by the American Institute of Certified Public Accountants. We examined, on a test basis, evidence supporting management's assertions and performed such other procedures as we considered necessary in the circumstances. We believe that our examination provides a reasonable basis for our opinion.

We met with representatives from the EPA's Region 4 Air, Pesticides, Toxics Management Division in Atlanta, Georgia; as well as with representatives from the agency's Office of Transportation and Air Quality, Diesel Emissions Reduction Act (DERA) Grants Office at EPA headquarters in Washington, D.C. We gathered information on criteria relevant to the cooperative agreement. We also obtained an understanding of the proposed agreement and gathered information concerning TDOT's performance. Specifically, we reviewed EPA's request for applications (RFA) and TDOT's proposal and work plan. We also reviewed applicable federal requirements including 2 CFR Parts 176 and 225, 40 CFR Part 31, and the Recovery Act.

On January 24, 2012, we made a site visit to TDOT's office in Nashville, Tennessee, to conduct interviews and obtain documentation to address our objectives.

To determine if TDOT followed all applicable laws, regulations, and terms and conditions of the cooperative agreement in the procurement of contracts for truck stop electrification (TSE) facilities, we:

- Conducted interviews with TDOT to gain an understanding of the procurement policies and procedures used to award grant contracts for the construction of TSE facilities.
- Obtained documentation and analyzed all proposals received in response to TDOT's RFA to determine whether TDOT followed its selection criteria and process for awarding the contracts.

To determine if TDOT monitored the performance of the grant contracts to ensure compliance with all applicable regulations, statutes, and terms and conditions that flowed down from the cooperative agreement, including Recovery Act requirements, we:

- Conducted interviews with TDOT to gain an understanding of the process used to monitor contract performance.
- Obtained and reviewed copies of reports and documents used to monitor and evaluate contract performance during construction of the facilities and throughout the contract period (i.e., progress, monitoring, monthly and quarterly usage, etc.).
- Reviewed grant contracts to determine the nature of the work to be performed.
- Identified and analyzed change orders for necessity and scope.
- Reviewed grant contracts for compliance with the Recovery Act's Buy American provisions, as well as the reporting requirements of the Davis Bacon Act and the Recovery Act.

To determine if TDOT achieved the objectives of the cooperative agreement and accurately reported results to EPA, we:

- Identified the objectives of the cooperative agreement, including any considerations for air quality.
- Conducted interviews with TDOT to identify how progress under the cooperative agreement is measured and communicated to EPA.
- Obtained and reviewed copies of information that TDOT maintained to track progress and any reports provided to EPA.
- Conducted interviews with EPA project officers to discuss their role in TDOT's contract-selection process and their review of contract documents to ensure compliance with the requirements of the cooperative agreement.

- Conducted interviews with EPA project officers to identify how TDOT communicates progress under the cooperative agreement and whether the EPA reviews and verifies progress.
- Obtained copies of information provided by TDOT and reviews made by the EPA's project officers.
- Verified that work required under the cooperative agreement has been accomplished through a review of selected work products.
- Conducted site visits to verify contractors constructed all planned facilities and that the facilities are in operation and properly maintained.
- Reviewed usage reports for each of the four completed TSE facilities.

We conducted site visits at the four TSE facilities from January 25–26, 2012, and performed the following steps:

- Validated the number of TSE units installed.
- Observed and noted the condition of TSE equipment.
- Inspected units for evidence of compliance with the Recovery Act's Buy American requirements.
- Observed and noted use of the equipment.
- Documented observations with photographs.

We also reviewed project costs and TDOT's drawdown of EPA funds. Specifically, we performed the following steps:

- Obtained, reviewed, and reconciled TDOT's most recent Federal Financial Report (FFR) for the period ending December 31, 2011.
- Discussed the FFR preparation with TDOT to ensure the FFR was prepared in accordance with applicable laws, regulations, and terms and conditions of the cooperative agreement.
- Selected and reviewed a judgmental sample of 14 out of 33 contractor invoices. The sample represented \$1,220,355 of \$1,485,024 total contract costs. We reviewed supporting invoices, payment documents, and associated accounting system entries to determine whether the expenditures were allocable and allowable under 40 CFR Part 31, the cooperative agreement, and Recovery Act Section 1604.
- Reviewed all invoices related to TDOT's outreach program, which totaled \$135,992. We reviewed supporting invoices, payment documents, and associated accounting system entries to determine whether the expenditures were allocable and allowable under 40 CFR Part 30, the cooperative agreement, and Recovery Act Section 1604.
- Reviewed TDOT's drawdown procedures, obtained a drawdown history, and selected a judgmental sample of one drawdown for testing. We reviewed supporting documentation to determine if the drawdown was reasonable and properly supported.

We conducted our audit work between January 2012, and January 2013. Our examination disclosed material noncompliance with 2 CFR §176.60, Section 1605 of the Recovery Act, and Section 23 of the cooperative agreement pertaining to Buy American requirements. Chapter 3 of this report includes a discussion of the noncompliance. In addition, TDOT did not fully comply with Programmatic Condition 4 of the cooperative agreement pertaining to the reporting of actual project results. Chapter 4 of this report includes a discussion of the noncompliance related to TDOT's potential overstatement of project results in its final report.

As a result, unless TDOT can establish that the project met Buy American requirements, we recommend that EPA disallow and recover Recovery Act funds. For the potentially overstated project results, we recommend that EPA review the assumptions used by TDOT to calculate projected results, assist TDOT with any recalculations, and adjust the DERA program reporting of TDOT results to reflect recalculated results.

In our opinion, TDOT has not complied with the requirements of 2 CFR §176.60, Section 1605 of the Recovery Act for the cooperative agreement period ending November 30, 2011.



Robert K. Adachi
Director for Forensic Audits

Chapter 2

Introduction

Purpose

The EPA OIG conducted this review to determine whether TDOT complied with the requirements, and terms and conditions of Cooperative Agreement No. 95425709, and all related laws and regulations.

Our objectives were to determine whether TDOT:

- Followed all applicable laws, regulations, and terms and conditions of the cooperative agreement in the procurement of contracts for TSE facilities.
- Monitored the performance of the contracts to ensure compliance with all applicable laws, regulations, and terms and conditions that flowed down from the cooperative agreement, including related Recovery Act requirements.
- Achieved the objectives of the cooperative agreement and accurately reported them to EPA.

Background

Congress signed the DERA into law in August 2005, under Title VII, Subtitle G of the Energy Policy Act of 2005, and authorized up to \$200 million per year from fiscal year (FY) 2007 through FY 2011 (\$1 billion total) for EPA to fund programs to achieve significant reductions in diesel emissions. Congress appropriated a total of \$169.2 million for EPA under the DERA for FYs 2008 through 2010. Congress appropriated an additional \$300 million to EPA in FY 2009 for DERA grants under the Recovery Act.

Health Affects Related to Diesel Emissions

Diesel emissions account for 6.3 million tons of nitrogen oxide (NO_x) and 305,000 tons of particulate matter in the national mobile emissions inventory (2004).¹ The emissions are from a variety of on-road and non-road vehicles, such as those used for freight, ports, transit, construction, agriculture and energy production.

According to EPA, reducing emissions from diesel engines is one of the most important air-quality challenges facing the United States. These emissions

¹ Data obtained from EPA's RFA No. EPA-ARRA-OAR-OTAQ-09-06, the *ARRA Recovery and Reinvestment Act Funding for the National Clean Diesel Funding Assistance Program*, issued in 2009.

contribute to serious public health problems, including asthma, lung cancer, and various other cardiac and respiratory diseases. These problems result in thousands of premature deaths, millions of lost workdays, and numerous other negative health and economic outcomes every year.

Requirements for Addressing Environmental Results

EPA Order 5700.7, *Environmental Results under Assistance Agreements*, establishes the agency's policy for addressing environmental results under EPA assistance agreements, including grants and cooperative agreements. Program offices must review recipient performance reports to determine whether the recipient achieved the outputs and outcomes contained in the work plan.

TDOT's Cooperative Agreement

The EPA awarded Cooperative Agreement No. 95425709 to TDOT on June 26, 2009. The agreement provided \$2 million of Recovery Act funds for the installation of a network of TSE facilities (175-200 electrified parking spaces) at select interstate highway truck stops. The objective of the project was to reduce long-term idling of Class 8 trucks. The expected results of the project included air-pollution reductions and fuel conservation. The initial grant budget and project period was from June 1, 2009, to September 30, 2010. At the request of TDOT, EPA extended the project period through November 30, 2011.

TDOT Grant Contract Awards

TDOT's work plan proposed to solicit grant applications from truck-stop owners wanting to receive grant funding to install TSE equipment. TDOT's first and second RFAs were open only to truck-stop owners. For the first RFA published in July 2009, TDOT received two proposals. TDOT made awards to the two truck-stop owners. However, due to concerns about the upfront costs of providing electric power to the TSE facilities, one truck-stop owner decided not to proceed with the project. For the second RFA published in October 2009, TDOT received no project proposals.

In an attempt to allocate the remaining cooperative agreement funds, TDOT submitted a request to EPA on April 14, 2010, for an amendment to the work plan to allow for a third RFA that would be open to truck-stop owners and TSE technology vendors. On June 18, 2010, EPA approved TDOT's request to issue the third RFA to owners and vendors. TDOT received nine applications from TSE vendor companies in response to the third RFA. TDOT received no responses from truck-stop owners. TDOT made five funding recommendations through the third RFA. However, because of a series of events, TDOT later cancelled two of the five awards.

TDOT completed four awards. One award went to a truck stop in the first RFA, and three awards went to TSE technology vendors in the third RFA. Three of the four completed TSE facilities are in operation. Mountain Plaza Truck Stop was operational for approximately 3 months after placing its facilities into operation, but closed in September 2011 due to bankruptcy and subsequent foreclosure. The following images are from the four completed TSE facilities located at these truck stops: Mountain Plaza, Pilot Flying J, Super Truck & Travel Plaza, and North Forty.



Mountain Plaza Truck Stop (EnviroDock—30 Spaces)

Period of operation: May–July 2011.

Above and right: Boarded-up and non-operable TSE facilities.

(EPA OIG photos)





**Pilot Flying J
(Convoy Solutions-IdleAire—33 Spaces)**

Placed into operation: October 2011.

Above: TSE parking spaces.
Below: Close-up of a window unit.

(EPA OIG photos)





Super Truck & Travel Plaza (Shorepower—24 Spaces)

Placed into operation: October 2011.

Above: TSE electrical plug-in station.

Below: View of parking spaces.

(EPA OIG photos)





**North Forty Truck Stop
(Jr Enterprises-AirDock—30 Spaces)**

Placed into operation: October 2011.

Above: TSE parking spaces.

Below: Close-up of a window unit.

(EPA OIG photos)



Buy American Requirements

Title 2 CFR §176.60 and Section 1605 of the Recovery Act prohibit the use of Recovery Act funds for a project unless all of the iron, steel, and manufactured goods used in the project are produced in the United States. Section 1605 also requires that this prohibition be consistent with U.S. obligations under international agreements, and provides for a waiver under three circumstances:

- (1) Iron, steel, or relevant manufactured goods are not produced in the United States in sufficient and reasonably available quantities and of a satisfactory quality.
- (2) Inclusion of iron, steel, or manufactured goods produced in the United States would increase the overall project costs by more than 25 percent.
- (3) Applying the domestic preference would be inconsistent with public interest.

Title 2 CFR §176.140(a)(1) defines a manufactured good as a good that is brought to the construction site for incorporation and has been processed into a specific form and shape, or combined with raw materials to create a material that has different properties than the properties of the individual raw materials. There is no requirement with regard to the origin of components in manufactured goods, as long as the manufacture of the goods occurs in the United States.² In the case of a manufactured good that consists in whole or in part of materials from another country, a domestically manufactured good is one that has been substantially transformed in the United States into a new and different manufactured good distinct from the materials from which it was transformed.³

To assist recipients of Recovery Act funds, the EPA developed several guidance documents and Internet-based training modules explaining the concept of substantial transformation and the types of documentation needed to support a substantial transformation determination. Key documents include:

- *Determining Whether “Substantial Transformation” of Components Into a “Manufactured Good” Has Occurred in the U.S.: Analysis, Roles, and Responsibilities*, October 22, 2009 (Determining Substantial Transformation)
- *Buy American Provisions of ARRA Section 1605 Questions and Answers—Part 1*, revised September 22, 2009 (Buy American Q&A Part 1)
- *Buy American Provisions of ARRA Section 1605 Questions and Answers—Part 2*, November 16, 2009 (Buy American Q&A Part 2)

² Title 2 CFR §176.70(a)(2)(ii) and Title 2 CFR §176.160(a), “Domestic iron, steel, and/or manufactured good.”

³ Title 2 CFR §176.160(a), “Domestic iron, steel, and/or manufactured good.”

These guidance documents provide:

- An explanation of substantial transformation.
- A matrix of questions for determining whether substantial transformation has occurred in the United States.
- The requirements for the type of documentation needed to support substantial transformation.
- The need to retain the documentation to support compliance with Section 1605 of the Recovery Act

The EPA also included the Buy American requirements in TDOT's cooperative agreement. Section 23 of the cooperative agreement states that none of the funds made available under the Recovery Act may be used for a project for the construction, alteration, maintenance, or repair of a public building or public work; unless all of the iron, steel, and manufactured goods used in the project are produced in the United States. TDOT in turn included the same requirement in all four of the completed grant contract awards.

Chapter 3

Potential Noncompliance With Buy American Requirements

TDOT followed applicable laws, regulations, and terms and conditions of the cooperative agreement in the procurement and monitoring of contracts for TSE facilities, except for the Buy American requirements. While TDOT obtained Buy American certifications from three of the four grant contract awardees, TDOT did not determine whether trusses used in the construction of TSE facilities by one contractor qualified as substantial transformation as defined in 2 CFR §176.160. This occurred because subsequent to the contract awards, EPA incorrectly determined that the requirements did not apply to the project. Consequently, there was no assurance that all iron, steel, or manufactured goods incorporated into the project were manufactured or substantially transformed in the United States, as required by Section 1605 of the Recovery Act. Unless TDOT can demonstrate (or certify) compliance with Buy American requirements for the project, or obtain an EPA waiver, TDOT's project to install a network of TSE facilities at selected interstate truck stops is not eligible for Recovery Act funds.

Full Compliance Not Determined

Although TDOT began raising questions to EPA about the applicability of the Buy American provisions before issuing its third RFA, all grant contracts awarded by TDOT included Buy American requirements. TDOT initially obtained certifications indicating compliance with the requirement for two of the four grant contract awards. TDOT also received written documentation in a memorandum from a third grant contract awardee contending that there was "substantial transformation" within the meaning of the Buy American requirements of the trusses used in the construction of the TSE facilities. However, the approval of the substantial transformation issue became a moot point based on EPA's subsequent determination of the non-applicability of Buy American provisions. To the OIG's knowledge, the substantial transformation claim was never reviewed and approved by TDOT. In 2013, TDOT obtained a certification from the fourth grant contract awardee.

EPA Determined That Buy American Requirements Were Not Applicable

Although EPA included Buy American requirements in the cooperative agreement, EPA subsequently determined that the requirements did not apply

to the project. EPA stated that the project was not a public work conducted by TDOT. Rather, EPA believed TDOT subgranted the project to private entities and the requirements did not apply.

EPA based its decision on a prior determination by the DERA program. The prior determination found in Section 23 of the cooperative agreement, *Required Use of American Iron, Steel, and Manufactured Goods*, stated:

For the purposes of this Buy American term and condition (as applied to diesel emissions reduction projects conducted pursuant to DERA), EPA has determined that this term and condition applies to projects involving the construction, alteration, maintenance or repair of Truck Stop Electrification (TSE) facilities and projects for the construction, alteration, maintenance or repair of heavy generators (such as those used in public energy production) which are considered to be public works when a governmental entity is conducting the project.

Per EPA, the work plan established that TDOT's role was to develop and facilitate a grant competition and oversee the selection of subgrantees that would move forward with developing TSE parking spaces best suited for their respective locations and clientele. Therefore, the subgrantees would be conducting the project. TDOT was required to maintain primary responsibility for ensuring successful completion of the approved project. TDOT was also required to monitor performance of the subrecipients and ensure compliance with applicable laws, regulations, and terms and conditions that flow down in the subaward.

The OIG Disagrees With the EPA's Determination

The OIG does not agree with the EPA's determination regarding the applicability of Buy American requirements. To the contrary, the OIG concluded that TDOT contracted rather than subgranted the procurement and installation of the TSE facilities. In doing so, TDOT conducted the project, and per the DERA program determination, Buy American requirements would apply.

We agree with EPA that the initial work plan addressed the selection of subgrantees (or truck-stop partners). However, as discussed in the Background section of this report, due to a lack of response from the truck-stop community, TDOT stated it received EPA approval to revise the work plan to open the competition to TSE technology vendors. This resulted in TDOT's procurement of equipment and installation of the equipment directly from three TSE technology vendors. The OIG concluded that these relationships, as well as the relationship with the one truck stop awardee, are indicative of a contract (or vendor) relationship rather than a subgrant relationship as asserted by EPA.

TDOT’s Policy Statement 22 pertaining to subrecipient contract monitoring⁴ identifies a vendor as:

a dealer, distributor, merchant, or other seller providing goods or services that are required for the conduct of a Federal program. These goods or services may be for an organization’s own use or for the use of beneficiaries of the Federal program.

Further, the policy refers to the use of characteristics identified in OMB Circular A-133, Section 210, Subparts (b) and (c) to distinguish a subrecipient from a vendor.

Table 1 presents OMB Circular A-133, Section 210 characteristics for determining whether a subrecipient or vendor relationship exists.⁵

Table 1: Characteristics of a subrecipient versus a vendor

A subrecipient organization:	A vendor organization:
Determines who is eligible to receive what federal financial assistance.	Provides goods and services within normal business operations.
Has its performance measured against whether the objectives of the federal program are met.	Provides similar goods or services to many different purchasers.
Has responsibility for programmatic decision-making.	Operates in a competitive environment.
Has responsibility for adherence to applicable federal program compliance requirements.	Provides goods or services that are ancillary to the operation of the federal program.
Uses federal funds to carry out a program of the organization, as compared to providing goods or services for a program of the pass-through entity.	Is not subject to compliance requirements of the federal program.

Source: OMB Circular A-133 and the EPA OIG.

The OIG conducted an analysis of TDOT’s four grant contract awards using OMB’s relationship characteristics. With one exception, we concluded that the relationships for the four awards are indicative of the characteristics of a vendor; not a subrecipient. In summary, TDOT’s awardees did not:

- Determine who is eligible to receive federal funds.
- Have their performance measured against the objectives of the program.
- Have responsibility for making program decisions.
- Use federal funds to carry out a program of their organization.

⁴ State of Tennessee, Department of Finance and Administration Policy 22, *Subrecipient Contract Monitoring* (Revised 7/1/04).

⁵ Per OMB Circular A-133, it is not expected that all of the characteristics will be present and judgment should be used in determining whether an entity is a subrecipient or a vendor.

However, TDOT did require the awardees to comply with applicable Recovery Act requirements identified in the cooperative agreement. This requirement is a characteristic indicative of a subrecipient rather than a vendor.

In addition to the characteristic analysis, the OIG reviewed information from TDOT regarding the relationship with its grant contract awardees. The OIG learned that:

- TDOT reviewed OMB Circular A-133 and believed that a vendor relationship would best describe their awardees. However, TDOT noted that the cooperative agreement refers to subgrants, subawards, and subrecipients.
- TDOT considered the grantees to be vendors and did not include them in the state's subrecipient monitoring program (required for subrecipients by Policy Statement 22). However, TDOT stated that it had been conscientious in trying to address the administrative and programmatic requirements established by the cooperative agreement. TDOT indicated it would have done the same regardless of whether the grantees were characterized as vendors or subrecipients. TDOT noted that the only practical difference is that the projects did not have to be included in the subrecipient monitoring program.
- The TDOT office that set up the Recovery Act 1512 reporting also set up the projects as subrecipients. As a result, most of the office's communications referred to the grantees as subrecipients rather than vendors.

Conclusion

The OIG's review and analysis support TDOT making contract awards rather than subgrants to the Mountain Plaza Truck Stop and to the three TSE technology vendors. TDOT also maintained primary responsibility for ensuring successful completion of the project and for monitoring the grant contract awards to ensure full compliance with laws, regulations, and terms and conditions of the cooperative agreement. Because of EPA's determination of non-applicability of Buy American requirements, TDOT halted its efforts to determine compliance with the requirements. As a result, there is no assurance TDOT complied with Recovery Act requirements.

Recommendations

We recommend that the Region 4 Regional Administrator:

1. Disallow and recover Recovery Act funds of \$1,623,049, unless TDOT can certify that the project complied with Buy American requirements in the Recovery Act, as required by the EPA cooperative agreement with TDOT.
2. For the iron, steel, and manufactured goods for which TDOT cannot certify compliance, employ the procedures set forth in 2 CFR §176.130 to resolve the noncompliance. In the event that Region 4 decides to retain foreign iron, steel, and manufactured goods in the project under 2 CFR §176.130 (c)(3), Region 4 should reduce the amount of the award by the cost of the steel, iron, or manufactured goods that are used in the project.⁶

EPA and Recipient Comments

The OIG received comments on the draft report from TDOT and Region 4. Region 4 also provided supplemental documentation as support for its comments. The supplemental documentation is not included in the report but is available upon request.

TDOT disagreed with our conclusion and recommendations and responded with several points. First, TDOT stated that Section 1605 of the Recovery Act and 2 CFR Part 176 provide that the federal agency issuing the grant shall determine whether the Buy American provisions are applicable to a project. Second, TDOT made the case that the purchase and installation of TSE equipment at privately owned truck stops was not a public work under any recognizable definition of the term. Third, TDOT made the case that the agency did not conduct the project.

TDOT noted that it requested and received direction from EPA on whether Buy American provisions applied to the project. Per TDOT, EPA clearly told TDOT that the provisions did not apply. Further, TDOT said it followed EPA's direction and did not require two of the project grantees to certify Buy American compliance. TDOT also included comments regarding "public works projects" and OMB's Frequently Asked Questions (FAQs) on the Recovery Act website. Specifically, TDOT cited that "If the facility is/will be privately owned, then the ARRA Buy American provision will not apply to it, because it will not be a public building or public work." TDOT also cited two other examples from other agencies' guidance, where Buy American provisions did not apply. TDOT's complete written response regarding this discussion is in appendix A.

⁶ Since the budget or project period of the Cooperative Agreement expired November 30, 2011, enforcement or termination in accordance with the agency's grant management regulation would not be an option for consideration.

Region 4 responded that TDOT has information that demonstrates Buy American compliance for all of its grantees. The region provided a Buy American certification, dated February 28, 2013, for JR Enterprises South, LLC. Region 4 also noted that Convoy Solutions had previously provided written documentation in a memorandum to TDOT contending that there was “substantial transformation” within the meaning of the Buy American requirements of the trusses used in construction of the TSE facilities. The region further stated that approval of the substantial transformation claim by Convoy Solutions became a moot point following EPA’s determination that Buy American provisions did not apply to the project. The region stated that it is likely that TDOT would have supported the substantial transformation request. EPA’s complete written response regarding this discussion is in appendix B.

Region 4 also disagreed with our conclusion and recommendations, and stands by its original decision that Buy American provisions do not apply. Region 4 continues to maintain that TDOT’s subgrantees conducted the project. Region 4 cited TDOT’s work plan for the cooperative agreement, saying the work plan established up front that TDOT’s role was to develop and facilitate a grant competition and oversee selection of subgrantees that would develop TSE parking spaces best suited to their respective locations and clientele. Further, the region stated the project does not meet the definition of a “public building and public work” listed in 2 CFR §176.140, because TDOT did not retain ownership of the TSE parking spaces. Region 4 stated that pursuant to OMB’s Recovery Act website, the lack of ownership of the property and equipment negates the applicability of Buy American provisions. EPA’s complete written response regarding this discussion is in appendix C.

The OIG Response

The OIG agrees with the Region 4 comments regarding TDOT’s grant award and the work plan. However, the OIG does not agree with the conclusion that the subgrantees conducted the project. The OIG maintains that TDOT conducted the project and contracted for the purchase and installation of the TSE facilities.

First, the OIG does not agree with Region 4 concerning TDOT making subawards. As for the statement: “We agree with EPA that the initial work plan addressed the selection of subgrantees (or truck-stop partners),” on page 14 of this report, the OIG is only acknowledging that we are in agreement with what the work plan states. As discussed in our draft report, the awardees did not meet the characteristics of a subgrantee. In addition, TDOT did not consider the awardees to be subgrantees and did not include them in the state’s subrecipient monitoring program. OMB Circular A-133 (e) states: “Methods to ensure compliance for Federal awards made to for-profit subrecipients may include pre-award audits, monitoring during the contract, and post-award audits.” Based on the OIG’s discussion with TDOT and its external auditors, TDOT did not conduct these items because TDOT did not consider the awards to be subgrants.

Further, the OIG disagrees with TDOT's opinion that the truck stop and TSE vendors made programmatic decisions regarding the program (OMB Circular A-187 refers to "program" as the "Federal" program). As such, TDOT made all programmatic decisions. The truck stop and TSE vendors merely fulfilled their obligations under the grant contracts. Additionally, the truck stop and TSE vendors did not use federal funds to carry out a program of the organization. OMB Circular A-187 uses "organization" to refer to the entity (i.e., truck stop and TSE vendors in this instance). TDOT carried out the project under a state program. The truck stop and TSE vendors did not have or carry out their own programs. In addition, TDOT's performance was measured against the objectives of the federal program, not the truck stop and TSE vendors. TDOT measured the truck stop and TSE vendors' performance against TDOT's grant contract requirements.

Second, the OIG disagrees with the Region 4 and TDOT comments regarding the project not being a public work. The OIG believes the project is a public work infrastructure project conducted by TDOT. Public works are a broad category of infrastructure projects financed and constructed by the government for recreational, employment, and health and safety uses in the greater community. Public works are often interchangeable with the term public infrastructures. Per EPA, the term infrastructure refers to the substructure or underlying foundation or network used for providing goods and services; especially the basic installations and facilities on which the continuance and growth of a community, state, etc., depend.

Congress enacted the Recovery Act to invest in transportation, environmental protections, and other infrastructure that will provide long-term economic benefits. Based on the definition above, public works are defined by "funding" and "community use," not "ownership." EPA determined that TSE facilities are infrastructure projects under the Recovery Act. The EPA's DERA program determination regarding the applicability of the Buy American provision stated that TSE facilities are considered to be public works when a governmental entity is conducting the project. EPA's determination does not address ownership as the criteria for making the Buy American determination, as discussed in the OMB example cited by Region 4 and TDOT, and the other two examples cited by TDOT. Rather, EPA based its determination on who is conducting the project.

The OIG contends the project is a public works project. Therefore, TDOT, as recipient of the funds, is responsible for conducting the project. Or, alternatively, one might argue that because TDOT was the responsible entity for conducting the project, the project fits the category of public works. This argument is consistent with the DERA program determination cited on page 14 of this report.

In conclusion, the OIG acknowledges receipt of the recent Buy American certification from JR Enterprises South, LLC. We will revise the report to reflect the additional certification. With regards to the Convoy Solution substantial transformation request, the OIG obtained the request from TDOT during the course of our review. However, the OIG did not consider the request since TDOT had not reviewed and accepted the request. Upon TDOT's acceptance, the OIG will review the request, along with the basis for TDOT's acceptance.

Chapter 4

Assumptions Significantly Overestimated Project Results

TDOT complied with the cooperative agreement requirements and satisfied Region 4 requirements for determining project results. However, TDOT overstated its results. This occurred because TDOT utilized significantly overestimated usage assumptions in its projections rather than using actual usage data. As a result, TDOT does not have reasonable assurance that the TSE project will achieve its projected emissions reductions. The project may not achieve expected environmental results and human health benefits. Further, the DERA program results may be overstated.

Usage Assumptions Were Significantly Overestimated

TDOT utilized assumptions that were significantly overestimated based on project usage data available at the time of the TSE project final report. The assumptions include:

- The use of estimated hours rather than actual hours of operation.
- The use of installed facilities rather than operable facilities.

TDOT initially proposed the installation of a network of 175-200 electrified parking spaces. For 200 spaces, TDOT projected reductions in air pollution including 60.32 tons per year of NO_x; 1.72 tons per year of particulate matter; and 3,552 tons per year of carbon dioxide. TDOT also projected a savings of approximately 350,000 gallons of diesel fuel per year. TDOT calculated the reductions, as encouraged by EPA's grant solicitation, using the diesel emissions quantifier. The calculations required TDOT to make assumptions regarding the use of the facilities. TDOT assumed truck drivers would use the facilities for 8 hours per day for an average of 250 days per year. TDOT used the *National Deployment Strategy for Truck Stop Electrification*,⁷ published in 2006, and the federal *Hours of Service Regulations*⁸ as the basis for these assumptions.

Per the TSE project final report, dated February 28, 2012, TDOT installed 117 spaces rather than the 175-200 spaces proposed. While the TSE project final report discussed the various reasons for not installing the proposed 175-200 spaces, TDOT initially did not revise its projected results to reflect the actual

⁷ Study conducted by the Texas Transportation Institute under a grant funded by EPA.

⁸ U.S. Department of Transportation, Federal Motor Carrier Safety Administration, *Sleeper Berth Provision*, requiring at least 8 consecutive hours in the sleeper berth.

spaces installed. Programmatic Condition 4 of the cooperative agreement states that the final project report will include a summary of the project or activity, actual results (outputs and outcomes), and costs. The condition also says the final report will include actual emissions benefit calculations.

TDOT used EPA’s *DERA Program Final Report Template, Part 1*, December 2010, to prepare the final report. The template provides a narrative discussion of actual project results and examples of how to quantify results. These results may include, but are not limited to: emission reductions, cost effectiveness, diesel fuel saved, health benefits achieved, and documented improved ambient air quality.

At EPA’s request, TDOT later updated projected results in the final report using the actual spaces installed. However, TDOT’s update included the same assumptions used to calculate the initial reductions proposed for the 175-200 spaces. With the requested updates, EPA accepted the final report on March 19, 2012.

While EPA asked TDOT to update its assumptions based on actual units installed, EPA did not ask TDOT to update its usage assumption based on actual usage. As such, TDOT’s updated results continue to represent estimated rather than actual results. TDOT’s reporting is not consistent with the DERA program final report template that discusses actual results. Because TDOT did not consider actual usage, the projected results for the project are potentially overstated—including annual and lifetime emission reductions, capital and total project cost effectiveness, and gallons of diesel fuel saved.

Use of Estimated Hours Rather Than Actual Hours of Operation

TDOT’s initial assumptions estimated 8 hours per day of idling. Usage data at the time of the TSE project final report was significantly lower than the estimated 8 hours per day. Table 2 shows actual usage through December 2011 at only 3.7 percent of planned usage.

Table 2: Summary of actual versus projected TSE facility usage *

TSE Vendor	Reporting Months for 2011	No. of spaces installed	TSE hours used	Planned usage (8 hrs/day)	Percent of planned usage
Mountain Plaza Truck Stop	May–July	30	514	15,120	3.4
North Forty Truck Stop (JR Enterprises)	Oct.–Dec.	30	52	15,120	0.3
Super Truck & Travel Plaza (Shorepower)	Oct.–Dec.	24	0	12,096	0.0
Pilot Flying J (Convoy Solutions)	Oct.–Dec.	33	1,625	16,632	9.8
Totals		117	2,191	58,968	3.7

Source: EPA OIG.

(*) Usage calculated at 8 hours/day x 21 days/month (based on TDOT) x no. of spaces installed.

The following factors contributed to the lower usage: (1) Mountain Plaza Truck Stop closed after approximately 3 months of operation; (2) three facilities were not completed and placed into operation until October 2011; and (3) truck drivers were using TSE facilities at lower-than-projected levels. According to the TSE project final report, there are several other factors contributing to lower-than-projected levels of use, including the fact that many major companies will not pay for their drivers to use the units, and that drivers remain skeptical of the equipment despite relatively low prices.

TDOT believes that the project partners have a great deal of work to do to persuade truck drivers to use the facilities. Further, TDOT said that in the absence of a serious outreach effort or a significant spike in diesel fuel prices, TSE equipment usage is likely to remain low.

In August 2012, TDOT communicated to the OIG that usage data collected for the first two quarters of 2012 indicate TSE vendors that have implemented proactive outreach efforts are achieving the best results. TDOT continues to encourage marketing of the TSE facilities. In addition, as noted in the TSE project final report, TDOT has employed billboard advertising and targeted magazine and website advertising to help make truck drivers aware of TSE facilities available in Tennessee. TDOT will also continue to work with TSE vendors and truck-stop owners to raise awareness and encourage truck drivers to increase their use of TSE facilities.

However, unless TDOT can demonstrate a significant increase in usage of TSE facilities, project results will remain significantly overstated. TDOT could achieve a more accurate projection of results based on actual usage or a more realistic assumption for anticipated usage, rather than the 8 hours per day currently used.

Use of Installed Rather Than Operable Facilities

The 117 installed spaces used in the projected results calculation of the TSE project final report included 30 TSE units installed at the Mountain Plaza Truck Stop. The truck stop closed due to bankruptcy and subsequent foreclosure approximately 3 months after the TSE facilities were placed into operation. The truck stop has remained closed and



the TSE facilities have been nonoperational since September 2011. However, TDOT is optimistic about the reopening of the former truck stop and the utilization of TSE units installed at the site. Per TDOT, a new owner purchased the truck stop in 2012. The new owner views the TSE units as business assets and intends to put the units back into operation. Renovations of the property have begun, and the new owner plans to reopen the truck stop. Until this actually occurs, TDOT has no assurance that the truck stop will reopen or that the new owner will operate the TSE facilities.

Conclusion

Unless TDOT can demonstrate a significant increase in usage of TSE facilities, EPA does not have reasonable assurance that the project will achieve projected emissions reductions, or expected environmental results and human health benefits. A recalculation of results using actual usage data would more accurately project results and reflect a more realistic assumption for anticipated usage.

Recommendations

We recommend that the Region 4 Regional Administrator:

3. Review the assumptions used by TDOT to calculate projected results to determine if the assumptions are valid, consistent with the DERA program guidance, and representative of project usage. If needed, work with TDOT to develop a more accurate projection of project results based on actual usage and a more realistic assumption of anticipated usage.
4. Review any recalculated results of the project in accordance with EPA Order 5700.7 and Programmatic Condition 4 to determine whether TDOT achieved the objectives of the cooperative agreement.
5. Adjust the DERA program reporting of TDOT project results to reflect recalculated results.

EPA and Recipient Comments

The EPA concluded that the overall objectives of the cooperative agreement have been met. This includes installing and operating a network of 117 electrified parking spaces across Tennessee, with some level of demonstrated emission reductions and fuel savings based on the limited TSE usage data available to TDOT at the time the final project report was prepared and submitted to the EPA. The EPA has already taken steps in conjunction with TDOT to address the concerns raised in the draft report. EPA is working with TDOT to rerun the diesel emissions quantifier. Post-project TSE usage data will be utilized to produce

updated emissions-reduction information, which will be incorporated as an addendum to this project.

TDOT stated its willingness to work with EPA staff to modify the estimates of project results based on actual usage or a revised assumption of anticipated usage. However, TDOT offered the following comments that are relevant to the finding and the cause of the finding.

In regards to using estimated hours of use rather than actual hours of operation, TDOT stated that it is notable that there was very limited usage data at the end of the project period, which ended November 30, 2011. The TSE project final report was due in February 2012. TDOT did not have a more accurate method for forecasting the hours of use of the project's TSE equipment; therefore, assumptions from TDOT's grant application were used to prepare the final report.

TDOT believed that it was clear in its proposal that the estimate considered the potential for reducing emissions. The estimates for emissions were calculated, as directed by EPA's grant solicitation, using the diesel emissions quantifier. TDOT assumed one truck per parking space for each of the proposed electrified parking spaces (e.g., 100 parking spaces provides the opportunity to reduce emissions from 100 trucks per day times an estimated 250 days per year). TDOT believed this to be a reasonable estimate of the potential emissions that could be reduced through TSE.

TDOT understands the OIG's concern about the accuracy of calculating emissions benefits based on the use of installed facilities rather than operable facilities. For the purposes of the TSE project final report, however, TDOT believed that including installed TSE spaces in the calculations of potential emissions reductions was reasonable. As recommended by the OIG, TDOT is willing to work with EPA staff to modify the estimates of project results based on actual usage or a revised assumption of anticipated usage.

The OIG Response

The OIG acknowledges comments from Region 4 and TDOT, and understands the basis for the calculations. However, the OIG continues to maintain that unless TDOT can demonstrate a significant increase in usage of TSE facilities, project results will remain significantly overstated. The OIG commends TDOT's willingness to work with EPA staff to modify the estimates on actual usage or revise the assumptions concerning anticipated usage. The OIG also commends Region 4 and the efforts the region has already taken to address the issue, and we look forward to the receipt and evaluation of updated emission information.

Status of Recommendations and Potential Monetary Benefits

RECOMMENDATIONS						POTENTIAL MONETARY BENEFITS (in \$000s)	
Rec. No.	Page No.	Subject	Status ¹	Action Official	Planned Completion Date	Claimed Amount	Agreed-To Amount
1	17	Disallow and recover Recovery Act funds of \$1,623,049, unless TDOT can certify that the project complied with Buy American requirements in the Recovery Act, as required by the EPA cooperative agreement with TDOT.	U	Region 4 Regional Administrator		\$1,623	
2	17	For the iron, steel, and manufactured goods for which TDOT cannot certify compliance, employ the procedures set forth in 2 CFR §176.130 to resolve the noncompliance. In the event that Region 4 decides to retain foreign iron, steel, and manufactured goods in the project under 2 CFR §176.130 (c)(3), Region 4 should reduce the amount of the award by the cost of the steel, iron, or manufactured goods that are used in the project.	U	Region 4 Regional Administrator			
3	24	Review the assumptions used by TDOT to calculate projected results to determine if the assumptions are valid, consistent with the DERA program guidance, and representative of project usage. If needed, work with TDOT to develop a more accurate projection of project results based on actual usage and a more realistic assumption of anticipated usage.	U	Region 4 Regional Administrator			
4	24	Review any recalculated results of the project in accordance with EPA Order 5700.7 and Programmatic Condition 4 to determine whether TDOT achieved the objectives of the cooperative agreement.	U	Region 4 Regional Administrator			
5	24	Adjust the DERA program reporting of TDOT project results to reflect recalculated results.	U	Region 4 Regional Administrator			

1 O = Recommendation is open with agreed-to corrective actions pending.
 C = Recommendation is closed with all agreed-to actions completed.
 U = Recommendation is unresolved with resolution efforts in progress.

TDOT's Comments on Draft Report



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March 11, 2013

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EPA Office of Inspector General
61 Forsyth St., SW (Mail Code 12T26)
Atlanta, GA 30303

RE: Comments on Draft Attestation Report
Examination of Costs and Compliance for Cooperative Agreement No. 95425709
Awarded to the Tennessee Department of Transportation

Dear Ms. Bennett:

The Tennessee Department of Transportation (TDOT) values the opportunity to review and comment on the draft report prepared by EPA's Office of Inspector General (OIG) on the audit of TDOT Cooperative Agreement 95425709. TDOT's comments on each major recommendation are presented below.

TDOT's application for this ARRA Diesel Emissions Reduction Grant directly addressed EPA Region 4's first priority of developing a Regional Green Corridors Program focusing on idle reductions for trucking along interstate corridors. The agency's proposal for this economic stimulus grant also addressed another grant criterion, which was to assist those most affected by the current economic conditions, in this case truck owners and drivers and truck stop owners.

Truck stop electrification (TSE) technology saves fuel and reduces harmful diesel emissions. It saves money for drivers who use the technology by allowing them to cut off their engines and use a more environmentally sound way to heat and cool their trucks while they rest. TSE demonstrates tremendous potential for significant reductions in pollutant and noise emissions at low operational cost to the driver. TSE installations also offer long-term economic benefits by providing a continuing source of revenue to truck stops while reducing truck owners' operational costs.

Regarding the OIG draft report, TDOT was surprised and deeply disappointed at the arbitrary and capricious nature of the OIG recommendations. Further, TDOT is mystified by OIG's recommendation that the grantee (i.e., TDOT) be severely punished for what is essentially an internal disagreement between EPA and OIG on the applicability of Buy American provisions.

Before responding to the details of the draft report, TDOT would like to emphasize several points.

First, the statutory language of ARRA anticipated many questions that would likely arise regarding the technical details of Buy American compliance. Section 1605 of the American Recovery and Reinvestment Act of 2009 (ARRA) and 2 CFR Part 176 provide that the federal agency issuing the grant shall determine whether the Buy American provisions are applicable to a project. EPA determined that Buy American did not apply to this project.

OIG Response 1: The OIG does not agree that Section 1605 of the Recovery Act and 2 CFR Part 176 give federal agencies the authority to determine whether Buy American provisions are applicable to the project. Rather, the provisions give federal agencies the authority to allow the recipient to use foreign iron, steel, or manufactured goods in the project without regard to the restrictions of Section 1605 of the Recovery Act, when one of three exceptions apply (i.e., nonavailability, unreasonable cost, or inconsistent with public interest). EPA did not base its determination on these exceptions.

Second, in TDOT's comments on OIG's draft position paper in August 2012, the agency made the case that the purchase and installation of truck stop electrification equipment at privately owned truck stops was not a public work under any recognizable definition of the term.

Third, TDOT also made the case that the agency did not conduct the project.

OIG Response 2: The OIG disagrees with TDOT and believes the project is a public work (infrastructure project) conducted by TDOT. Public works are a broad category of infrastructure projects financed and constructed by the government for recreational, employment, and health and safety uses in the greater community. Public works are often interchangeable with the term public infrastructures. Per EPA, the term infrastructure refers to the substructure or underlying foundation or network used for providing goods and services; especially the basic installations and facilities on which the continuance and growth of a community, state, etc., depend. EPA determined TSE facilities to be infrastructure projects under the Recovery Act.

Congress enacted the Recovery Act to invest in transportation, environmental protections, and other infrastructure that will provide long-term economic benefits. Based on the definition above, public works are defined by "funding" and "community use," not "ownership." The OIG contends the project is a public works project. Therefore, TDOT, as recipient of the funds, is responsible for conducting the project. Or, alternatively, one might argue that because TDOT was the responsible entity for conducting the project, the project fits the category of public works. This argument is consistent with the DERA program determination cited on page 14 of this report.

TDOT requested and received direction from EPA on whether Buy American provisions applied to the project. EPA told us clearly that Buy American did not apply to the project. TDOT, in good faith, followed EPA's direction and did not require two of the project grantees to certify Buy American compliance. As a result, OIG now recommends that the appropriate response from EPA is to punish the ARRA project sponsor (i.e., TDOT) for following that direction.

OIG's report acknowledges twice that the "cause" of the alleged noncompliance was EPA's determination that Buy American did not apply. In the "At a Glance" section at the front of the report, OIG states that TDOT did not obtain Buy American certifications from all of its Grant Contract awardees. This phrase could be easily misunderstood because TDOT did obtain Buy American certifications from two grantees. The OIG went on to say that this "occurred because EPA incorrectly determined, subsequent to the contract awards, that the requirements did not apply to the project."

OIG's conclusion that TDOT should be punished is both harsh and unjust.

Further, OIG also says that the opening of the competition to TSE technology vendors "resulted in TDOT's procurement of equipment and installation of the equipment directly from three TSE technology vendors." This simply is not accurate. TDOT reimbursed the technology companies after those companies obtained and installed the technology at interstate truck stops. TDOT supervised the companies' processes to procure the equipment and hire contractors to install it on the truck stop property. TDOT did not procure the equipment for these grantees and does not own the equipment.

After considering all of the above, OIG leaped to the draconian conclusion that TDOT should have ignored EPA's direction that Buy American did not apply and substitute TDOT's judgment that Buy American did apply. This unfair and punitive judgment stands even though TDOT complied with the determination of Buy American applicability as provided by Section 1605 of ARRA. Despite the obvious uncertainty regarding this issue and EPA's internal disagreement over the determination that EPA made, the OIG decided to recommend the most severe remedy (i.e., that EPA should disallow and recover the ARRA funds involved).

OIG Response 3: The OIG acknowledges that TDOT, in good faith, followed EPA's direction regarding the applicability of Buy American requirements. However, as discussed in the report, the OIG maintains that EPA incorrectly made this determination. The determination regarding the applicability of Buy American should have been made according to the exceptions noted in 2 CFR § 176.70. Region 4 did not base its determination on the exceptions. Further, the OIG's conclusions and recommendations are consistent with Section 1605 of the Recovery Act and 2 CFR Part 176.

OIG Recommendation 1 - ARRA DERA Tennessee DOT Cooperative Agreement No. 95425709

In Chapter 3 of the draft report, OIG comments that "TDOT followed applicable laws, regulations, and terms and conditions of the cooperative agreement in the procurement and monitoring of contracts for the TSE facilities with the exception of the Recovery Act Buy American requirements." The report then recommends that "EPA disallow and recover applicable Recovery Act funds unless TDOT can certify that the project fully complied with Buy American requirements."

TDOT strongly objects to the audit report's recommendation regarding Buy American compliance and strongly believes the OIG recommendation is arbitrary, capricious, unfair and unjustified. On August 3, 2012,

TDOT made many of the points below in responding to the OIG's draft Position Papers. Although the OIG did not respond to those points in the draft report, TDOT believes the following points are still relevant.

OIG Response 4: The OIG acknowledges TDOT's comments. The OIG did evaluate TDOT's response to the position papers and incorporated changes into the draft report as deemed necessary. It is not the OIG's practice to attach and include specific responses to position papers in the draft report. The OIG issues position papers primarily to provide an opportunity for the auditee to review the findings and recommendations prior to issuing the official draft report and to comment on any factual inaccuracies.

Definition of a Public Work

The report states that TDOT "did not provide assurance that all iron, steel, or manufactured goods incorporated into the project were manufactured in the United States, as required by the Recovery Act." The finding language focuses on the definition of a "public work" and implies that all Recovery Act infrastructure projects, regardless of project details, must comply with the Buy American requirements. Section 1605 of the American Recovery and Reinvestment Act of 2009 (ARRA) and 2 CFR Part 176 provide that the federal agency issuing the grant shall determine whether the Buy American provisions are applicable to a project.

OIG Response 5: See OIG Response 1 and 2.

TDOT has reviewed several guidance documents, including one from the Office of Management and Budget (OMB) on the subject of Buy American applicability. Those documents clearly indicate only public works projects are subject to Buy American. For example, OMB's Frequently Asked Questions (FAQs) on the American Recovery and Reinvestment Act (ARRA) of 2009 responded to Question 7 (General Recovery Act FAQ) about whether the Buy American provision under Section 1605 of ARRA applies to construction undertaken by a university with ARRA funds. The OMB response included the following sentence: "If the facility is/will be privately owned, then the ARRA Buy American provision will not apply to it, because it will not be a "public building or public work." www.whitehouse.gov/omb/recovery_faqs/

Similarly, the National Institute of Standards and Technology (NIST) provided supplemental guidance on that agency's ARRA grants. This document on page 3 states that governmental entities receiving ARRA funds for construction of a public building or public work must comply with the ARRA Buy American requirements. The next sentence in the guidance is directly relevant. The italicized words are included on the NIST web page. "However, *if the facility* being constructed ... under the NIST construction grant *is* or will be *privately-owned*, it is not considered to be a public building or a public work and the *Buy American requirements do not apply*." www.nist.gov/recovery/upload/FINAL-NCG-SBAG.pdf

The U.S. Department of Energy (DOE) maintains a Frequently Asked Questions website regarding the American Recovery and Reinvestment Act. The website contains the following question and answer.

Q: Does Buy American apply to private projects, or private contractors on public projects?

A: No, and yes, respectively. The Buy American requirements apply to all Recovery Act funds used for a project for the construction, alteration, maintenance, or repair of a public building or public work. The question, therefore, is whether the project is for a public building or public work, not who is performing the work. Generally speaking, if a government entity owns or leases the building or work, it is a public

building or work that would be subject to the Buy American provision. However, title is not the only factor (it is not dispositive). Determinations of what is a public building or public work must be made on a case-by-case basis by the grantee and the Recovery Act award official (the Contracting Officer). http://www1.eere.energy.gov/recovery/buy_american_faq.html#q6

OIG Response 6: The OIG does not consider the examples included above to be applicable to the situation in question. The OMB's FAQs example relates to a seemingly unique scenario involving a state college or university. The remaining two examples simply represent the opinions of other agencies—not the EPA. The agency made its own determination as set forth in the cooperative agreement. This determination focuses on who is conducting the project—not ownership. See OIG Response 2 for additional information related to this issue.

Cause of Noncompliance - EPA Informed TDOT that Buy American Did Not Apply

For the TDOT ARRA grant, EPA Region 4 confirmed in writing to TDOT that Buy American requirements did not apply to this truck stop electrification project. This was based on EPA's determination that the project was not a *public work*. In fact, the final OIG report refers twice to EPA's determination that Buy American requirements did not apply to the TDOT project as the cause of the alleged noncompliance. Although the OIG position paper cites EPA's determination as the cause, OIG unreasonably recommends that EPA's Region 4 Regional Administrator disallow and recover Recovery Act funds.

OIG believes EPA erred in this determination because OIG does not agree with EPA's conclusion that the project was not a public work conducted by TDOT. Instead, OIG finds that TDOT conducted the project based on OIG's interpretation of the definition of *public work* in Title 2 CFR 176.140. That rule defines *public building* and *public work* as "a public building or public work of a governmental entity (the United States; ... State and local governments;). These buildings and works may include, without limitation, bridges, dams, plants, highways, parkways, streets, subways, tunnels, sewers, mains, power lines, pumping stations, heavy generators, railways, airports, terminals, docks, piers, wharves, ways, lighthouses, buoys, jetties, breakwaters, levees and canals, and the construction ... of such buildings and works."

TDOT cannot understand how a good faith reading of this definition supports the OIG conclusion that the purchase and installation of truck stop electrification (TSE) technology at privately owned truck stops is a "public work." Public works are publicly owned. The ARRA funding was used by private entities to purchase and install TSE equipment at privately owned truck stops. In one case, the equipment was purchased and owned by a truck stop (the TDOT grantee). In the three other projects, the equipment is owned by a TSE technology company (TDOT's grantee) and installed on a privately owned truck stop through a formal agreement between the TSE technology company and the truck stop. In all cases, the equipment was purchased by and is owned by a private sector company.

OIG Response 7: The definition of public works includes no reference to ownership, rather it discusses projects of a governmental entity. Additionally, the list of items presented is not intended to be complete. See OIG Response 2 for additional OIG comments on public works.

TDOT Did Not Conduct the Project

OIG has concluded that “TDOT contracted rather than subgranted the procurement and installation of the TSE facilities. In doing so, TDOT conducted the project and, as such, per DERA program determination, Buy American requirements would apply.” Further, OIG finds that by opening the grant competition to TSE technology vendors, this “resulted in TDOT’s procurement of equipment and installation of the equipment directly from three TSE technology vendors.”

TDOT strongly disagrees with the OIG conclusion. As noted in the OIG audit report, TDOT’s role was to develop and facilitate a grant competition and to oversee the selection of grantees who would be conducting the project. Further, TDOT’s role was to ensure successful completion of the selected projects, monitor performance of grantees and ensure compliance with applicable laws, regulations, and terms and conditions that flow down from the EPA grant award.

The purchase and installation of truck stop electrification (TSE) equipment at four Tennessee truck stops was carried out by the successful applicants that responded to TDOT's request for grant applications. Those grantees ordered and received TSE equipment, published bid requests and managed the procurement process for selecting construction and electric contractors, supervised construction and paid invoices for equipment and installation costs. Three of the grantees identified candidate truck stops for installing TSE technology and negotiated agreements with the host truck stops. This was done in all three cases without TDOT’s involvement or participation. The conclusion that TDOT conducted the project directly contradicts the facts.

TDOT did provide oversight and monitoring of this ARRA project and TDOT staff worked diligently with partner companies to ensure that state and federal requirements were met. However, TDOT understands that this monitoring was required by ARRA and necessary to ensure that procurement and financial procedures and requirements were satisfied. In any case, that oversight does not mean that TDOT conducted the project. That conclusion simply cannot be supported by an objective evaluation of how the project was implemented.

OIG holds that TDOT conducted the project and therefore Buy American requirements applied. As a result, the final report recommends that EPA ignore the fact that TDOT was following written guidance from EPA - the federal agency that awarded the grant. Further, OIG recommends that EPA punish the state for following the guidance established by the granting agency. This suggests that the appropriate EPA action is to punish the ARRA grantee for a policy disagreement within EPA. This reasoning is arbitrary, capricious, unfair and unjustified.

If the OIG’s recommendation is accepted, to protect their respective institutions, potential EPA grantees should be very wary in accepting an EPA grant because the grant could be a great risk to the grant applicant institution. Grantees should not feel comfortable in following written directions from EPA as the federal agency issuing the grant. They cannot be confident that following the guidance of the granting federal agency will protect the grantee from punitive actions if the OIG subsequently determines that a requirement was not met. If this reasoning is followed, all grantees will be forced to obtain necessary direction from EPA’s Office of the Inspector General.

OIG Response 8: The OIG largely agrees with TDOT’s discussion regarding implementation of the project. However, the OIG does not agree that the individual grantees conducted the project. The OIG maintains that TDOT, as the recipient of the grant funds, conducted the project. TDOT in turn contracted with the grantees to purchase and install TSE facilities. See OIG Response 2 for additional information related to this issue.

OIG Report Recommendation 2 -ARRA DERA Tennessee DOT Cooperative Agreement No. 95425709

In Chapter 4 of the draft report, OIG comments that “TDOT complied with the cooperative agreement requirements and satisfied Region 4 requirements for determining project results. However, TDOT overstated its results. This occurred because TDOT utilized significantly overestimated usage assumptions in its projections rather than using actual usage data.”

OIG further states that, “While EPA asked TDOT to update its assumptions based on actual units installed, EPA did not ask TDOT to update its usage assumption based on actual usage. As such, TDOT’s updated results continue to represent estimated rather than actual results. TDOT’s reporting is not consistent with the DERA program final report template that discusses actual results.”

The second recommendation in the draft audit report states that "TDOT potentially overstated project results and the project may not achieve expected environmental and human health benefits." The OIG recommends that EPA Region 4 review the assumptions used by TDOT to calculate projected results and, if needed, to work with TDOT to develop a more accurate projection of project results based on actual results and/or a more realistic assumption for anticipated usage.

TDOT is certainly willing to work with EPA to review TDOT’s projected results and to make any necessary adjustments to those projections, as directed by Region 4. TDOT offers the following comments, however, which are relevant to the finding and the cause of the finding.

OIG states that TDOT's estimated environmental results "utilized assumptions that are significantly overestimated based on project usage data at the time of the Final Report. These assumptions include the following:

- the use of estimated hours rather than actual hours of operation; and
- the use of installed facilities rather than operable facilities."

In regard to the use of estimated hours of use rather than actual hours of operation, it is notable that there was very limited usage data at the end of the project period, which ended November 30, 2011. The Final Report was due in February 2012. TDOT did not have a more accurate method for forecasting the hours of use of the project TSE equipment and, therefore, used the assumptions from TDOT’s grant application in preparing the Final Report.

The usage and emissions estimates used in TDOT's grant application were based largely on a study conducted by the Texas Transportation Institute (TTI), *National Deployment Strategy for Truck Stop Electrification*, published in 2006 and funded by a grant through the U.S. EPA Office of Transportation and Air Quality (as referenced in the grant proposal). According to the TTI study, truck drivers idle their engines from six to 10 hours per day on extended trips. A typical long-haul truck is on the road for an estimated 250 to 300 days per year, resulting in average annual idling between 1,500 to 3,000 hours per truck.

TDOT proposed to equip 175 - 200 parking spaces with truck stop electrification technology and provided emission estimates for both 175 and 200 TSE-equipped spaces. TDOT chose to use a more conservative estimate in both scenarios. Since federal Hours of Service (HOS) regulations allowed truck drivers to claim eight hours of off-duty rest time in sleeper berths, TDOT used eight hours of rest on an average of 250 days per year in calculating the baseline data. This is equivalent to a potential 2,000 hours of idle time reduced annually, which was less than EPA’s Diesel Emissions Quantifier's default assumption of 2,400 hours idle time per truck.

We believe it was clear in our proposal that this estimate considered the *potential* for reducing emissions. Emissions estimates were calculated, as directed by EPA's grant solicitation, using the Diesel Emissions Quantifier. We assumed one truck per parking space for each of the proposed electrified parking spaces (e.g., 100 parking spaces provides the opportunity to reduce emissions from 100 trucks per day x an estimated 250 days per year). We believe this is a reasonable estimate of the *potential* emissions that could be reduced through truck stop electrification.

As noted in the OIG draft report, upon EPA's request, TDOT updated expected project results in its Final Report using the actual number of TSE spaces installed and the same assumptions used to calculate the initial estimated outcomes under the Cooperative Agreement. EPA accepted TDOT's final report on March 19, 2012. As TDOT noted in the final report, actual emission reductions will depend on the idling emission rate of heavy-duty truck engines and the hours of truck idling that are avoided through truckers' use of the TSE equipment.

TDOT understands OIG's concern about the accuracy of calculating emissions benefits based on the use of installed facilities rather than operable facilities. For the purposes of the Final Report, however, we believe that including installed TSE spaces in the calculations of *potential* emissions reductions was reasonable.

As recommended by the OIG, TDOT is willing to work with EPA staff to modify the estimates of project results based on actual usage or a revised assumption of anticipated usage.

OIG Response 9: The OIG acknowledges TDOT's comments and understands the basis for the calculations. However, the OIG continues to maintain that unless TDOT can demonstrate a significant increase in usage of TSE facilities, project results will remain significantly overstated. The OIG commends TDOT's willingness to work with EPA staff to modify the estimates based on actual usage or a revised assumption of anticipated usage.

Sincerely,

Alan D. Jones
Manager, Policy Office
Long Range Planning Division

cc: Brian Carroll
Chris Christianson
Tanisha Hall
Mel Marcella
Toks Omishakin
John Reinbold
Linda Tidwell

Agency's Comments on Draft Report



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
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 ATLANTA, GEORGIA 30303-8960

MAR 22 2013

MEMORANDUM

SUBJECT: OIG Draft Report on Examination of Costs and Compliance for Cooperative Agreement No. 95425709 Awarded to the Tennessee Department of Transportation

FROM: Gwendolyn Keyes Fleming
 Regional Administrator

TO: Angela Bennett, Project Manager
 EPA OIG

This is in response to your January 24, 2013, email providing an opportunity to comment on the draft Office of Inspector General report and requesting feedback on concurrence or non-concurrence with the findings and proposed recommendations from the OIG's audit of the Tennessee Department of Transportation's American Recovery and Reinvestment Act (Recovery Act) Diesel Emissions Reduction Act (DERA) Project Grant, EPA Grant No. 2A-95425709. The U.S. Environmental Protection Agency, Region 4, has reviewed the draft report and compared the findings and recommendations to the information available in the project file and supplemental information provided by the grantee. Based on this information, we offer the following response on the draft report which concluded that: (1) TDOT did not ensure compliance with the Buy American requirements stipulated in the Recovery Act for its EPA DERA truck stop electrification (TSE) cooperative agreement; and (2) TDOT potentially overstated project results and the project may not achieve expected environmental and human health benefits.

Response to Finding 1:

1. The EPA provided a written determination to the TDOT that the Buy American provisions do not apply to its truck stop electrification project. While we continue to believe that this is an accurate determination, we contacted TDOT to see if it had any additional information that would factually address the concerns raised in the draft report

regarding Buy American compliance. At this point, we would conclude that, independent of the agency determination of nonapplicability of Buy American to this project, TDOT has information to demonstrate Buy American compliance for all of its grantees.

Mr. Alan Jones of TDOT confirmed to EPA staff that the grantee which had not provided a Buy American certification during the project period, JR Enterprises South, LLC, has since provided a certification of its Buy American compliance applicable to this project, which is provided as an attachment. The only other grantee noted in the OIG report whose Buy American compliance status was mentioned involved the entity Convoy Solutions. Convoy Solutions had previously provided written documentation in a memorandum to TDOT contending that there was a “substantial transformation” within the meaning of the Buy American requirements of the trusses used in construction of the TSE facilities. Convoy Solutions utilized “sold for scrap” recycled trusses that were retrofitted/alterd to include the addition of new equipment. The approval of Convoy Solutions’ substantial transformation claim became a moot point following the EPA’s determination that Buy American did not apply to this project; however, it is likely that TDOT would have supported Convoy Solutions’ substantial transformation request. In addition, the majority of the costs for this project were either exempt from the Buy American requirements or were American made products. For the Convoy Solutions project, the total reimbursed costs for the project was \$473,250 (invoices attached), of which \$452,000 was paid to purchase services or exempt items, or to purchase American made products.

OIG Response 1: The OIG acknowledges receipt of the recent Buy American certification from JR Enterprises South, LLC. We will revise the report to reflect the additional certification. In regards to the Convoy Solution substantial transformation request, the OIG obtained the request from TDOT during the course of our review. However, the OIG did not consider the request since TDOT had not reviewed and accepted the request. Upon TDOT’s acceptance, the OIG will review the request, along with the basis for TDOT’s acceptance.

2. The EPA continues to have concerns about finding number 1 as detailed in our August 6, 2012, response to OIG’s July 19, 2012, Position Papers. (See attached.)

OIG Response 2: See OIG comments in the August 6, 2012, response to the OIG’s July 19, 2012, position papers (appendix C).

Response to Finding 2:

1. The EPA concluded that the overall objectives of the cooperative agreement have been met. This includes the installation and operation of a network of 117 electrified parking spaces across Tennessee with some level of demonstrated emission reductions and fuel savings based on the limited TSE usage data available to TDOT at the time that the final project report was prepared and submitted to the EPA. The EPA has already taken steps

in conjunction with TDOT as outlined in our August 6 memorandum (attached) to address the concerns raised in the draft report. EPA is working with TDOT to rerun the diesel emissions quantifier. Post project TSE usage data will be utilized to produce updated emission reduction information, which will be incorporated as an addendum to this project.

OIG Response 3: The OIG acknowledges comments from Region 4 and commends the efforts already taken to address the issue. The OIG looks forward to the receipt and evaluation of updated emission information.

Additional comments:

1. On page 12 of the draft report, a conclusion is made that the Mountain Plaza Truck Stop grant award was a contract. It is our position that such a conclusion is inconsistent with the facts established for this project. The nature of the agreement between the TDOT and Mountain Plaza was to carry out a public purpose as part of TDOT's mission; specifically, a reduction in diesel emissions resulting from the installation of electrified parking spaces at the truck stop. The nature of this agreement is consistent with that of a subaward and acknowledged by the OIG on page 10 of the report which states, "We agree with EPA that the initial work plan addressed selection of subgrantees (or truck stop partners)." For example, Mountain Plaza Truck Stop conducted an open competition soliciting the installation of TSE equipment at its location, and it then selected the TSE vendor to complete the TSE work for the project. This demonstrates the independent nature of this entity operating as a subawardee as opposed to a TDOT contractor.

OIG Response 4: The OIG does not agree with Region 4's assertion that TDOT made subawards. As for the statement on page 13 of this report, the OIG is only acknowledging that we are in agreement with what the work plan states. As for TDOT calling its grant contract awardees, subgrantees, this is just one example of very confusing terminology used by TDOT throughout the project. As discussed in our draft report, the awardees did not meet the characteristics of a subgrantee. In addition, TDOT did not consider the awardees to be subgrantees and did not include them in the state's subrecipient monitoring program. OMB Circular A-133 (e) states: "Methods to ensure compliance for Federal awards made to for-profit subrecipients may include pre-award audits, monitoring during the contract, and post-award audits." Based on the OIG's discussion with TDOT and its external auditors, TDOT did not conduct these items because TDOT did not consider the awards to be subgrants.

2. It is not clear from the statement on the bottom of page 6, referencing TDOT's third round request for applications "open to truck stop owners and TSE technology vendors", that there is an understanding of the requirement that in order to be eligible for this grant competition, a TSE technology vendor must provide evidence of its partnership with a truck stop as demonstrated by a letter of commitment from the truck stop, not that a TSE vendor could qualify to carry out the electrification grant project on its own. The object

of the partnership was to carry out a public purpose of improving air quality through the reduction of diesel emissions rather than to procure goods or services for the direct benefit of TDOT, further demonstrating a contract was not present in this case.

OIG Response 5: The OIG understands the truck stop and the TSE vendor “partnership” concept. The paragraph was included in the background section to point out that TDOT opened the RFA process to include vendor applicants.

3. The conclusion on page 13 of the report, which addresses the on-going relationship between TDOT and the grantee TSE vendors, does not appear to address the direct feedback provided by TDOT about its role in the project activities by each grantee. (See item 4 in EPA’s August 6 memorandum highlighting the on-going relationship between TDOT and the TSE vendor grantees.) TDOT indicated that the grantees did have responsibility for programmatic decision-making, used the federal funds to carry out a program of the organization (in this case the “TSE vendor/Truck Stop partnership”), and had its performance measured against the objectives of the program. The OIG conclusion acknowledges that the grantees were required to comply with the applicable Recovery Act requirements established in the cooperative agreement, but then does not appear to take these facts exhibiting the characteristics that are not indicative of a contract for goods and services into consideration in the findings.

OIG Response 6: For the OIG response to the comment made regarding page 13 of the draft report, see the OIG comments in the August 6, 2012, response to the OIG’s July 19, 2012, position papers, Item 4 (appendix C).

The OIG disagrees with TDOT that the truck stop and TSE vendors made programmatic decisions regarding the program (OMB Circular A-187 refers to “program” as the “Federal” program). As such, TDOT made all programmatic decisions. The truck stop and TSE vendors merely fulfilled their obligations under the grant contracts. Additionally, the truck stop and TSE vendors did not use federal funds to carry out a program of the organization. OMB Circular A-187 uses “organization” to refer to an entity (i.e., the truck stop and TSE vendors in this instance). TDOT carried out the project under a state program. The truck stop and TSE vendors did not carry out their own programs. In addition, TDOT’s performance was measured against the objectives of the federal program, not the truck stop and TSE vendors. TDOT measured the truck stop and TSE vendors’ performance against TDOT’s grant contract requirements.

Thank you for the opportunity to provide comments on this draft report. If you have any questions on this response, please do not hesitate to contact Mr. Stuart Perry of my staff at 404-562-8980 or via email at perry.stuart@epa.gov

Attachments (3)

Agency's Comments on Position Papers



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
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AUG 06 2012

MEMORANDUM

SUBJECT: EPA Region 4 Response to Position Papers Number 1 and 2
Stemming from the OIG Audit of the Tennessee Department of Transportation
ARRA DERA Project Grant, EPA Grant No. 2A-95425709,
OIG Assignment No. OA-FY12-0260

FROM: Beverly H. Banister, Director
Air, Pesticides and Toxics Management Division *Douglas Kelley*

TO: Angela Bennett, Project Manager
EPA OIG

The purpose of this memorandum is to respond to the July 19, 2012, position papers provided by the Office of Inspector General developed following your audit of the Tennessee Department of Transportation's (TDOT) ARRA DERA Project Grant, EPA Grant No. 2A-95425709. We have reviewed the position papers issued by your office and compared your findings to the information available in the project file and supplemental information provided by the grantee. Based on this information we offer the following response to your findings which concluded that: (1) TDOT did not ensure compliance with the Buy American requirements stipulated in the Recovery Act for its EPA Diesel Emissions Reduction Act truck stop electrification (TSE) project grant; and (2) TDOT potentially overstated project results and the project may not achieve expected environmental and human health benefits:

1. Regarding Finding 1, we do not agree with the finding and do not concur with your recommendation to disallow and recover any Recovery Act grant funds for this project grant. Further, pursuant to Agency responsibilities under Section 1605 of the Recovery Act, EPA has stated in writing that the Buy American provisions do not apply to this truck stop electrification project grant, and stand-by that decision as the facts in this case do not factually support the finding noted above. The following information is provided as factual information to support our position.
2. The TDOT project grant was awarded for the purpose of providing funding to support the installation of a network of electrified parking spaces at selected interstate highway truck

stops in Tennessee. The work plan for this cooperative agreement established up front that TDOT's role was to develop and facilitate a grant competition and oversee the selection of sub-grantees who would be selected to move forward with developing TSE parking spaces that best suit their location and clientele.

OIG Response 1: The OIG agrees with the comments regarding the grant award and the work plan. However, the OIG does not agree with Region 4's conclusion that the subgrantees would be conducting the project. The OIG maintains that TDOT conducted the project by contracting for the purchase and installation of TSE facilities.

3. As stated in the terms and conditions of this project grant, TDOT was required to maintain primary responsibility for ensuring successful completion of the EPA-approved project and to monitor the performance of the sub-recipient(s) and ensure that they comply with all applicable regulations, statutes, and terms and conditions which flow down in the sub-award. TDOT was required to ensure that sub-recipients are aware of requirements imposed upon them by Federal statutes and regulations. TDOT was also required to ensure that any sub-award(s) comply with the standards in Section 210(a)-(d) of OMB Circular A-133 and will not be used to acquire commercial goods or services for the recipient (TDOT). Therefore, it is clear that TDOT was required to take an active role in the performance of this project and were critical to the success of this project.

OIG Response 2: The OIG agrees with TDOT's requirements under the cooperative agreement. Hence, TDOT—which maintained primary responsibility for ensuring successful completion of the project and for monitoring the subrecipients to ensure full compliance with regulations, statutes, terms and conditions—did in fact “conduct” the project or work at some level.

The OIG notes that Region 4 incorrectly cited OMB Circular A-187. OMB Circular A-133 is the correct citation. As discussed in the draft report, the OIG used Section 210 (a)-(d) of OMB Circular A-133 to show that TDOT's awards are indicative of a vendor contractor and not a subgrantee.

4. Based on discussions with TDOT, each of the sub-recipients who were awarded funds for “developing TSE parking spaces that best suit their location and clientele” meet the criteria noted in Section 210(b) of Circular A-133 regarding sub-recipients. In our discussions with TDOT they stated that the grantees: conducted all procurement actions for services (e.g., electrical, concrete work, etc.); supervised all construction on the sites; the grantees were responsible for taking pictures of the work being done and providing site pictures to TDOT; were responsible for submittal of all invoices for equipment purchased, for site preparation work completed, etc.; and were responsible for providing periodic reports regarding the project to TDOT.

TDOT indicated that they only traveled to the sites periodically to observe the progress of the projects, and only provided help to the grantees on certain activities as requested (e.g., preparing for solicitation of competitive bids for work to be performed on-site), but they did not do the work for them and did not issue the solicitations, etc.. In addition, the TDOT sub-recipients were also responsible for determining compliance with the Davis-Bacon wage rate determinations including submission of copies of payrolls by all subcontractors and were responsible for submitting monthly online wage reports to TDOT. The sub-recipient roles being performed by each of the TDOT grantees (and also required by the “TDOT Grant Contract” signed by each of the sub-recipients) provide clear evidence that TDOT was in an active oversight role as compared to one where TDOT was actually conducting the project which would meet the criteria of public works.

OIG Response 3: The OIG disagrees and continues to maintain that TDOT, as the recipient of the grant award, conducted the project.

5. In order to meet the obvious intent associated with meeting the definition of “Public building and public work” listed in 2 CFR Section 176.140, one would need to consider what the purpose of the TDOT awards were for, targeted to “companies with truck stops in Tennessee and/or TSE companies working in partnership with a Tennessee truck stop” (language pulled from TDOT TSE Request for Applications (RFA)). If TDOT were “conducting the project”, the normal mode would be for TDOT to put out an RFA that included very detailed bid specifications, performance bond requirements, etc. and would establish a principal purpose of acquiring property or services for direct agency benefit or use (on behalf of the welfare of the citizens of Tennessee) as part of an acquisition (procurement action). In that case, TDOT would retain ownership of the public work, which in this case did not occur. Ownership of the TSE parking spaces is vested with the grantees. Pursuant to OMB’s Recovery Act web-site, the lack of ownership of the property and equipment negates the applicability of the Buy American provision. See http://www.whitehouse.gov/omb/recovery_faqs#g7 (General Recovery Act FAQ – Question 7), which provides “if the facility is/will be privately-owned, then the ARRA Buy America provision will not apply to it, because it will not be a ‘public building or public work.’”

OIG Response 4: The EPA’s DERA program determination regarding Section 23 states that projects “... are considered to be public works when a governmental entity is conducting the project.” The determination does not address ownership as the criteria for making the Buy American determination.

The OIG does not consider the OMB’s FAQs example included above to be applicable to the situation in question. The example relates to a seemingly unique scenario involving a state college or university.

6. Further, in an assistance mode, as defined by the Federal Grant and Cooperative

Agreement Act of 1977 and highlighted in EPA’s “Policy for distinguishing Between Assistance and Acquisition” (GPI-94-04), TDOT’s purpose would need to be one of transferring something of value (e.g., money) to an eligible entity to accomplish a public purpose of support or stimulation authorized by statute. TDOT’s role in this case is clearly one of “assistance” and not acquisition (procurement), and therefore does not meet the obvious intent associated with being “a public building of, and a public work of, a government entity”.

OIG Response 5: See OIG Response 4.

7. Regarding Finding 2, we do not agree with the finding based on our discussions with TDOT and the information that they had at the time of reporting. However, we have had discussions with TDOT regarding the recommendations included in Finding 2, and offer the following comments:
 - a. We believe the overall objectives of the cooperative agreement have been met including the installation and operation of a network of 117 electrified parking spaces across Tennessee with some level of demonstrated emission reductions and fuel savings based on limited usage data provided to TDOT from the truck stops in Tennessee. It is expected that over time the usage of the TSE equipment will increase as people become more familiar with the benefits of using the equipment and the availability of the TSE equipment.
 - b. The assumptions used by TDOT to calculate and report out on emissions reductions and estimated reductions in fuel usage using the diesel emissions quantifier were based on 2000 hours of usage instead of the default setting of 2400 hours. This lower usage estimation was in an effort to utilize a more conservative approach to reporting given that they did not have any reliable information to predict actual usage (very little to no usage data was available to them at the time of the report).
 - c. Whereas it is understandable that it will likely take some time to maximize usage of the electrified parking spaces across Tennessee, TDOT indicated they are willing to develop an addendum to their report which provides project results based on actual usage data that they now have for the most recent quarter. The quarterly data will be used to extrapolate a project usage estimate for an entire year which will be plugged into the diesel emission quantifier to generate estimated emissions reduction information. This addendum report will be added to the EPA grant file and provided to your office.

OIG Response 6: The OIG acknowledges comments from Region 4 and commends the efforts already taken to address the issue. The OIG looks forward to the receipt and evaluation of updated emission information.

Distribution

Regional Administrator, Region 4
Agency Follow-Up Official (the CFO)
Agency Follow-Up Coordinator
Director, Grants and Interagency Agreements Management Division,
Office of Administrator and Resources Management
Deputy Regional Administrator, Region 4
Office of External Affairs, Region 4
Director, Air, Pesticides, and Toxic Management Division, Region 4
Chief, Indoor Environments and Grants Section, Region 4
Audit Follow-Up Coordinator, Region 4
Manager, Policy Office Long Range Planning Division,
Tennessee Department of Transportation