



U.S. ENVIRONMENTAL PROTECTION AGENCY

OFFICE OF INSPECTOR GENERAL

# Materials Relating to Resolution of Audit Report No. 11-R-0700 Concerning Agency's Compliance With "Buy American" Requirements

April 25, 2013



Scan this mobile  
code to learn more  
about the EPA OIG.

# Table of Contents

---

	PDF Page
<b>OIG Audit Resolution Memorandum to Deputy Administrator, March 21, 2013</b> .....	3
<b>Determining Whether “Substantial Transformation” of Components Into a Manufactured Good” Has Occurred in the U.S.: Analysis, Roles, and Responsibilities, October 22, 2009, Exhibit 1</b> .....	8
<b>At a Glance Summary of Report 11-R-0700, September 23, 2011, Exhibit 2</b> .....	18
<b>Agency Proposed Management Decision, January 27, 2012, Exhibit 3</b> .....	20
<b>OIG Legal Memorandum in Response to Region 5’s Proposed Management Decision, March 15, 2012, Exhibit 4</b> .....	27
<b>Agency Legal Opinion Regarding EPA's Guidance on the Buy American Provisions of ARRA, August 7, 2012, Exhibit 5</b> .....	34
<b>Agency Response to OIG Memorandum Entitled, "Response to Region 5’s Proposed Management Decision on OIG Report No. 11-R-0700," August 15, 2012, Exhibit 6</b> .....	41
<b>OIG Legal Memorandum in Response to Office of Water's Aug 15, 2012 Memorandum in Connection with OIG Report No. 11-R-0700," September 28, 2012, Exhibit 7</b> .....	43
<b>OIG Memorandum Regarding Resolution of OIG Report No. 11-R-0700, October 17, 2012, Exhibit 8</b> .....	56
<b>OIG Memorandum Regarding Resolution of OIG Report No. 11-R-0700, January 17, 2013, Exhibit 9</b> .....	59
<b>EPA Audit Resolution Submission Form, January 29, 2013, Exhibit 10</b> .....	63
<b>Federal Acquisition Regulation Final Rule for ARRA "Buy American Requirements for Construction Material," August 30, 2010, Exhibit 11</b> .....	69
<b>Correspondence Letter from Deputy Comptroller of the United States to Congressman Gerry E. Studds, November 3, 1975, Exhibit 12</b> .....	71



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

MAR 21 2013

THE INSPECTOR GENERAL

**MEMORANDUM**

**SUBJECT:** Resolution of Office of Inspector General Report No. 11-R-0700, *American Recovery and Reinvestment Act Site Visit of Wastewater Treatment Plant—Phase II Improvements Project, City of Ottawa, Illinois, September 23, 2011*

**FROM :** Arthur A. Elkins Jr. 

**TO:** Robert Perciasepe  
Deputy Administrator

In accordance with guidelines set out in the Environmental Protection Agency Manual 2750, the Office of Inspector General and agency representatives met with the EPA Chief Financial Officer on February 28, 2013, in an effort to resolve the above-referenced audit matter. (See Exhibit 2, OIG Report 11-R-0700; and Exhibit 3, Region 5's response to the final report.) The meeting did not result in an audit resolution, so we are presenting the dispute to you as the EPA's Deputy Administrator and final agency arbiter of audit resolution cases. Office of Water Deputy Assistant Administrator Michael Shapiro agreed via email that this next step is warranted.

The OIG is asking for a prompt resolution of this matter, given the lengthy, and sometimes inexplicable, delays to date in moving towards an outcome.<sup>1</sup> The Office of Management and Budget Circular A-50, *Audit Followup*, specifies a 180-day period for the resolution of audits, and it is now approximately 1 year past this time period.

A series of meetings between the agency and the OIG relating to the subject audit report have yielded no agreement. The OIG therefore respectfully requests that you make a decision for the agency based on the written record. Following is a concise summary of the highlights of the dispute. The summary includes references to the attached, relevant materials. In particular, we direct your attention to OIG legal memoranda dated March 15, 2012 (Exhibit 4) and September 28, 2012 (Exhibit 7); and to the EPA Office of General Counsel legal opinion dated August 7, 2012 (Exhibit 5). These documents provide the majority of relevant information.

<sup>1</sup> For example, one unexplained delay occurred during the time period between October 2012 and January 2013. The OIG submitted a request to the CFO for assistance in the audit resolution process on October 17, 2012. (See Exhibit 8.) The agency, however, did not provide materials required by EPA Manual 2750, and there was no response of any sort from the Office of the Chief Financial Officer. The OIG was compelled to repeat the request on January 17, 2013. (See Exhibit 9.) A meeting was finally held with the CFO and agency representatives on February 28, 2013.

## SUMMARY

The subject City of Ottawa audit, and three related Region 5 audits, were initiated by OIG hotline complaints. The complaint related to the Ottawa City project alleged that certain products being used in the EPA's American Reinvestment and Recovery Act of 2009 project were not in compliance with Section 1605 of the Recovery Act—the Buy American provisions. Those provisions require that products used in Recovery Act projects must be “produced” in the United States. Congressional intent behind these provisions is clear. In the purpose statement, Congress stated that the first goal of the Recovery Act was “[t]o preserve and create jobs and promote economic recovery.” A major step in achieving that purpose was supposed to be the Buy American provisions. Agencies had an obligation to rigorously monitor use of foreign components in Recovery Act projects so as to eliminate imports that would negatively affect American jobs and the American economy.

The OIG concluded that Region 5 had wrongfully determined that certain equipment used in the Ottawa City project (and three similar projects resulting in three additional Region 5 audits) was procured in compliance with the Buy American provisions. (*See* Exhibit 2.) Further, the OIG concluded that the incorrect determinations by Region 5 were mostly the result of flawed OW guidance. (The OW guidance in question is included at Exhibit 1.) We state “mostly the result,” because Region 5 played a role in the outcome when it failed to follow certain guidelines in the OW guidance. The OIG March 2012 memorandum at Exhibit 4 includes details about the region's actions.

In an effort to ensure compliance with the Buy American provisions, the OW determined that substantial transformation analysis should be employed when components of products used in Recovery Act projects are manufactured overseas. (*See* Exhibit 1.) Generally, the question is whether those components are transformed enough within the United States so as to be able to conclude that they are actually produced in the United States. The EPA generally required a Recovery Act contractor with a product that was partially composed of a foreign component(s) to evidence that the component had been substantially transformed in the United States.

The established test for determining substantial transformation is the change in character or use test. This test for substantial transformation is based in statute (19 U.S.C. § 2518(4)(B)), regulation (19 C.F.R. § 177.22(a)), and is employed in virtually all case law cited by OGC and OW. The test was referenced in Recovery Act-related OMB regulations, which in turn are cited in the OW guidance. The essence of the rigorous established test is that in order for a foreign component to be considered manufactured in the United States, it must be substantially transformed into a new and different article of commerce with a character or use distinct from the article or articles from which it was transformed. This test is discussed in detail in the attached OIG legal memoranda. (*See* Exhibits 4 and 7.)

For its Recovery Act-related guidance, OW created a questionnaire with three questions to be used for assessing substantial transformation. (*See* Exhibit 1.) Each question is a stand-alone test. The second question in the questionnaire is the established change in character or use test. The third question, however, is a new, alternative test created by OW. The OW alternative test simply requires evidence of such factors as time or money spent on the domestic process to show substantial transformation. Importantly, there is no ultimate evidentiary requirement in the alternative test that the foreign component was transformed into a “new and different article.” The OW alternative test was widely used by the agency (including Region 5), in part because it does not require a rigorous assessment of change in use or character. Because of the lack of rigor in the alternative test, there is a very high risk that there can be a lack of compliance with the letter and intent of the Buy American provisions. We believe that

this was in fact the result for the acquisition that was the subject of this audit report, as well as for acquisitions referenced in the three related reports. In short, it strongly appears that certain Recovery Act funds were spent in violation of the requirements of the Act.

The OGC asserted in its legal opinion that there is legal support for the alternative test. (See Exhibit 5.) However, despite the fact that there are many hundreds of legal cases that focus on a substantial transformation test, the OGC only cited to two cases in support of the alternative test. One is a federal case, which actually supported the OIG position that the established test must be used to assess substantial transformation. The second case is a U.S. Customs Service Notice; it dealt with a fact pattern that is entirely unrelated to the fact patterns reviewed by the OIG. These two cases do not constitute legal support for the OW alternative test.

## AGENCY ARGUMENTS

During the course of the last year, OW has generated seven arguments to justify its alternative test. Many of these arguments have been addressed in OIG legal memoranda. (See Exhibits 4 and 7.) Summaries of the arguments and OIG responses are presented below.

**First argument.** OW contends that it would be imprudent to address a problem related to Recovery Act guidance at this late date because the stimulus funds have mostly been spent. (See Exhibit 6.) But with regard to the subject audit, and the three related Region 5 audits, OW noted at the February meeting that Recovery Act funds related to the audit(s) have not yet been spent. Thus, there is still a chance here to apply correct guidance in at least a few instances. Finally, the significantly flawed OW alternative test sits prominently in the public domain (if one inputs “substantial transformation test” into Google, the second entry is the OW alternative test guidance), and so the test may be used going forward by the EPA or other agencies to wrongly assess substantial transformation in other instances involving federal funds, especially if additional stimulus monies are appropriated.

**Second argument.** OW argues that it did not have much time to prepare the guidance and so any error that may have slipped through is justifiable. This is not persuasive. One of the cases cited in OW’s own substantial transformation guidance is *Customs Ruling HQ 734097* (November 25, 1991). This case included a test that is an effective blend of the established test and the alternative test. The referenced test required evidence of both complex manufacture **and** that the components “[lost] their identity and [became] an integral part of a new article.” Application of this test, that was known by OW when preparing its guidance, would have been simple and appropriate.

**Third argument.** OW proposed a possible solution to the OIG concerns by suggesting that the words “change in character or use” (the established test) be added to the question component of the alternative test. Unfortunately, the suggested change would not require the user of the test to show evidence of actual change in character or use. Put another way, the proposal would not add a new criterion about change in use or character to the test. Hence, the proposed modification would not result in any improvement and no reduction in the risk that the agency was violating the Act.

**Fourth argument.** OW raised a concern that it would be unworkable to revisit thousands of past Recovery Act decisions to assess whether mistakes were made regarding foreign components because of flawed guidance. However, at the February 28, 2013, meeting, the OW agreed that a waiver might be a feasible option to address the mistakes without having to revisit each previous payment. Ultimately it is for the agency to decide how best to remedy the concerns raised here, but difficulty in correcting an error is not a defense to a conclusion that there is an error.

**Fifth argument.** At the February 28, 2013, meeting with the CFO, the OGC raised the argument that OW intended to ensure that the alternative test required evidence of a change in character or use, but the wording was a bit “inartful.” Because of the “inartfulness,” however, the established test was not employed in the subject audited project, nor in the three related audited projects, and probably not used in many other substantial transformation decisions in EPA Recovery Act projects. This might be an acceptable argument when large amounts of Recovery Act funds are not at stake, but here the size and importance of the multibillion-dollar stakes demanded and still demands artfulness and accuracy.

**Sixth argument.** In the requisite 2750 form that was submitted to the CFO in February 2013 (Exhibit 10), OW asserted for the first time in writing that the Federal Acquisition Regulation in 2010 “applied a test that essentially looked to the last place of assembly to determine the location of manufacture.” The section of the FAR in question is located at 75 Fed. Reg. 53,153, 53,156 (August 30, 2010). (See Exhibit 11.) OW seems to be arguing that the FAR “test” is similar to the OW alternative test, so there is no risk of having violated the Buy American provisions. This is the OIG’s first opportunity to respond in writing to this argument. OW’s novel argument about the FAR fails for a few reasons. First, the FAR merely stated that there is a record of interpreting “manufacture” in connection with the Buy American Act (which is significantly different than the Buy American provisions of the Recovery Act), and then elaborated on the simple assertion by referencing a General Accounting Office opinion letter (B-175633 dated November 3, 1975 (Exhibit 12)). The GAO case discussed an Army regulation that required in its two-part Buy American Act test that at least 50 percent of the value of the end product must be of domestic origin. That is significantly more rigorous than the OW sole focus on “assembly.” Thus, contrary to OW’s assertion, the two tests are not comparable. Second, the other part of the Army test focused on the last place of manufacture—not last place of assembly. (The FAR also discussed last place of manufacture and not last place of assembly.) In the GAO opinion, “manufacture” included a number of steps in addition to assembly. More importantly, the GAO was left unsure about whether those manufacturing steps were sufficient to satisfy the intent behind the Buy American Act requirement regarding manufacture in the United States, so GAO recommended that the Secretary of Defense better define and clarify the meaning of “manufactured in the United States.” (See Exhibit 12 at 4.) The FAR and the referenced GAO case simply do not apply an established test about the last place of assembly that is somehow similar to OW’s alternative test. The recent FAR argument does not save OW’s alternative test.

**Seventh argument.** The agency stated at the February meeting with the CFO that it was not required to use the substantial transformation concept to assess whether foreign components were in compliance with the Buy American provisions. Apparently, this means that the agency should not now be held responsible for applying a methodology that it did not have to use in the first place. We agree that OW was not required to employ the concept of substantial transformation. However, it did so, and it justified that decision in its guidance by stating that the concept is “well-established” and that “EPA is not aware of an alternative standard” that could be used in the context of the Buy American provisions to determine whether or not a manufactured good is U.S.-produced. (See Exhibit 1 at 2.) We believe OW made the correct choice to focus on substantial transformation; but having selected substantial transformation as the operative basis for determining whether Recovery Act funds were being properly spent, OW was then required to apply the correct substantial transformation test. OW failed to do so and thus the intent behind the Buy American provisions was not satisfied and Recovery Act funds were likely spent in violation of the Act.

## CONCLUSION

Based on the discussion above and the attached supporting documentation, we request that the agency's final audit resolution decision require appropriate modification of OW substantial transformation guidance and application of the revised guidance to the proposed management decisions referenced in the subject audit, as well as in the three related Region 5 audits. Also, if the agency chooses to further mitigate the risk of violation of the Recovery Act, it should address prior relevant decisions that are possibly incorrect, as well as make appropriate changes to the guidance in question so that it will not be improperly used in the future.

If you have any questions regarding this memorandum, please contact Melissa Heist, assistant inspector general for the Office of Audit, at (202) 566-0899 or ([Heist.Melissa@epa.gov](mailto:Heist.Melissa@epa.gov)); or Robert Adachi, product line director, at (415) 947-4537 or ([Adachi.Robert@epa.gov](mailto:Adachi.Robert@epa.gov)).

### Attachments (12)

cc: Acting Assistant Administrator, Office of Water  
Principal Deputy Assistant Administrator, Office of Water  
Regional Administrator, Region 5  
Deputy Regional Administrator, Region 5  
General Counsel  
Deputy General Counsel  
Chief Financial Officer  
Deputy Chief Financial Officer  
Deputy Associate General Counsel for Civil Rights and Finance Law  
Director, Office of Ground Water and Drinking Water, Office of Water  
Acting Director, Office of Wastewater Management, Office of Water  
Audit Follow-up Coordinator, Region 5  
Director, Water Division, Region 5  
Chief, State and Tribal Programs Branch, Region 5

## Exhibit 1



## **DETERMINING WHETHER “SUBSTANTIAL TRANSFORMATION” OF COMPONENTS INTO A “MANUFACTURED GOOD” HAS OCCURRED IN THE U.S.: ANALYSIS, ROLES, AND RESPONSIBILITIES**

Section 1605 of the American Recovery and Reinvestment Act of 2009 (ARRA) requires that of the all iron, steel, and manufactured goods used in ARRA funded projects to construct public buildings or public works be produced in the U.S. This is the expected means of compliance. OMB published Guidance for Federal agencies subject to this provision on April 23, 2009 (at 74 FR 18452, found at <http://edocket.access.gpo.gov/2009/pdf/E9-9073.pdf>), elaborating on this ARRA requirement, including the provisions of Section 1605(b) and (c) for a waiver of this requirement under specified circumstances, and of Section 1605(d) that this requirement must be implemented “consistent with U.S. obligations under international agreements.”

That Guidance includes at §176.140 the definition of a “manufactured good” as “[a] good brought to the construction site for incorporation into the building or work that has been processed into a specific form and shape, or combined with other raw material to create a material that has different properties than the properties of the individual raw materials.” §176.70(a)(2)(ii) of the Guidance further states that “[t]here is no requirement with regard to the origin of components or subcomponents in manufactured goods used in the project, as long as the manufacturing occurs in the United States.”

Thus, recipients of assistance from the Clean or Drinking Water State Revolving Funds (SRF) provided under ARRA must determine, have the goods to be used in this project been “manufactured” in the U.S.? This may be relatively simple to determine for many goods used in a water infrastructure project. However, many other manufactured goods used in ARRA SRF projects are brought together in the U.S. through a widely varying spectrum of activities. When such goods are comprised of any components produced in countries other than the U.S., SRF assistance recipients can use substantial transformation analysis to determine whether the activities in the U.S. by which a particular good is brought together do or do not enable it to be considered “manufactured” in the U.S. under §1605 and the Guidance.

### ***The Concept of Substantial Transformation***

To assess whether these varied activities do or do not enable the assistance recipient to consider a good as “produced in the U.S.”, OMB included in a section of their Guidance on international agreements the concept of “substantial transformation”. §176.160 provides that recipients need to inquire whether, “[i]n the case of a manufactured good that consists in whole or in part of materials from another country, [the good] has been substantially transformed in the United States into a new and different manufactured good distinct from the materials from which it was transformed.” This OMB Guidance term itself directly applies to and is binding on few if any SRF recipients, because it appears only in a term for international agreements. However, EPA believes the

substantial transformation concept provides necessary guidance on this issue. The origins and applications of the term are rooted in well-established Federal interpretations, particularly by the Customs Department and the Federal courts, and EPA is not aware of any alternative standard – particularly, any alternative appropriate for application under §1605 – to determine whether or not a manufactured good is U.S.-produced.

### *Applying Substantial Transformation Analysis – Roles and Responsibilities*

Before exploring the principles and means to interpret and apply the substantial transformation concept, it is important to clarify the roles of ARRA assistance recipients, EPA, and the States in the process of applying this concept. These roles are, of necessity, a combination of the traditional responsibilities among these partners in the SRF programs, and the specific, new mandates imposed by §1605.

*Assistance Recipients' Role:* SRF assistance recipients bear the direct responsibility to comply with the Buy American requirement of §1605, because that section applies the requirement to each “project”. The statutory expectation is that recipients will comply by buying U.S.-produced iron, steel, and manufactured goods. This expectation is illustrated by the characterization in the OMB Guidance (at §176.80) of waivers as “exceptions” to the general rule of Buy American. Recipients, in conjunction with consultants, contractors, suppliers/distributors, and others, thus are responsible to decide if products are U.S.-made, by applying the substantial transformation analysis specified by OMB.

Assistance recipients will make this determination for a finished good by obtaining information about the processes used and applying the questions set forth in the Section below, “*Analysis to Determine Whether Substantial Transformation Has Occurred in the U.S.*” To decide in unclear (marginal) cases, recipients should ask themselves: would we be confident to use information from the analysis to document our Buy American compliance – that this good is U.S.-produced – to our State or EPA in a compliance audit?

For recipients considering use of goods claimed to be U.S.-produced, if a competing manufacturer, bidder or supplier protests such claim, you can ask such competitors to frame any concerns in the form of specific responses to these questions, both as to their product and that of another competing company. This information can equip recipients to ask further questions of their intended manufacturers, to better inform the recipient’s decision, and to preemptively address the subject of potential bid protests later on that might otherwise complicate an ARRA project’s timely contracting. In other words, if a competitor states a complaint – that its goods are U.S.-produced, but the other company’s claim that their goods comply with §1605 is false – then the assistance recipient should request this response be framed in the format of appropriately detailed answers by the competitor to the substantial transformation questions, both as to their product and that of another competing company.

Upon applying a substantial transformation analysis through these questions, many assistance recipients will determine that a good to be used in their project is substantially

transformed in the U.S. Because it is thus manufactured in the U.S., such recipients can comply with §1605 by using the good in their projects and retaining appropriate documentation in their files. This documentation will include (1) appropriately detailed answers from the manufacturer to the substantial transformation questions, as described in the “*Analysis to Determine Whether Substantial Transformation Has Occurred in the U.S.*” section of this paper, below; (2) any additional material the recipient may have from the manufacturer that provides detail supporting the answers; and, (3) upon procurement of the good, documentation from the manufacturer verifying that the product originated in a U.S. plant where substantial transformation occurred as demonstrated by the answers above. **This information and documentation will be such assistance recipients’ basis for demonstrating compliance with the Buy American requirement of §1605(a).**

After receiving information to answer the substantial transformation questions as to an intended manufacturer’s product, an assistance recipient may have continuing, reasonable doubt as to the adequacy of the answers to establish the U.S. origins of that product. By requesting and analyzing substantial transformation information, a recipient will also be better equipped to understand other potential options. This analysis may provide a basis to see whether a competing manufacturer’s U.S.-made product does meet, or can be timely adapted to meet the recipient’s justified specifications. If the U.S.-made product does not meet those specifications, and other U.S.-made goods that do meet them are not available, then the recipient should have sufficient information to apply for a waiver from EPA. While assistance recipients assisted by the engineering community and others will use best professional judgment in making determinations as to substantial transformation, such determinations must be supported by appropriately detailed information from manufacturers describing the specific operations in their manufacturing process that warrant a determination that substantial transformation has occurred in the U.S.

***EPA Role:*** EPA does not and will not make determinations as to substantial transformation or the U.S. or foreign origin of manufactured goods. EPA’s role under §1605 is to review waiver requests when an assistance recipient believes it cannot comply by buying U.S.-made goods, and to undertake compliance oversight. The limitations on EPA’s role in this issue are driven by responsibilities assigned by ARRA.

ARRA’s SRF appropriations heading requires that if all funds allotted to each State are not under contract or construction within 12 months of enactment (February 17, 2010), EPA must reallocate such un-contracted-for funds to States that have placed all their funds under contract by that date. OMB’s Guidance (at §176.120), reflected also in EPA’s April 28, 2009 Memorandum on the “Implementation of Section 1605” (found at [http://www.epa.gov/water/eparecovery/docs/04-29-2009\\_BA\\_waiver\\_process\\_final.pdf](http://www.epa.gov/water/eparecovery/docs/04-29-2009_BA_waiver_process_final.pdf), “Application by Assistance Recipient” section), stresses the importance of ascertaining the U.S.-produced origins of goods or securing any necessary waivers before signing construction contracts. In light of these requirements and SRFs-specific time constraints, EPA must view the role assigned to Federal agencies by §1605 itself – to decide on requests for waivers – as the Agency’s central focus in implementing §1605.

However, EPA does recognize that, for assistance recipients, these issues may be as novel, complex, and demanding as they are for EPA, and that prior to contracting, they are at risk of losing ARRA funding provided to them by their State if it is not under contract by February 17, 2010. Thus, **at the discretion of the EPA Region and upon the direct request of an assistance recipient only, EPA may undertake informal “anticipatory” oversight.**

As per the preceding paragraph, EPA will not itself make any substantial transformation determinations. However, where an assistance recipient has made at least a tentative determination that substantial transformation of a specific good has occurred in the U.S., EPA may review detailed information about substantial transformation that the assistance recipient believes is or may be sufficient to support its determination, and will in such cases, as a matter of “anticipatory” oversight, advise the recipient as to whether in EPA’s judgment the supporting information is sufficient.

In this effort, EPA will review only information provided by the recipient, or on its behalf by another party (e.g., a manufacturer or consulting engineer) with the recipient’s express consent. This will ensure that any EPA review of a recipient’s substantial transformation determination and supporting information is undertaken because the assistance recipient considers it to be genuinely in its own interest, and is not primarily for the benefit or convenience of any other party.

*State Buy American Role:* §1605 does not authorize or provide a role for States in the consideration or granting of waivers. However, as with the typical situation pertaining to oversight of SRF assistance, States do have a lead oversight role – particularly through their conduct of oversight audits – in ensuring assistance recipients comply with all applicable requirements. This includes §1605, as the terms and conditions in the SRF capitalization grant agreements for ARRA require that applicable provisions be placed in all assistance agreements. Applying Buy American information posted on [www.epa.gov/water/eparecovery](http://www.epa.gov/water/eparecovery), States can advise assistance recipients to help ensure that the documentation in recipients’ project files is appropriate for review of any applicable means of compliance with §1605.

- For the procurement of U.S.-made iron, steel, and manufactured goods (the preferred approach), this would include verification of U.S. production (as stated in sample certification point 2 in Appendix 5 of EPA’s April 28, 2009 Buy American memo, cited above, and as referred to in point (3) of “Assistance Recipients’ Role”, above), in conjunction with, where necessary, the information provided and determination made that substantial transformation occurred in the U.S., as indicated in this paper.
- For items covered by a categorical (e.g., nationwide) waiver, the documentation must include all elements specified in and required by the waiver for an item or project to be covered. For any individual project component that has been granted a waiver, documentation will include a copy of the Federal Register notice of the project specific waiver.

- For items subject to an international agreement, the recipient documentation will include a communication from the applicable state or municipal party to the agreement that the recipient and any specific components are covered, a substantiated estimate that the value of the project is \$7,443,000 or more, and verification of the components' origin from a country covered by the agreement.

### ***Substantial Transformation Concerns for States and EPA***

Both EPA and States should recognize that, if they wish to provide technical assistance in areas of Buy American activities beyond the scope of the above responsibilities, there is a tension between the State or EPA role for compliance oversight on the one hand, and the discretionary provision of technical assistance with respect to that compliance on the other. Both EPA and States should be cautious regarding recipient requests to consult on substantial transformation, keeping in mind their primary responsibility for ensuring compliance.

However, like EPA, States can provide their own “anticipatory oversight” to their assistance recipients. States can choose to review detailed information and analysis provided by or on behalf of the recipient that presents a case about the potential substantial transformation of a product the recipient wishes to procure for an ARRA project. While this review by the State is purely discretionary and, like any EPA may do in this regard, is not a formal decision-making process under ARRA, such review also would recognize the reality faced by ARRA’s SRF assistance recipients: of complying with new, unfamiliar, and complex Buy American requirements prior to a tight deadline for signing contracts. Both EPA and States, in undertaking this role, should inform recipients seeking such review of those recipients’ obligation to scrutinize and analyze to the best of their ability the information proffered by manufacturers asserting U.S. production of their goods, and to consider information put forward by competing manufacturers who may be contesting such assertions. Under these circumstances, neither EPA nor States are compelled to provide an “anticipatory” oversight review, and should concur in such requests only if the State or EPA believes they have a sufficient basis to be able to determine whether substantial transformation had occurred if they were undertaking a direct oversight audit.

### ***Some Basic Principles of Substantial Transformation Analysis***

With the widely diverse conditions of production in the water infrastructure industry, circumstances of creating a finished good may range from production lines that are nearly or entirely integrated vertically, to the bringing together of components from dispersed sources. The challenge for substantial transformation analysis is to determine whether – on the spectrum from “minimal assembly required” in a simple kit (such as an IKEA box) to heavy machining involving high value labor and sophisticated equipment – the U.S.-based production process for each specific finished good reached a point where one

could fairly say that substantial transformation has occurred. The simple assembly case is clearly not substantial transformation, the heavy machining clearly is. The focus of substantial transformation analysis is on the many, individualized, more complex cases in between these two, obvious poles.

An oversimplified summary of this analysis is to ask whether the activities in the U.S. substantially transform the components that go into the completed item. EPA has relied on long-articulated Federal legal interpretations to provide more useful detail. Some basic principles in “substantial transformation” analysis include the following.

- First, the determination of whether “substantial transformation” has occurred is always case-by case, using questions and criteria well-established in administrative and judicial case law. [*SDI Technologies v. U.S.*, 977 F.Supp 1235 (C.I.T. 1997), at 1239 n. 2. *Customs Ruling HQ 560427* (August 21, 1997)]
- Second, no good “satisfies the substantial transformation test by ... having merely undergone “[a] simple combining or packaging operation.” [19 USC Sec. 2463(b)(2)(A), cited in *Uniden America Corp. v. U.S.*, C.I.T. Slip Op. 00-139, Court No. 98-05-01311 at 8, n. 4.]
- Third, “[a]ssembly operations which are minimal or simple, as opposed to complex or meaningful, will generally not result in a substantial transformation.” [*Customs Ruling HQ 734097* (November 25, 1991) (and Customs Cases cited therein)]

These principles are helpful in offering a basic framework and sideboards for more searching substantial transformation analysis, as described herein.

### ***Analysis to Determine Whether Substantial Transformation Has Occurred in the U.S.***

EPA has developed several questions for assistance recipients to ask when determining whether substantial transformation has occurred in the U.S. As EPA entered the work of ARRA implementation without current experience in the Office of Water with Buy American programs, these questions were derived directly from numerous Federal court cases, Customs Department administrative rulings, and interpretive rules for U.S. trade agreements.

**In applying these questions to individual cases, “yes” answers must in all cases be documented by meaningful, informative, and specific technical descriptions of the activities in the actual process asked about in each question.** These descriptions need not be of great length, but must be sufficiently detailed and clearly written to inform assistance recipients and agency reviewers about the activities that have occurred in the process(es), enough to understand their nature and purpose. They should not simply assert a conclusion, describe an end state, or essentially repeat the words of the question

as a statement. **Simple “yes” answers are always entirely insufficient to make a case that an item has been substantially transformed in the U.S.**

These questions all focus on processing work on and assembly/integration of the components into a finished good. Design, planning, procurement, component production, or any other step prior to the process of physically working on and bringing together the components into the item used in and incorporated into the project cannot constitute or be a part of substantial transformation.

Substantial Transformation has occurred in the U.S. if answer is “yes” to either Question 1, 2, or 3 below.

1. Were all of the components of the manufactured good manufactured in the United States, **and** were all of the components assembled into the final product in the U.S.? (If the answer is yes, then this is clearly manufactured in the U.S., and the inquiry is complete)

Question 2 addresses primarily the situations where important processing work is done on components of the complete item. While assembly is typically also involved, the focus of the question 2 steps is generally on that work prior to final assembly. Because each of the subquestions of 2 call for relatively significant and demanding steps, the answer to question 2 is “yes” if answer to any of 2a, 2b, or 2c is “yes.”

2. Was there a change in character or use of the good or the components in America? (These questions are asked about the finished good as a whole, not about each individual component)
  - a. Was there a change in the physical and/or chemical properties or characteristics designed to alter the functionality of the good?
  - b. Did the manufacturing or processing operation result in a change of a product(s) with one use into a product with a different use?
  - c. Did the manufacturing or processing operation result in the narrowing of the range of possible uses of a multi-use product?

Question 3 generally addresses situations where the most significant of the potentially transformative work is assembly. Because assembly is in most cases further down the spectrum towards non-transformative work, a more demanding standard is appropriate. Thus, if the answer to at least two of 3a, 3b, 3c, 3d, or 3e is “yes”, then the answer to Question 3 is “yes”. Manufacturers who wish to establish beyond a doubt that their product has been substantially transformed in the U.S. via answers to Question 3 will want to provide descriptions of their process(es) that support affirmative answers to as many of the subquestions as are applicable, to increase the likelihood that the answers to at least two of the questions are sufficient.

3. Was(/were) the process(es) performed in the U.S. (including but not limited to assembly) complex and meaningful?
  - a. Did the process(es) take a substantial amount of time?
  - b. Was(/were) the process(es) costly?
  - c. Did the process(es) require particular high level skills?
  - d. Did the process(es) require a number of different operations?
  - e. Was substantial value added in the process(es)?

### ***Some Actions Are Not Substantial Transformation under Any Circumstances***

Work that makes simply cosmetic or surface changes only in a component, e.g., painting, lacquering, or cleaning, cannot amount or contribute to a finding of substantial transformation. [One example of this: *Rules of Origin under the U.S.-Jordan Free Trade Agreement, Final Report*, at 4.9 (at <http://www.jordanusfta.com/documents/chap4.pdf>).] Similarly, simply cutting a material to length or width, e.g., cutting steel pipe to particular length, is considered a minor change that is not and does not advance the case for substantial transformation [*Rules of Origin* above, at 4.11.2].

### ***Can Substantial Transformation Occur Onsite?***

The OMB Guidance definition of “manufactured good” as a “good brought to the construction site” suggests a few general operating presumptions: (1) what occurs onsite is construction; (2) “manufacturing” occurs prior to the point at which a “good [is] brought to the construction site,” and (3) the substantial transformation test is applied to determine the U.S. or non-U.S. origin of goods at that point, as they arrive onsite. On the other hand, the OMB Guidance also provided for “substantial transformation” analysis to determine where manufacturing has occurred. In such analysis, the principle is inherent and well-established that a good is manufactured at any site where substantial transformation occurs. (See, e.g., *Torrington v. U.S.* 764 F.2d 1563 (1985), at 1568: “a substantial transformation occurs when an article emerges from a manufacturing process [having met the applicable criteria for transformation]”, cited at *SDI Technologies, Inc. v. U.S.* (977 F.Supp. 1235 (CIT 1977), at 1239.) Thus, substantial transformation can encompass onsite manufacturing. Because the OMB Guidance was signed April 6, 2009, less than seven weeks after enactment of ARRA, this did not allow time to coordinate or integrate the “manufactured goods” definition with the “substantial transformation” term.

Interpretation of these two terms can be coordinated by maintaining the distinctions made in each term. Under the “manufactured goods” definition, what occurs at the project site is presumed to be construction; under the “substantial transformation” analysis,



manufacturing may occur at the project site, but only if the process there is both substantial transformation and it occurs under conditions ordinarily and customarily associated with manufacturing at a conventional plant.

In other words, for an activity at the project site to be considered “manufacturing,” the manufacturer must, first, bring all components of the good to the site and must always do so in normal course of business. This ensures that the U.S. company is not changing the terms of its customary operations in an attempt to game the Buy American requirements. In addition, the manufacturer does all the work onsite with its own personnel, and may use a subcontractor for this only if the manufacturer does so already in the normal course of business. Thus, by ensuring the manufacturer maintains essentially full custody and control at the project site to the point where the good is finished, this condition requires that the manufacturer customarily engages in work at project sites as the functional equivalent of a manufacturing plant for that particular good.

If the U.S. company that meets these “customary operation” conditions does retain custody through the onsite completion of the good and its installation into the project, the final issue is whether that onsite work amounts to substantial transformation under the Questions 1, 2, or 3 above. The U.S. company’s case will be strongest if the transformative work must be done onsite. For example, the U.S. manufacturer may provide that onsite assembly and installation include sophisticated adjustments, calibration, etc., by the U.S. company or its authorized and customary subcontractors, which must necessarily be done onsite to meet project performance specifications and establish warranty conditions.

This discussion also explains why, in a “kit” situation, where all pieces are shipped by one company with the intent of providing all components necessary to be assembled into a functional good (e.g., pump station), their assembly by a contractor or third party is properly considered as “construction” and not substantial transformation.

## Exhibit 2



# At a Glance

*Catalyst for Improving the Environment*

## Why We Did This Review

The U.S. Environmental Protection Agency, Office of Inspector General, conducts site visits of American Recovery and Reinvestment Act of 2009 (Recovery Act) clean water and drinking water projects. The purpose of the visits is to confirm compliance with selected Recovery Act requirements. We selected the wastewater treatment plant project in the City of Ottawa, Illinois, for review.

## Background

The city received a \$7,720,293 loan from the State of Illinois under the Water Pollution Control Loan Program. The loan included \$3,860,147 in Recovery Act funds. The city will use these funds to rehabilitate and improve the city's wastewater treatment plant.

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

The full report is at:  
[www.epa.gov/oig/reports/2011/20110923-11-R-0700.pdf](http://www.epa.gov/oig/reports/2011/20110923-11-R-0700.pdf)

## ***American Recovery and Reinvestment Act Site Visit of Wastewater Treatment Plant—Phase II Improvements Project, City of Ottawa, Illinois***

### **What We Found**

We conducted an unannounced site visit of the wastewater treatment plant project in the City of Ottawa, Illinois. As part of our site visit, we toured the project, interviewed city representatives and engineering and contractor personnel, and reviewed documentation related to Recovery Act requirements.

The city could not provide sufficient documentation to support that some manufactured goods used on the project met the Buy American requirements of Section 1605 of the Recovery Act. In these instances, the documentation did not demonstrate clearly that items were either manufactured in the United States or substantially transformed in the United States. As a result, the state's use of over \$3.8 million of Recovery Act funds on the Ottawa project is prohibited by Section 1605 of the Recovery Act, unless a regulatory option is exercised.

### **What We Recommend**

We recommend the Regional Administrator, Region 5, employ the procedures set out in Title 2 of the Code of Federal Regulations (CFR) to resolve the noncompliance on the Ottawa project. In the event that the region decides to retain foreign-manufactured goods in the Ottawa project under 2 CFR §176.130 (c)(3), the region should either “reduce the amount of the award by the cost of the steel, iron, or manufactured goods that are used in the project or . . . take enforcement or termination action in accordance with the agency's grants management regulations.”

Neither the region nor the city agreed with our conclusion that the documentation was not sufficient to support Buy American compliance for some items. Based on additional documentation provided by the city, we agree that some items are now sufficiently supported, and we have revised the report accordingly. However, documentation is still insufficient in four instances.

## Exhibit 3




UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 5  
77 WEST JACKSON BOULEVARD  
CHICAGO, IL 60604-3590

JAN 27 2012

REF ID: A1700109 58

**MEMORANDUM**

**SUBJECT:** Proposed Management Decision  
American Recovery and Reinvestment Act Site Visit of Wastewater Treatment  
Plant -- Phase II Improvements Project, City of Ottawa, Illinois  
Project Number: OA-FY11-A-000

**FROM:** Susan Hedman   
Regional Administrator

**TO:** Arthur A. Elkins, Jr.  
Inspector General

We have reviewed the final report titled *American Recovery and Reinvestment Act Site Visit of Wastewater Treatment Plant – Phase II Improvements Projects, City of Ottawa, Illinois*, and we continue to disagree with the Office of Inspector General's (OIG) position that Buy American documentation is insufficient for the four items listed in the report. We affirm our prior determination that the Buy American documentation for the Kaeser blowers and the ITT Flygt pumps (two different models) is sufficient to prove compliance with Recovery Act requirements. Further, as promised in our July 29, 2011 response, we monitored the status of the K-Turbo blowers that were being manufactured at the time the final OIG report was issued. We received an inspection report and Buy American documentation from the City of Ottawa; the OIG has received the same information. Based on this information, we have concluded that the K-Turbo Buy American documentation also demonstrates compliance with Recovery Act requirements. The attached table summarizes the basis and rationale for our determinations for all four items.

Central to our disagreement with the report's conclusions is the amount and meaning of technical information presented in the submitted documents. In introducing the concept of substantial transformation, EPA provided a means for Recovery Act assistance recipients to analyze and determine whether manufactured goods meet Buy American requirements. Such determinations must be supported by detailed documentation from manufacturers. EPA also anticipated that Recovery Act assistance recipients would be assisted by the engineering community using their best professional judgment in reviewing and analyzing manufacturing information. City of Ottawa engineers evaluated and reviewed Buy American documentation and using their best engineering professional judgment found it sufficient to prove substantial transformation. EPA engineers have affirmed the City of Ottawa's determination and find the documentation sufficient as well.

EPA has met its obligations, under 2 CFR Section 176.130, to review the OIG's allegations of Recovery Act noncompliance. We have reviewed and evaluated Buy American documentation, resulting in no finding of noncompliant items. Therefore, I have concluded that Recovery Act funding to the City of Ottawa should not be reduced for this project and that no corrective action is required.

#### Attachment

cc: Geoff Andres, Manager, Infrastructure Financial Assistance Section, Illinois EPA  
Arnold Bandstra, Assistant City Engineer, City of Ottawa, Illinois  
Melissa Heist, Assistant Inspector General for Audit  
Robert Adachi, Director of Forensic Audits  
John Manibusan, EPA OIG Office of Congressional, Public Affairs and Management

EPA Region 5 Proposed Management Decision Summary Table

January 17, 2012

Equipment Description & Section Number	Manufacturer	Concur or Non-concur	Basis & Rationale for Determination
Submersible Pumps (Section Number 11310)	ITT-Flygt	Non-concur. No further action will be taken.	<ul style="list-style-type: none"> <li>• ITT-Flygt Buy American certification documentation includes letters dated February 24, 2010, and June 1, 2011. Letters reference pumps provided in the Ottawa project.</li> <li>• The February 24, 2010 letter is prospective in nature and lists the general ITT-Flygt brand models to be provided in the Ottawa project. This letter was not used for EPA's evaluation of Buy American documentation.</li> <li>• The June 1, 2011 letter/documentation is specific and includes detailed narrative answers to a completed Substantial Transformation checklist. Specific model and serial numbers of the pumps provided in the Ottawa project are also listed in the letter.</li> <li>• The June 2011 documentation indicates that the manufacturing facility is located in Pewaukee, Wisconsin.</li> <li>• The June 2011 documentation provides narrative answers to all five elements of Question #3 in the Substantial Transformation checklist; Question #3 addresses the issue of whether the processes performed in the USA are complex and meaningful. Affirmative and detailed answers to only two elements of Question #3 are needed to yield a result that the processes are complex and meaningful; two answers are listed below that will document substantial transformation.</li> <li>• On page 3 of the June 2011 documentation, the response to element 3(a) of Question #3 states that mechanical manufacturing including motor stator installation, rotor unit manufacture, mechanical seal assembly, impeller assembly, and pump housing assembly takes an average of 85 minutes per pump unit. Further, electrical manufacturing including installation and connection of electric sensor components, and power cable installation takes an average of 25 minutes per pump unit. The total relevant manufacturing time is approximately 110 minutes per pump unit. This total manufacturing time can be considered substantial and commensurate for the type of pump provided. Additional information provided to element 3(a) was not considered or evaluated.</li> <li>• On page 5 of the June 2011 documentation, the response to element 3(d) of Question #3 states that highly skilled manufacturing employees are required to build the equipment in the ITT-owned manufacturing facility located in the USA who are factory trained, certified and familiar with the manufactured goods. This level of skill is commensurate with the performed manufacturing processes.</li> <li>• Photographs were included with the June 2011 documentation that showed the facility and various manufacturing areas within the facility. One of four manufacturing pods is pictured. The manufacturing pod appears consistent with the manufacturing processes described in the June 2011 documentation.</li> </ul>

EPA Region 5 Proposed Management Decision Summary Table

January 17, 2012

Equipment Description & Section Number	Manufacturer	Concur or Non-concur	Basis & Rationale for Determination
Submersible Chopper Pumps (Section Number 11311)	ITT-Flygt	Non-concur. No further action will be taken.	<ul style="list-style-type: none"> <li>• ITT-Flygt Buy American certification documentation includes letters dated February 24, 2010, and June 1, 2011. Letters reference pumps provided in the Ottawa project.</li> <li>• The February 24, 2010 letter is prospective in nature and lists the general ITT-Flygt brand models to be provided in the Ottawa project. This letter was not used for EPA's evaluation of Buy American documentation.</li> <li>• The June 1, 2011 letter/documentation is specific and includes detailed narrative answers to a completed Substantial Transformation checklist. Specific model and serial numbers of the pumps provided in the Ottawa project are also listed in the letter.</li> <li>• The June 2011 documentation indicates that the manufacturing facility is located in Pewaukee, Wisconsin.</li> <li>• The June 2011 documentation provides narrative answers to all five elements of Question #3 in the Substantial Transformation checklist; Question #3 addresses the issue of whether the processes performed in the USA are complex and meaningful. Affirmative and detailed answers to only two elements of Question #3 are needed to yield a result that the processes are complex and meaningful; two answers are listed below that will document substantial transformation.</li> <li>• On page 3 of the June 2011 documentation, the response to element 3(a) of Question #3 states that mechanical manufacturing including motor stator installation, rotor unit manufacture, mechanical seal assembly, impeller assembly, and pump housing assembly takes an average of 85 minutes per pump unit. Further, electrical manufacturing including installation and connection of electric sensor components, and power cable installation takes an average of 25 minutes per pump unit. The total relevant manufacturing time is approximately 110 minutes per pump unit. This total manufacturing time can be considered substantial and commensurate for the type of pump provided. Additional information provided to element 3(a) was not considered or evaluated.</li> <li>• On page 5 of the June 2011 documentation, the response to element 3(d) of Question #3 states that highly skilled manufacturing employees are required to build the equipment in the ITT-owned manufacturing facility located in the USA who are factory trained, certified and familiar with the manufactured goods. This level of skill is commensurate with the performed manufacturing processes.</li> <li>• Photographs were included with the June 2011 documentation that showed the facility and various manufacturing areas within the facility. One of four manufacturing pods is pictured. The manufacturing pod appears consistent with the manufacturing processes described in the June 2011 documentation.</li> </ul>



EPA Region 5 Proposed Management Decision Summary Table

January 17, 2012

Equipment Description & Section Number	Manufacturer	Concur or Non-concur	Basis & Rationale for Determination
<p>Positive Displacement Blower (Section Number 11370)</p>	<p>Kaeser</p>	<p>Non-concur. No further action will be taken.</p>	<ul style="list-style-type: none"> <li>• Kaeser Buy American certification documentation includes a letter dated October 29, 2010 to sales representative who sold the Omega positive displacement blower packages supplied to the Ottawa project. Additional documentation also included involving correspondence between Kaeser and EPA Headquarters Office of Water (OW) staff engineers regarding whether the items are “substantially transformed” and actually manufactured in the USA.</li> <li>• The October 2010 documentation indicates that the items are manufactured at the Kaeser facility in Fredericksburg, Virginia.</li> <li>• The October 2010 documentation provides narrative answers to all five elements of Question #3 in the Substantial Transformation checklist (a copy of the completed checklist was not provided); Question #3 addresses the issue of whether the processes performed in the USA are complex and meaningful. Affirmative and detailed answers to only two elements of Question #3 are needed to yield a result that the processes are complex and meaningful; two answers are listed below that will document substantial transformation.</li> <li>• On page 2 of the October 2010 documentation, the response to element 3(a) of Question #3 states that the manufacturing process requires an estimated 16 o 20 hours of build time. This manufacturing time can be considered substantial and commensurate for a positive displacement blower package. Additional information provided to element 3(a) was not considered or evaluated.</li> <li>• On page 2 of the October 2010 documentation, the response to element 3(b) of Question #3 states that the combination of domestically sourced components and domestic labor can account for 35 to 50 percent of the product’s value. The range of this value depends upon the relative size of the unit when compared to the components being installed, as well as the complexity of the customer’s specifications. This response is sufficient given the variability of inputs that could lead to a manufactured positive displacement blower package.</li> <li>• EPA Headquarters OW staff engineers provided “anticipatory” oversight to address the issue of substantial transformation in order to determine if the products were actually manufactured in the USA. The “anticipatory” oversight included a review of Buy American documentation similar to the current documentation review performed in meeting EPA’s obligations under 2CFR Section 176.130.</li> <li>• EPA OW staff engineers opined that substantial transformation is occurring at Kaeser’s Fredericksburg, Virginia facility, and that the products are therefore made in the USA. An e-mail message dated November 1, 2010 documents this opinion.</li> <li>• EPA Region 5 staff engineering review of the Kaeser Buy American information affirms EPA OW staff engineering opinion that substantial transformation is occurring at Kaeser’s Fredericksburg, Virginia facility, and that the products are therefore made in the USA.</li> </ul>

EPA Region 5 Proposed Management Decision Summary Table

January 17, 2012

Equipment Description & Section Number	Manufacturer	Concur or Non-concur	Basis & Rationale for Determination
Centrifugal Blower (Section Number 11375)	K-Turbo	Non-concur. No further action will be taken.	<ul style="list-style-type: none"> <li>• The K-Turbo Buy American documentation includes two documents: a site visit inspection report prepared by the City of Ottawa Assistant City Engineer, and a Buy American compliance document prepared by K-Turbo. The City of Ottawa site visit inspection report was e-mailed to EPA and the OIG on October 11, 2011, while the K-Turbo Buy American compliance document was received by EPA and the OIG on November 4, 2011.</li> <li>• The City of Ottawa Assistant City Engineer monitored and documented the manufacture of their three K-Turbo blowers in the site visit inspection report dated October 11, 2011. The unit serial numbers for the three K-Turbo blowers are 3100-100, 3100-101, and 3100-102.</li> <li>• The site visit inspection report lists four visits to the K-Turbo facility in Batavia, IL: 1) May 16, 2011; 2) July 18, 2011; 3) August 29, 2011; and 4) September 1, 2011. With the exception of the May visit, the site visit inspections documented the various manufacturing processes. Photographs and other documentation (such as parts lists) are included in the report.</li> <li>• Based on the site visit inspections, Ottawa's Assistant City Engineer concluded that their three K-Turbo blowers are made in the USA by applying a standard of substantial transformation. Specifically, the Assistant City Engineer focused his attention on Question #3 of the Substantial Transformation checklist which addresses the issue of whether the processes performed in the USA are complex and meaningful.</li> <li>• The November 2011 documentation indicates that the three blowers (serial numbers 3100-100, 3100-101, and 3100-102) are manufactured at the K-Turbo facility in Batavia, Illinois.</li> <li>• The November 2011 documentation provides narrative answers to all five elements of Question #3 in the Substantial Transformation checklist (a copy of the completed checklist was not provided); Question #3 addresses the issue of whether the processes performed in the USA are complex and meaningful. Affirmative and detailed answers to only two elements of Question #3 are needed to yield a result that the processes are complex and meaningful; two answers are listed below that will document substantial transformation.</li> <li>• On page 2 of the November 2011 documentation, the response to element 3(a) of Question #3 states that each machine (that is, each blower) required an estimated 240 hours of construction. This construction or manufacturing time can be considered substantial and commensurate for the type of blower package provided. Additional information regarding time spent on a blower was not considered or evaluated.</li> <li>• Beginning on page 3 of the November 2011 documentation, the response to element 3(d) of Question #3 chronicles the various mechanical and electrical operations performed during the manufacture of a blower. Pictures were provided to illustrate the numerous operations. Additional information pertaining to testing operations was not considered or evaluated.</li> <li>• EPA Region 5 staff engineering review of the K-Turbo Buy American information affirms the City of Ottawa's opinion that substantial transformation occurred at K-Turbo's Batavia, Illinois facility, and that the blowers are made in the USA.</li> </ul>

## Exhibit 4



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

MAR 15 2012

**MEMORANDUM**

**SUBJECT:** Response to Region 5's Proposed Management Decision on OIG Report No. 11-R-0700, *American Recovery and Reinvestment Act Site Visit of Wastewater Treatment Plant—Phase II Improvements Project, City of Ottawa, Illinois*, September 23, 2011

**TO:** Susan Hedman  
Regional Administrator, Region 5

Nancy Stoner  
Acting Assistant Administrator  
Office of Water

This memorandum notes our disagreement with the proposed management decision provided by Region 5 for Office of Inspector General (OIG) Report No. 11-R-0700, *American Recovery and Reinvestment Act Site Visit of Wastewater Treatment Plant—Phase II Improvements Project, City of Ottawa, Illinois*, issued September 23, 2011. In addition to this memorandum being addressed to Region 5, the author of the decision, the memorandum is also addressed to the Office of Water (OW) because it authored the guidance that the region relied on to make its decision.<sup>1</sup>

The proposed management decision in question, dated January 27, 2012, concluded that there was compliance with Section 1605 of the American Recovery and Reinvestment Act of 2009 (Recovery Act). Specifically, the region determined that in applying a test set out in guidance prepared by OW, a number of products that were discussed in the audit had in fact met the substantial transformation test. For the purposes of this document, we would like to focus on one of those products, the Kaeser Blower. We disagree with the proposed management decision because we believe that the OW guidance on which that decision is based is significantly flawed and therefore led to the wrong decision. The OW guidance includes legal definitions of substantial transformation, but then employs a test for use in assessing substantial transformation that seemingly does not comport with those legal definitions. We request that OW modify its guidance so that the definitions of substantial transformation are met via an appropriate test, and we request that the region apply the modified test to the Kaeser Blower product. We believe that

<sup>1</sup> The resolution of the substantial transformation issue that is the subject of this memorandum will affect other OIG audits and investigations of Recovery Act projects throughout the country.

the likely result will be that the region will determine that the Kaeser Blower is not in compliance with the Buy American provisions of the Recovery Act.

The region and any OW staff who opined on the issue most certainly relied on the OW guidance document, *DETERMINING WHETHER "SUBSTANTIAL TRANSFORMATION" OF COMPONENTS INTO A "MANUFACTURED GOOD" HAS OCCURRED IN THE U.S.: ANALYSIS, ROLES, AND RESPONSIBILITIES*, dated October 22, 2009. The purpose of this document was to help assistance recipients fulfill their responsibilities to use iron, steel, and manufactured goods produced in the United States as required by Section 1605 of the Recovery Act. Specifically, the guidance notes that when "goods are comprised of any components produced in countries other than the U.S., SRF [State Revolving Fund] assistance recipients can use substantial transformation analysis to determine whether the activities in the U.S. by which a particular good is brought together do or do not enable it to be considered 'manufactured' in the U.S. under Section 1605 and the Guidance." The term "Guidance," as found in the OW document, refers to related Office of Management and Budget (OMB) regulations dated April 23, 2009.

In its 2009 substantial transformation document, OW referenced the OMB Guidance – which in turn had quoted 2 C.F.R. § 176.160 – as requiring that "[i]n the case of a manufactured good that consists in whole or in part of materials from another country, [the good] has been substantially transformed in the United States into a new and different manufactured good distinct from the materials from which it was transformed." OW's focus on the idea of a new and different final product as being a key aspect of substantial transformation was reinforced by an additional cited definition – taken from 2 C.F.R. § 176.140 – of a "manufactured good" as "[a] good brought to the construction site for incorporation into the building or work that has been processed into a specific form and shape, or combined with other raw material to create a material that has different properties than the properties of the individual raw materials." By including these definitions of substantial transformation front and center, OW clearly established that foreign-made components – to satisfy a substantial transformation test – must be combined in such a way or modified in such a way within the United States so that the components are actually transformed into new and different items that are obviously different from those which were imported.

Case law referenced in the OW document reinforces the idea that, to have substantial transformation, there must be actual, significant change to the foreign component. In *SDI Technologies v. United States*, 21 Ct. Int'l Trade 895, 897 (1997), the court began by adopting the concept from another case that "[s]ubstantial transformation occurs when an article emerges from a manufacturing process with a name, character, or use which differs from those of the original material subjected to the process." In this matter, an electronic stereo chassis and other stereo system components, including speakers, were imported. The chassis was then encased and the speakers were attached in the receiving country. The court considered whether the character and use of the imported components had been changed. First, the court found that because the "essence" of the chassis and speakers remained the same, their character had not been substantially transformed by the addition of a shell and the assembly of the components. Second, the court, among other things, concluded that the addition of speakers did not result in a new use because it involved a simple combining of components; hence, there was no evidence of

substantial transformation. The court also noted that it is important to assess which country is the source of the most complex part of the manufacturing; if the country that is exporting the component is responsible for creating the complex item then it is unlikely the country that is importing the component will be seen as a source of substantial transformation. In short, the character and use of the chassis and speakers had not significantly changed during the production process, so there was no substantial transformation.

A second case cited in the OW guidance, *Customs Ruling HQ 734097* (November 25, 1991), set out a particularly relevant definition of substantial transformation. It stated: “[i]n determining whether the combining of parts or materials constitutes a substantial transformation, the issue is the extent of operations performed and whether the parts lose their identity and become an integral part of the new article” (emphasis added). The case noted that, in assessing substantial transformation, one should look to the complexity of the process to help make that determination. But, in the end, a complex manufacturing process alone is not sufficient to evidence substantial transformation; the component from overseas must also lose its original identity. The case offered the following substantial transformation test: (1) were the parts physically transformed, (2) did the assembly process require large amounts of skilled labor or specialized equipment, (3) was the cost of manufacture high, and (4) did the components lose their identity by becoming an integral part of a new article. This test combines inquiries into straightforward manufacturing issues like labor and cost with the traditional criteria of physical transformation and integration into a new identity.

To help assistance recipients determine whether a product has been substantially transformed, OW developed a questionnaire with three questions. The first question asked whether all components had been manufactured in the United States. The second question asked whether there had been a change in character or use of a component in the United States. The third question focused on whether the United States manufacturing process was complex and meaningful. OW determined that only one of the questions must be answered in the affirmative to conclude that substantial transformation occurred. Indeed, there is no need to apply a substantial transformation test if the answer to question one is in the affirmative. Question two poses the standard substantial transformation test that is identified in the definitions and case law found in the OW guidance; it requires a change in character or use of the original component.

Our concern here lies with the use of question three – standing ALONE – to determine whether substantial transformation occurred. That question has five subparts:

- a. Did the process take a substantial amount of time?
- b. Was the process costly?
- c. Did the process require particular high level skills?
- d. Did the process require a number of different operations?
- e. Was substantial value added in the process?

According to the guidance, two of the five subparts must be answered in the affirmative for there to be an overall “yes” for the question. This is the question that the region applied when concluding whether the Kaeser Blower chassis had been substantially transformed. However, the major flaw is that while each of the subparts may well be satisfied with whatever calculable (and

hopefully supportable) manufacturing data is provided by the contractor, there is no additional, necessary determination of whether the components in question may, in fact, have “[lost] their identity and become an integral part of the new article.” This test is missing half of the analysis required by the Customs Ruling above.

OW repeatedly noted – through case law and regulations – that substantial transformation must involve actual transformation of a component into a new and different good that is distinct from the original component. Proof of costly, complex, value-enhancing processes may well be established via question three, but all of that does not also evidence whether, ultimately, the component was significantly modified.

The problem identified above with regard to question three of the OW questionnaire is apparent in the decision making about the Kaeser Blower that was referenced in the audit report. The “base chassis” core of the Kaeser Blower – the key component of the final product – was imported from Germany. It is a complex, large unit. American-made components (motor, valves) were added in the United States. The region concluded that because time had been spent adding the components and because the value of the chassis had been increased by the components, question three was satisfied and substantial transformation had been established. However, if one were to apply the definitions of substantial transformation as set out in the OW guidance, one would most likely conclude that substantial transformation had not occurred. For one, the United States manufacturing process admittedly involved the addition of American components to the core German chassis, but the complex manufacturing of the chassis had occurred in Germany. Second, the U.S. manufacturing process did not result in a “new and different manufactured good distinct from the materials from which it was transformed.” Although the German chassis was not fully functional when it was imported – unlike the stereo system in *SDI*, the chassis which was the essence of the blower remained essentially the same after the addition of American components. The complex, large German chassis did not lose its identity in the United States.

The critical flaw in the OW substantial transformation questionnaire is that in accepting responses to question three ALONE as sufficient evidence of substantial transformation, OW has ultimately not fully satisfied the test set out in the Customs Ruling (which it cited) discussed above. There it was noted that substantial transformation is the result of complex processes (question three) AND evidenced by a loss of identity and physical transformation of the original component because of the way a component is fully integrated into the final product (question two). OW’s guidance fails because it allows a contractor to establish substantial transformation by showing only one part (question three) of a critical two-part test (questions two and three). If both critical parts of the substantial transformation test had been applied to the Kaeser Blower, the region would seemingly have concluded that substantial transformation had not occurred and there was not compliance with the Buy American provisions of the Recovery Act.

For the reasons set out above, we believe that OW must modify the substantial transformation questionnaire employed in its guidance so that some combination of both questions two and three are employed as the appropriate test for substantial transformation. We further expect that this new test – a combination of questions two and three – will be applied to the Kaeser Blower chassis from Germany.

We have two additional concerns about the region's proposed management decision. First, the region relied on vague and unsupported statements included in a letter from Kaeser dated October 29, 2010. For example, the region relied on Kaeser's claim that the combination of domestically sourced components and domestic labor "can" account for 35 to 50 percent of the product's value. The range of this value depended on the relative size of the unit when compared to the components being installed, as well as the complexity of the customer's specifications. The region also relied on the claim that each unit would require an estimated 16–24 hours of build time. Neither of these statements was supported by verifiable evidence to determine creditability, accuracy, and usefulness. These statements were seemingly prospective estimates and not specifically tailored to the Ottawa blowers, as required by Environmental Protection Agency (EPA) guidance. Additionally, these statements were addressed in the report and determined to be insufficient to support substantial transformation. The region has not provided any reason why the report's determination was incorrect or any new evidence for consideration, as required by EPA Manual 2750.

Second, the region also relied on a November 1, 2010, e-mail message from OW to Kaeser in which it advised the company that "substantial transformation is occurring in the U.S. at your Fredericksburg, VA facility." However, the OW substantial transformation guidance states that "EPA does not and will not make determinations as to substantial transformations." EPA limits its role under Section 1605 to reviewing waiver requests. Hence, the e-mail appears to not be in keeping with the limitations set out in the OW guidance. Also, the region did not provide the justification or precedence for why OW's decision is determinative in this matter, as required by EPA Manual 2750.

The Buy American provisions of the Recovery Act state, in part, that monies are only to be used for projects where the manufactured goods are produced in the United States. The provisions were included so as to help achieve the first stated goal of the Recovery Act: "To preserve and create jobs and promote economic recovery." OW adopted a substantial transformation test so as to eliminate those components that were made overseas and were not ultimately manufactured in this country. However, the OW questionnaire that is used to assess substantial transformation seems to be designed to fall short of achieving the Buy American goal with regard to at least some foreign made components. We believe that the questionnaire is flawed because it allows for a determination that a component has been transformed even though the component has in fact not been shaped into a new form or combined with other components to create a new item that has different properties (*see* 2 C.F.R. § 176.140). The result, in our opinion, is that not all components from overseas are being rigorously scrutinized to ensure they are transformed within the United States, as is required under the spirit and letter of the Buy American provisions of the Recovery Act. In addition to problems highlighted with regard to the OW questionnaire, we also noted above two examples where the process for assessing substantial transformation was seemingly less than rigorous.



If you have any questions regarding this memorandum, please contact Melissa Heist, Assistant Inspector General for Audit, at (202) 566-0899; or Robert Adachi, Product Line Director, at (415) 947-4537.



Arthur A. Elkins, Jr.

- cc: Principal Deputy Assistant Administrator, Office of Water  
Agency Follow-Up Official (the CFO)  
Agency Follow-Up Coordinator  
General Counsel  
Director, Office of Ground Water and Drinking Water, Office of Water  
Director, Office of Wastewater Management, Office of Water  
Deputy Regional Administrator, Region 5  
Audit Follow-Up Coordinator, Region 5  
Director, Water Division, Region 5  
Chief, State and Tribal Programs Branch, Region 5

## Exhibit 5




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

AUG 07 2012

Office of  
General Counsel

MEMORANDUM

SUBJECT: EPA's Guidance on the Buy American Provisions of the ARRA

FROM: Kenneth Redden   
Deputy Associate General Counsel  
Civil Rights and Finance Law Office  
Office of General Counsel

TO: Michael Shapiro  
Deputy Assistant Administrator  
Office of Water

**Question Presented**

Whether the analytical framework EPA provided in guidance to State Revolving Loan program grant recipients concerning the use of "substantial transformation" as a means of complying with the Buy American provisions of the American Recovery and Reinvestment Act of 2009 (ARRA or Act) is consistent with the requirements of the ARRA.

**Short Answer**

Yes. Substantial transformation is a legally supported means of complying with the Buy American provisions of the ARRA. The Agency's guidance provides tests for analyzing substantial transformation that are consistent with relevant legal authority.

**Background**

**The ARRA Buy American Provisions**

Section 1605 of the ARRA states that, with some limited exceptions, none of the funds awarded under the 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 . . . *manufactured goods used in the project are produced in the United States.*" (Emphasis added). OMB elaborated on this requirement in guidance specific to assistance agreements, published on April 23, 2009, which has been codified at 2 CFR §176 et seq. That guidance requires Agencies to include the following definition of manufactured goods in the terms and conditions of any grant: "(1)

Manufactured Good means a good brought to the construction site for incorporation into the building or work that has been (i) processed into a specific form and shape; or (ii) combined with other raw material to create a material that has different properties than the properties of the individual raw materials.”

The OMB terms and conditions did not fully address the concept of substantial transformation, nor did any OMB guidance require Agencies to elaborate on the definition of “manufactured good.” Nonetheless, in order to provide some level of clarity and ease-of-use to recipients who were going to make determinations regarding the origin of a myriad and diverse set of manufactured goods, EPA issued a guidance document “Determining Whether “Substantial Transformation” of Components into a “Manufactured Good” has occurred in the U.S.: Analysis, Roles, and Responsibilities”, October 22, 2009, (Substantial Transformation Guidance). The Substantial Transformation Guidance describes the concept of substantial transformation as a means of complying with the Buy American provisions of the ARRA. As noted in the Substantial Transformation Guidance, “EPA believes the substantial transformation concept provides necessary guidance on this issue [of whether a manufactured good is produced in the United States].” See Substantial Transformation Guidance, pg 1-2.

#### EPA’s Substantial Transformation Guidance

The Substantial Transformation Guidance sets forth three principles that would apply to all substantial transformation inquiries. The Substantial Transformation Guidance is clear: “These principles are helpful in offering a basic framework and sideboards for [a] more searching substantial transformation analysis, as described herein.” See Substantial Transformation Guidance at 5-6. The three principles are:

- First, the determination of whether “substantial transformation” has occurred is always case-by-case, using questions and criteria well-established in administrative and judicial case law. *SDI Technologies v. U.S.*, 977 F.Supp. 1235 (C.I.T. 1997), at 1239 n. 2. *Customs Ruling HQ 560427* (August 21, 1997).
- Second, no good “satisfies the substantial transformation test by ... having merely undergone ‘[a] simple combining or packaging operation.’” 19 USC Sec. 2463(b)(2)(A), cited in *Uniden America Corp. v. U.S.*, C.I.T. Slip Op. 00-139, Court No. 98-05-01311 at 8, n. 4.
- Third, “[a]ssembly operations which are minimal or simple, as opposed to complex or meaningful, will generally not result in a substantial transformation.” *Customs Ruling HQ 734097* (November 25, 1991) (and Customs Cases cited).

See Substantial Transformation Guidance at 6.

To further aid recipients, the Substantial Transformation Guidance provides three questions for assistance recipients to ask when determining whether substantial transformation has occurred in the United States. Question 1 addresses goods where all components were made in the United States. Question 2 is designed to aid in the analysis of goods where the

transformation is process-focused. And question 3 is focused on goods where the transformative work is assembly. See Substantial Transformation Guidance at 7-8. The questions were derived directly from numerous Federal court cases, United States Customs administrative rulings, and interpretive rules for United States trade agreements.

### Office of Inspector General Disagreement

In May 2011, EPA's Office of Inspector General (OIG) issued a draft report questioning whether certain items used in an Ottawa, IL, Clean Water State Revolving Fund (CWSRF) ARRA project were made other than in the United States and thus ineligible for ARRA funding. EPA Region 5, working with EPA's Office of Water, responded to the report on July 29, 2011, and disagreed with some of the findings. In September 2011, OIG issued a final report finding that three manufactured goods were not compliant with the ARRA because they had not been substantially transformed in the United States. EPA Region 5 disagreed with these findings, but was required to issue a proposed management plan within 120 days of the report. During the 120 period, EPA Region 5 staff met with OIG staff but was unsuccessful in resolving differences. Despite continued disagreement with the OIG findings, in January 2012, EPA Region 5 issued its proposed management plan for the three OIG findings at issue. In March 2012, OIG issued a response to the EPA Region 5 management plan. In that response, OIG agrees that EPA Region 5 properly used EPA HQ guidance in determining whether or not items were manufactured in the United States, but nonetheless determined that certain goods may still not be manufactured in the United States because it believes that EPA HQ guidance incorrectly interprets the statutory requirements of the ARRA.

OIG believes that the portion of the guidance relative to question 3 is not correct. In relevant part, question 3 provides the following:

3. Was(/were) the process(es) performed in the U.S. (including but not limited to assembly) complex and meaningful?
  - a. Did the process(es) take a substantial amount of time?
  - b. Was(/were) the process(es) costly?
  - c. Did the process(es) require particular high level skills?
  - d. Did the process(es) require a number of different operations?
  - e. Was substantial value added in the process(es)?

See Substantial Transformation Guidance at 7-8. The Substantial Transformation Guidance explains that assembly is in most cases further down the spectrum towards non-transformative work. Therefore, at least two of 3a, 3b, 3c, 3d, or 3e must be satisfied to establish substantial transformation based on assembly.

Specifically, OIG believes that manufactured goods that satisfy the requirements of question 3, standing alone, would not necessarily meet the requirements of the ARRA to use only manufactured goods produced in the United States.

## Legal Analysis

### The Substantial Transformation Guidance is Consistent with the Buy American Provisions of the ARRA

As explained in the Substantial Transformation Guidance, EPA adopted the concept of substantial transformation in part because it was referenced in OMB guidance with respect to determining country of origin for assistance agreements subject to International Agreements prior to the ARRA. OMB's regulation at 2 CFR §176.160 provides that recipients need to inquire whether, "[i]n the case of a manufactured good that consists in whole or in part of materials from another country, [the good] has been substantially transformed in the United States into a new and different manufactured good distinct from the materials from which it was transformed." Absent any specific elaboration from OMB, EPA provided guidance related to substantial transformation. As explained in the guidance, "[t]he origins and applications of the term are rooted in well-established Federal interpretations, particularly by the Customs Department and the Federal courts." See Substantial Transformation Guidance at 1.

Generally, substantial transformation means a change in the name, character, or use of a manufactured good. Anheuser-Busch Brewing Assoc. v. United States, 207 U.S. 556, (1908). There are thousands of United States Customs cases and reported Federal court cases concerning substantial transformation, many of which interpret statutory language that is not relevant to the analysis under the ARRA, and many of which involve manufactured goods that would not likely be used in a water treatment plant funded under the ARRA. In its guidance, EPA attempted to distill significant concepts from relevant cases so that an entity unfamiliar with the concept of substantial transformation would have some tools to make a reasoned determination as to whether a manufactured good was produced in the United States.

The inquiries that were included in question 3 have a basis in Federal court cases and United States Customs decisions. For example, the concept of "value added" is explored in Superior Wire v. United States, 11 C.I.T. 608 (Ct. Int'l Trade 1987). The importance of the amount of time taken to perform the assembly, the use of skilled workers, the number of components, and the cost of the assembly were all discussed in Notice of Final Determination, February 13, 2003, Brunswick Pinsetters (68 FR 7407), which also references other cases. That determination involved a Bowling pinsetter assembly case where Brunswick asked for a ruling that its pinsetter be considered an American-made product. Note that in many of the cases cited, the concept of substantial transformation was applied through international trade laws to determine country of origin for favorable trade reasons, not to determine whether an item was manufactured in the United States. Nonetheless, the rationale with respect to substantial transformation is applicable in either scenario. The Brunswick case stated in relevant part: If the manufacturing or combining process is a minor one which leaves the identity of the imported article intact, a substantial transformation has not occurred. See Uniroval Inc. v. United States, 3 CIT 220, 542 F. Supp. 1026 (CIT 1982). Assembly operations which are minimal or simple, as opposed to complex or meaningful, will generally not result in a substantial transformation. See C.S.D. 80 111, C.S.D. 8525, and C.S.D. 9097.

In finding that substantial transformation had occurred in the United States, the Brunswick case goes on to explain the type of assembly required in analyzing the assembly of bowling pinsetters:

In this case, the complex assembly of the central block from three subassemblies, including the incorporation of three motors from the drive frame subassembly into the central block, combined with the subsequent assembly of the central block, sixpack, ball accelerator, and U.S. origin electrical controller assembly and the installation of the pinsetters in bowling facilities in the United States, when taken together, result in a substantial transformation of the foreign origin subassemblies involved. The processing in the United States requires precise calibration and involves the assembly of numerous parts and subassemblies and highly skilled labor. The name, character and use of the foreign origin subassemblies and parts change as a result of the processing and other assembly operations performed in the United States. Therefore, pursuant to 19 U.S.C. 2518(4)(B), and 19 CFR 177.22(a), we find that the country of origin of the bowling pinsetters is the United States.

Note that the complex assembly itself is what changes the use of the components. This is similar to the subcomponents in question 3 of the Substantial Transformation Guidance where if two of the questions can be answered in the affirmative, it will necessarily result in a changed character or use of the product.

The analysis provided in Brunswick, and the authorities cited therein, provide a sound legal basis for the inquiries contained in question 3 of the Substantial Transformation Guidance. We are not aware of any Federal court cases or United States Customs decisions that overrule the Brunswick analysis.

Finally, a document meant to give an overview of rules of origin analysis explains substantial transformation in a similar way to how EPA did in the Substantial Transformation Guidance. In International Trade: Rules of Origin, Vivian C. Jones and Michael F. Martin, January 5, 2012, Congressional Research Service, which post-dates the development of EPA's Substantial Transformation Guidance, acknowledges that in the United States Customs context, there are several factors that are taken into account when determining whether substantial transformation has occurred. This quote is from page 3:

If an imported product consists of components that are from more than one country, a criterion known as *substantial transformation* is used to confer origin. In most cases, the origin of the good is determined to be *the last place in which it was substantially transformed into a new and distinct article of commerce* based on a change in name, character, or use. Making the determination about what constitutes a change sufficient for a product to be considered *substantially transformed* is the juncture at which an origin ruling can prove to be quite complex.

When determining origin, CBP [Customs and Border Protection] takes into account **one or more** of the following factors (emphasis added):

- the character/name/use of the article;
- the nature of the article's manufacturing process, as compared to the processes used to make the imported parts, components, or other materials used to make the product;
- the value added by the manufacturing process (as well as the cost of production, the amount of capital investment, or labor required) compared to the value imparted by other component parts; and
- whether the essential character is established by the manufacturing process or by the essential character of the imported parts or materials.

Origin determinations are very fact-specific, but as CBP itself has acknowledged, there can still be considerable uncertainty about what is deemed to be substantial transformation due to the "inherently subjective nature" which may be involved in CBP interpretations of these facts.

Taken as a whole, the Substantial Transformation Guidance issued by EPA on October 22, 2009, is consistent with the Buy American provisions of the ARRA. Additionally, EPA's interpretation of the substantial transformation is consistent with relevant legal authority and is similar to the published material from the Congressional Research Service.

### Conclusion

The Substantial Transformation Guidance provides a framework for recipients to analyze the concept of substantial transformation as a means of compliance with the Buy American provisions of the ARRA. The inquiries included in the Substantial Transformation Guidance are based on relevant legal authority explaining the elements of substantial transformation in the circumstances of process and assembly.

If you have any questions, please contact Wendel Askew at 202-564-3987 or Joanne Hogan at 202-564-5463.

Cc: Sheila Frace, OW  
 William Anderson, OW  
 Sheila Platt, OW  
 Kirsten Anderer, OW  
 Peter Shanaghan, OW  
 Jordan Dorfman, OW



## Exhibit 6



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

AUG 15 2012

OFFICE OF WATER

**MEMORANDUM**

**SUBJECT:** Response to OIG memo entitled, "Response to Region 5's Proposed Management Decision on OIG Report No. 11-R-0700, American Recovery and Reinvestment Act Site Visit of Wastewater Treatment Plant-Phase II Improvements Project, City of Ottawa, Illinois, September 23, 2011"

**FROM:** Nancy K. Stoner *Nancy K. Stoner*  
Acting Assistant Administrator

**TO:** Arthur A. Elkins, Jr.  
Inspector General

Thank you for the opportunity to respond to your memo entitled, "Response to Region 5's Proposed Management Decision on OIG Report No. 11-R-0700, American Recovery and Reinvestment Act Site Visit of Wastewater Treatment Plant-Phase II Improvements Project, City of Ottawa, Illinois, September 23, 2011," in which you note your disagreement with the proposed management decision provided by Region V, as well as your recommendation to the Office of Water to amend existing Buy American guidance. After numerous conversations with your counsel and staff, the Office of Water disagrees with your rejection of the Region's proposed management decision and your suggestion to amend existing Buy American guidance.

Based on legal analysis provided by the Office of General Counsel, the guidance provided to States and recipients three years ago establishes tests for analyzing substantial transformation that are consistent with relevant legal authority. Further, as a matter of policy, the Office of Water believes it would be imprudent to amend existing guidance more than two years after the February 17, 2010 ARRA statutory deadline for projects to be under to be under "contract or construction." At this time, the vast majority of the over 3,200 projects funded by the Clean Water State Revolving Fund and the Drinking Water State Revolving Fund have been completed and more than 95 percent of ARRA funds have already been expended. The Office of Water believes the guidance therefore requires no amendment and continues to support Region V's proposed management plan. If you have any questions, please contact Randolph L. Hill, Acting Director, Office of Wastewater Management, at (202) 564-0748, or Pamela S. Barr, Acting Director, Office of Ground Water and Drinking Water, at (202) 564-3750.

Attachment

## Exhibit 7



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

SEP 28 2012

THE INSPECTOR GENERAL

**MEMORANDUM**

**SUBJECT:** Response to Office of Water's August 15, 2012, Memorandum in Connection with OIG Report No. 11-R-0700, *American Recovery and Reinvestment Act Site Visit of Wastewater Treatment Plant -- Phase II Improvements Project, City of Ottawa, Illinois*, September 23, 2011

**TO:** Nancy K. Stoner  
Acting Assistant Administrator  
Office of Water

Susan Hedman  
Regional Administrator, Region 5

A series of hotline complaints raised questions that ultimately led the Office of Inspector General (OIG) to focus on Office of Water (OW) guidance regarding the proper assessment of products used in American Recovery and Reinvestment Act (ARRA) projects to determine whether they comply with the ARRA Buy American provision. In a memorandum dated March 15, 2012 (March 2012 memorandum), we notified EPA Region 5 and OW that we disagreed with the proposed management conclusion that certain equipment which we questioned in the referenced audit report complied with the statutory Buy American requirements. Specifically, we questioned the use of an OW alternative test for "substantial transformation" that is seemingly not based in statutory, regulatory, and case law definitions – and that resulted, in our view, in a different conclusion regarding compliance than would have been reached using an established substantial transformation test.

The OIG then met with representatives from OW, Region 5, and the EPA Office of General Counsel (OGC). At the meeting, OW and OGC maintained the legitimacy of the guidance, and OIG requested legal support for OW's position. On March 30, 2012, OGC provided an "informal legal discussion" (OGC informal opinion) in support of the OW alternative test. OIG responded to the OGC informal opinion on April 5, 2012, and noted – with explanation – our judgment that the OGC cases and analysis failed to provide sufficient legal support for the alternative test.

On August 15, 2012, OW forwarded OGC's August 7, 2012, legal opinion (OGC legal opinion) on the subject. The legal opinion did not provide any additional legal support for the OW alternative test as compared with the March 30 OGC informal opinion. OIG therefore continues to question the legal basis for OW's substantial transformation test.

## Substantial Transformation Tests

OW's ARRA guidance, "DETERMINING WHETHER 'SUBSTANTIAL TRANSFORMATION' OF COMPONENTS INTO A 'MANUFACTURED GOOD' HAS OCCURRED IN THE U.S.: ANALYSIS, ROLES, AND RESPONSIBILITIES" (Substantial Transformation Guidance), was designed to assist recipients/contractors in fulfilling their responsibilities to use iron, steel, and manufactured goods produced in the United States as required by the Buy American provision (Section 1605) of ARRA. In the case where a foreign component is modified during a manufacturing process in the United States, the essential question posed by the OW guidance is whether that component was "substantially transformed" during the manufacturing process and thus considered a product manufactured in the United States. The OW guidance includes two tests for substantial transformation from which a recipient/contractor is allowed to choose: the "established test" and the "OW alternative test." See Substantial Transformation Guidance at 7-8.

The established test focuses on whether a foreign component has been substantially changed as to character or use (the test initially also included change in name but that characteristic is now typically considered not to be dispositive). This test for substantial transformation is based in statute (19 U.S.C. § 2518(4)(B)), regulation (19 C.F.R. § 177.22(a)), and is employed in case law discussed by OGC and OW. To be a product of the United States, the statute requires that "in the case of an article which consists in whole or in part of materials from another country or instrumentality, it has been substantially transformed into a new and different article of commerce with a name, character, or use distinct from that of the article or articles from which it was transformed." 19 U.S.C. § 2518(4)(B)(ii). The language in this test requires a true change in the use or character of the foreign component such that a new product results. As the Supreme Court (in one of OGC's cited cases) declared over a hundred years ago: "Manufacture implies a change, but every change is not manufacture, and yet every change in an article is the result of treatment, labor, and manipulation. **But something more is necessary....** [T]here must be transformation; a new and different article must emerge, 'having a distinctive name, character, or use.'" Anheuser-Busch Brewing Assoc. v. United States, 207 U.S. 556, 562 (1908). (Emphasis added.)

The terms "character" and "use" have been operationally defined through a multitude of cases since the Supreme Court applied the established test in 1908. In one case referenced in OGC's informal opinion, Precision Specialty Metals, Inc. v. United States, 24 C.I.T. 1016 (Ct. Int'l Trade 2000), the court stated that substantial transformation may be found "where there is a definite and distinct point at which the identifying characteristics of the starting materials is [sic] lost and an identifiable new and different product can be ascertained." Id. at 1029. The Precision court applied the established test. Id. at 1036. In another case referenced in OGC's informal opinion, Uniroyal Inc. v. United States, 3 C.I.T. 220 (Ct. Int'l Trade 1982) (court found that attachment of outsole in the United States to the foreign-made upper part of the shoe did not result in substantial transformation), the court determined that if the manufacturing or combining process is a minor one which leaves the identity of the imported article "intact," a substantial transformation has not occurred. Id. at 224. This court also looked to whether the imported

component represented the “essence” of the finished product. *Id.* at 226-227. The Uniroyal court applied the established test. *Id.* at 224.

The focus of the established test was reiterated in and perhaps expanded by ARRA-related Office of Management and Budget (OMB) regulations. OW, in its ARRA guidance, cited to and adopted 2 C.F.R. § 176.160 to assist in defining “substantial transformation.” See Substantial Transformation Guidance at 1-2. OW, quoting from the OMB regulation, stated that recipients must inquire whether “[i]n the case of a manufactured good that consists in whole or in part of materials from another country, [the good] has been substantially transformed in the United States into a new and different manufactured good distinct from the materials from which it was transformed.” See 2 C.F.R. § 176.160(a)(2). OW acknowledged that the regulation is directly applicable to situations governed by international trade agreements, but also stated that the “substantial transformation” concept referenced in the OMB regulation is the only established concept available for use in determining whether or not a manufactured good is produced in the United States. See Substantial Transformation Guidance at 2. OW also cited to and adopted a second ARRA-related OMB regulation, 2 C.F.R. § 176.140, which defines the key term “manufactured good” as “[a] good brought to the construction site for incorporation into the building or work that has been processed into a specific form and shape or combined with other raw material to create a material that has different properties than the properties of the individual raw materials.” See 2 C.F.R. § 176.140(a)(1). The ARRA-related regulations that were referenced in the OW ARRA guidance include definitions that are strikingly similar – and perhaps even more stringent because of their specificity – to the statute-based established test.

OW’s alternative test for substantial transformation – which was not attributed by OW to any statutory or regulatory source – asks whether “the process(es) performed in the U.S. (including but not limited to assembly) [were] complex and meaningful.” See Substantial Transformation Guidance at 8. To pass the test, a recipient/contractor is instructed to positively respond to two of the five following characteristics: (1) Did the process(es) take a substantial amount of time? (2) Was (were) the process(es) costly? (3) Did the process(es) require particular high level skills? (4) Did the process(es) require a number of different operations? And, (5) Was substantial value added in the process(es)? The guidance does not give examples of how much time, cost, skill level, complexity in processes, or value is considered to be substantial. According to OGC, the OW alternative test is necessary because of the nature of the products that are used on EPA projects. An OW staff engineer who is involved in the assessment of substantial transformation noted that the test is widely used by EPA contractors/recipients.

### Legal Analysis

OGC’s legal opinion generally asserts that OW’s alternative test is supportable because the established test is “process-focused” and the OW alternative test is focused on “assembly.” First, that distinction is not clear given the language in the OW test. The OW alternative test, which is supposed to be focused on “assembly” rather than “process,” includes the word “process(es)” throughout and notes that the test is “not limited to assembly.” Second, and most importantly, OW ignores the real distinction between the two approaches to assessing substantial transformation. The established test requires that the foreign component must undergo a true change resulting in a “new and different article of commerce with a name, character, or use

distinct from that of the article or articles from which it was transformed”; the OW test does not require that result.

OGC, in its legal opinion, discussed in some detail three sources: a court case, a Customs Service notice, and an article – all offered to support a conclusion that the OW alternative test could be used, standing alone, to effectively assess substantial transformation. The court case, Superior Wire v. United States, 11 C.I.T. 608 (Ct. Int’l Trade 1987), according to OGC, supports the position that “value added” is a characteristic that – standing alone and as a subpart of the OW test – is an adequate test for substantial transformation. However, the Superior Wire court recognized that the established test for assessing substantial transformation involves an examination of change of use or character (not required by the OW alternative test), and that a subsidiary test – like significant added value (the OW alternative test) – might be used only as a “cross-check or additional factor” when assessing change in use or character. Id. at 614. Thus, the factor of “value added” is simply one characteristic of the manufacturing process that can, depending on the situation, be used to help check on a result achieved by using the established test, but it is not a stand-alone test. We will discuss the significance of this below.

OGC cited the Federal Register Notice of Issuance of Final Determination Concerning Bowling Pinsetters, 68 Fed. Reg. 7407 (Customs Serv. Feb. 13, 2003), as support for the proposition that complex manufacturing processes alone can be used to evidence that substantial transformation has occurred and, therefore, that the OW alternative test has a sufficient legal foundation. This Customs Service notice involved a truly complex manufacturing process in the United States that included thousands of components from other countries. The notice concluded that character and use of the foreign-origin seven subassemblies and the thousands of foreign parts clearly changed as a result of the sophisticated processing and other assembly operations performed in the United States. Id. at 7409. The assembly processes were so demonstrably complex that it was clear on its face that there was a change in use or character.

However, the fact pattern set out in the Customs Service notice involving thousands of foreign-made components is extreme when compared with the import situations that we have examined in the Ottawa, Illinois matter – and in other similar audits. The examples of assembly we have encountered (as will be detailed below) typically involve one or two foreign-made components that are modified in the United States. The processes in the United States take some time, perhaps require some skill, and may increase the value of the imported components. But the application of those sort of factors (time, value, skill and other factors set out in the OW test) to our fact situations, as required by the OW test, does not result in a clear determination of a true change in use or character. In short, the unique facts in the Customs Service notice involving thousands of components are entirely inapposite to Ottawa’s facts; and the established test – not an alternative, stand-alone test – was in fact applied in the notice.

Finally, OGC referenced a Congressional Research Service article “International Trade: Rules of Origin,” dated January 2012. OGC seems to suggest that the article supports the position that the established test is merely one of many separate tests/factors that may be used to assess substantial transformation. The information in the 2012 article cited by OGC is derived from a 1996 United States International Trade Commission publication. See United States International Trade Commission (USITC), Country of Origin Marking: Review of Laws,

Regulations, and Practices, USITC Publication 2975 (July 1996). The original 1996 publication, in a section entitled “The U.S. Approach to Origin,” states : “Customs considers a variety of factors when determining whether a manufacturing process has changed the name, character, or use of an imported article.” *Id.* at 2-4. The original source, contrary to OGC’s inference about a variety of stand-alone tests/factors, is clear that the ultimate test is the established test, and that Customs may turn to a variety of factors when applying the established test.

#### Application to City of Ottawa, Illinois Audit Report

In our March 2012 memorandum, we detailed a situation where a German component had been modified in the United States. The contractor – in line with requirements of OW’s alternative test – represented, among other things, that build time had been spent adding parts to the blower component, that value “can” increase due to processes in the United States – this includes upgrades to the contractor’s factory in the United States, and that skill is required to build and test the units. As we noted in the March 2012 memorandum, the claims by the contractor were not documented by “meaningful, informative, and specific technical descriptions” that could be verified; hence, the representations seemingly did not comply with the requirements. An OW staff engineer made a determination about substantial transformation (something that OW guidance expressly prohibits), and communicated directly to the contractor that this component met the requirements of the OW alternative test.

The alternative test is an easier test to meet than the established test. In keeping with its alternative test, OW did not assess whether the central German component that was identified in our audit report had been changed in use or character. Also, OW did not apply the ARRA-related regulatory language that required that the transformed component must, among other things, be a “new and different manufactured good distinct from the materials from which it was transformed.”

An illustration of the final blower product from the contractor’s literature is included in Attachment 1. The core, complex, foreign-made blower component (light colored item) and the enclosure for the product were manufactured in Germany. Items numbered 2, 4, 5, and perhaps 6 (the darker colored items) – essentially the motor, a valve and pulleys – were attached in the United States. With regard to the foreign-made blower component, the contractor’s literature states that the German state-of-the-art heavy manufacturing process had resulted in a “durable design that includes rigid casings, cast bearing supports, and one-piece rotors” – with “precision machined, case-hardened, spur-type timing gears and oversized cylindrical roller bearings” along with “piston-ring seals.” The literature also discusses the sophisticated instrumentation, controls and sensors that are part of the device.

Applying the established test and the ARRA-related regulations to the blower component, leads to a conclusion that there has not been a true change in use or character. First, the identifying characteristics of the blower component were not “lost” so that “an identifiable new and different product” emerged. The heavily manufactured German blower component was never manufactured into something new during the assembly process in the United States; the “essence” of the final blower product remained “intact” after assembly. Second, the “use” or “character” of the complex component did not change because the assembly process in the



United States was not a complex enough process to have created a new product with a new use or character.<sup>1</sup> Third, from the standpoint of the rigorous ARRA-related regulations, there was no evidence that the German blower component had been “substantially transformed in the United States into a new and different manufactured good distinct from the materials from which it was transformed” or created into “a material that has different properties than the properties of the individual raw materials.” In short, the use or character of the foreign-made blower component was not substantially modified in the United States. The identity of the complex German component which was the “essence” of the final product was left “intact.” Therefore, we are concerned that there is non-compliance with the Buy American provision of ARRA. In addition to our report regarding the City of Ottawa, we discussed almost identical concerns about the same or similar products in three other audit reports issued to Region 5. Details related to the audit reports are in Attachment 2.

### Conclusion

In its August 15, 2012 memorandum, OW stated that it would be “imprudent” to change its guidance at this late date. We do not agree. As long as the guidance in question is available for use by other divisions of EPA or other agencies, the potential for additional incorrect decisions exists. The prudent step, we believe, is to modify the guidance so as to mitigate further potential risk to the Agency.

Beyond our position regarding the specific German blower component as discussed in the City of Ottawa audit report, this is more fundamentally a question of whether the OW test is a legally sufficient, stand-alone method for accurately assessing substantial transformation. Our position is that an assessment of such factors as increased value or time used – the focus of the OW test – does not, without more, ensure that the foreign component was transformed into “a new and different article of commerce with a name, character, or use distinct from that of the article or articles from which it was transformed.” Nor does the OW alternative test, in line with ARRA-related regulations, ensure that a foreign-made good has been “substantially transformed

---

<sup>1</sup> OGC, at our March meeting and in its informal opinion – though not in its legal opinion – seemed to suggest that the addition of a motor to the German component caused the component to become fully functional and thus would have constituted a substantial change in use or character – the established test. (A change in function is not part of the OW alternative test.) OGC cited to a case involving an extruder, Customs letter, HQ 558919 (Mar. 20, 1995). An extruder is a machine tool which forms metal or plastic components by “extruding” – that is by pushing the materials through a die with force. In this case, an extruder subassembly was made abroad and then combined with what appears to be the majority of major components in the United States; the added components included a drive unit, an electrical control panel and the extruder screw. Customs determined that the foreign-made extruder subassembly was substantially transformed in the United States. Customs, in making its decision, applied the established test. It determined that the assembly processes involving the addition and total integration of a number of major components to the extruder subassemblies in the United States resulted in a substantial change in use or character because of the “the extent of operations performed” and the fact that the imported component “[lost] its identity and [became] an integral part of the new article.” Specifically, Customs stated “the DC motor, power unit and belt drive; the electrical control cabinet or panel which incorporates solid-state temperature controllers, screw-speed indicator, drive ammeter, pilot light on-off controls, and wiring necessary to operate the extruder; and the extruder screw which mixes and moves the material to be extruded through the die” were all critical and complex additions to the foreign-made assembly.

The facts here stand in contrast to the Ottawa blower situation where the sole, major component of the final blower product was imported and the assembly in the United States was not so complex as to cause the major foreign component to lose its identity and become an integral part of a new product. The German blower component remained “intact,” and was the “essence” of the final product after the assembly process in the United States.

in the United States into a new and different manufactured good distinct from the materials from which it was transformed.” As a consequence, the OW alternative test may have led to and can continue to lead to wrong decisions. These unjustified determinations may serve to undercut the goal of ARRA.

In accordance with EPA’s Audit Management Process Manual, 2750 CHG 2 (Dec. 3, 1998), we will forward this memorandum and related materials to the Agency Follow-Up Official. If you have any questions regarding this memorandum, please contact Melissa Heist, Assistant Inspector General for Audit, at (202) 566-0899 (Heist.Melissa@epa.gov); or Robert Adachi, Product Line Director, at (415) 947-4537 (Adachi.Robert@epa.gov).



Arthur A. Elkins, Jr.

cc: Principal Deputy Assistant Administrator, Office of Water  
Scott Fulton, General Counsel  
Deputy General Counsel  
Deputy Associate General Counsel for Civil Rights and Finance Law  
Director, Office of Ground Water and Drinking Water, Office of Water  
Director, Office of Wastewater Management, Office of Water  
Deputy Regional Administrator, Region 5  
Audit Follow-up Coordinator, Region 5  
Director, Water Division, Region 5  
Chief, State and Tribal Programs Branch, Region 5

Attachments

Attachment 1

# Com-Pak Plus™ Features

(shown without standard enclosure)

5-Year  
Warranty\*



\*5-year warranty on the Omega Plus tri-lobe blowers sold as a part of Com-pak Plus packages.

## 6 Pre-mounted Valves



Check and relief valves are standard. Unloaded start valve is optional. All come pre-mounted to save on installation costs.

## 7 Vibration Isolators



Heavy duty dampers absorb vibrations before they reach the base of the unit or sound enclosure.

## 8 Sight Glasses and Drain Ports



High visibility sight glasses allow the fluid levels to be checked at a glance from the front of the package. Drain valves with gasketed caps simplify fluid changes.



## Superior Enclosure



All Com-pak Plus models feature a standard enclosure. Built for exceptional noise reduction and easy access to maintenance points. The process air and cooling air are separated for better efficiency. Heavy gauge construction and powder coat finish make it suitable for both indoor and outdoor installation. For ease of handling, a sub-base is included on models up through HB 950C.

The process air and cooling air are separated for better efficiency. Heavy gauge construction and powder coat finish make it suitable for both indoor and outdoor installation. For ease of handling, a sub-base is included on models up through HB 950C.

## Effective Cooling



The combination of air ducts in the sound enclosure and powerful fans create a highly efficient cooling system that

ensures effective cooling even for frequency-controlled units.

## Instrumentation



Standard instrumentation includes pressure or vacuum

gauges, discharge temperature gauge with shut-down switch and inlet filter differential pressure gauge or vacuum switch.

Attachment 2

## List of Reports with Buy American Substantial Transformation Issue

1. Report No. 11-R-0700, American Recovery and Reinvestment Act Site Visit of Wastewater Treatment Plant—Phase II Improvements Project, City of Ottawa, Illinois
  - Report issued September 23, 2011.
  - Based on hotline complaint.
  - SRF – \$3.8 million; ARRA – \$3.8 million
  - Questioned three Flygt submersible pumps (Sweden), two Kaeser positive displacement blowers (Germany), and three KTurbo centrifugal blowers (Korea).
  - Available documentation failed to support that the items were manufactured or substantially transformed in the U.S.
  - Report referenced EPA substantial transformation guidance, but relied on regulatory definitions of a “manufactured good” and a “domestic manufactured good” found at 2 CFR § 176.140 and 176.160. Both regulations require a change in character or properties.
  - January 27, 2012 – region issued its proposed management decision; used OW’s substantial transformation guidance to support using a single test to determine that all questioned equipment complied with Buy American requirements.
  - March 15, 2012 – In memo sent to Region 5 and OW, OIG disagreed with proposed management decision and determined the OW’s guidance was flawed and the single test criteria were inconsistent with legal precedent.
  - August 15, 2012 – OW disagrees with OIG based on OGC legal analysis; supports region’s proposed final decision and states that modifications to the guidance are not necessary.
  
2. Report No. 12-R-0377, American Recovery and Reinvestment Act Site Visit of Wastewater Treatment Plant, Village of Itasca, Illinois
  - Report issued March 30, 2012.
  - Based on hotline complaint.
  - SRF – \$10 million; ARRA – \$10 million
  - Questioned foreign steel (Canada, China, Philippines, Sweden, Taiwan, and Thailand), four Aerzen positive displacement blowers, three Endress-Hauser micropilots (Germany), a Rosemount magnetic flowtube (Mexico), and an Eaton Filtration duplex strainer (China).
  - Documentation was not sufficient to support Buy American.
  - July 27, 2012 – region issued a proposed management decision and concurred with all OIG conclusions and recommendations for all items except the Aerzen blowers; the region used OW’s substantial transformation guidance to support using a single test to determine that the Aerzen blowers complied with Buy American requirements.
  - Discussed proposed management decision with region.
  - Agree with proposed decision except for blowers.

3. Draft Report No. OA-FY11-0036, American Recovery and Reinvestment Act Site Visit of Wastewater Treatment Plant Improvements Project, City of Nappanee, Indiana
  - Draft report issued August 16, 2011.
  - Based on hotline complaint.
  - SRF – \$4.8 million; ARRA – \$1.7 million
  - Questioned 11 Kaeser positive displacement blowers (Germany).
  - Documentation failed to support that the items were manufactured or substantially transformed in the U.S.
  - City replaced two items (Siemens Mag Flow Meters and Watson-Marlow Peristaltic Pump) with Buy American compliant equipment as a result of our draft report.
  - Final report in last stages of review.
  
4. Draft Report No. OA-FY12-0162 American Recovery and Reinvestment Act Site Visit of Combined Sewer Overflow Detention Facility, City of Goshen, Indiana
  - Draft report issued July 23, 2012.
  - Based on hotline complaint.
  - SRF – \$31 million; ARRA – \$5 million.
  - Questioned four Rotork actuators (England), one Kaeser positive displacement blower (Germany), and four Endress+Hauser flowmeters (Germany).
  - Goshen's response to the draft report received on August 20, 2012.

## Exhibit 8





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

OCT 17 2012

THE INSPECTOR GENERAL

**MEMORANDUM**

**SUBJECT:** Resolution of OIG Report No. 11-R-0700, *American Recovery and Reinvestment Act Site Visit of Wastewater Treatment Plant—Phase II Improvements Project, City of Ottawa, Illinois, September 23, 2011*

**TO:** Barbara Bennett  
Chief Financial Officer

As the Agency Follow-Up Official for the audit resolution process, we are notifying you that we have reached an impasse with the Office of Water (OW) concerning its position on guidance directly affecting Region 5's proposed management decision on the subject audit report. On March 15, 2012, we notified Region 5 and OW (see attachment 1) that we disagreed with the January 27, 2012, proposed management decision (see attachment 2) that the equipment questioned in the audit report complied with the Buy American requirements of Section 1605 of the American Recovery and Reinvestment Act of 2009 (Recovery Act). Specifically, applying a test set out in guidance<sup>1</sup> prepared by OW, the region determined that products that were discussed in the audit had in fact met the substantial transformation test and were in compliance with the Buy American requirements of the Recovery Act.

We disagreed with the proposed management decision because we believe that the OW guidance on which that decision is based is significantly flawed. The OW guidance includes legal definitions of substantial transformation, but then employs a test for use in assessing substantial transformation that seemingly is not based on those legal definitions. We recommended that OW modify its guidance so that the definitions of substantial transformation are implemented in the OW guidance, and we recommended that the region apply the legally sound test to the questioned equipment items in the Ottawa report. We believe that the result will be that the Region will determine that the equipment is not in compliance with the Buy American provisions of the Recovery Act.

On August 15, 2012, the Acting Assistant Administrator for OW notified our office that it disagreed with our rejection of Region 5's proposed management decision and our recommendation to amend the existing Buy American guidance (see attachment 3). OW based its decision on legal analysis from the Office of General Counsel (OGC) that the guidance for

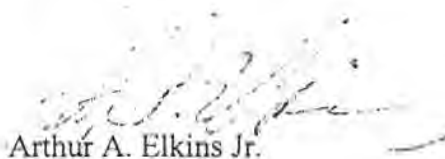
---

<sup>1</sup> DETERMINING WHETHER "SUBSTANTIAL TRANSFORMATION" OF COMPONENTS INTO A "MANUFACTURED GOOD" HAS OCCURRED IN THE U.S.: ANALYSIS, ROLES, AND RESPONSIBILITIES, October 22, 2009

analyzing substantial transformation is consistent with relevant legal authority. In addition, OW did not think it prudent to amend the guidance at such a late date. Therefore, OW determined that the recommended guidance modification was not necessary.

We reviewed OW's decision and the attached OGC legal analysis, dated August 7, 2012, (see attachment 4). On September 28, 2012, we notified Region 5 and OW (see attachment 5) that in our opinion the legal analysis does not offer adequate support for the position that OW's substantial transformation test is based in law. We continue to believe that the test developed by OW for the purpose of assessing substantial transformation is not consistent with legal precedent.

This matter is unresolved. The resolution of the Ottawa report is past the 180-day period specified in OMB Circular A-50, *Audit Followup*. If you have any questions regarding this memorandum, please contact Melissa Heist, Assistant Inspector General for Audit, at (202) 566-0899 or [heist.melissa@epa.gov](mailto:heist.melissa@epa.gov); or Robert Adachi, Product Line Director, at (415) 947-4537 or [adachi.robert@epa.gov](mailto:adachi.robert@epa.gov).



Arthur A. Elkins Jr.

#### Attachments

cc: Scott Fulton, General Counsel  
Acting Assistant Administrator, Office of Water  
Principal Deputy Assistant Administrator, Office of Water  
Regional Administrator, Region 5  
Deputy Regional Administrator, Region 5  
Deputy General Counsel  
Deputy Associate General Counsel for Civil Rights and Finance Law  
Acting Director, Office of Ground Water and Drinking Water, Office of Water  
Acting Director, Office of Wastewater Management, Office of Water  
Audit Follow-up Coordinator, Region 5  
Director, Water Division, Region 5  
Chief, State and Tribal Programs Branch, Region 5

## Exhibit 9



JAN 17 2013

**MEMORANDUM**

**SUBJECT:** Resolution of OIG Report No. 11-R-0700, *American Recovery and Reinvestment Act Site Visit of Wastewater Treatment Plant - Phase II Improvements Project, City of Ottawa, Illinois*, September 23, 2011

**TO:** Barbara Bennett  
Chief Financial Officer

We are notifying you, as the Agency Follow-Up Official for the audit resolution process, that efforts to resolve issues concerning the Office of Water's (OW) "substantial transformation" test have not led to an end of the ongoing impasse. Therefore, we request that you proceed with the next appropriate step in the resolution process under EPA Manual 2750.

Below, we will summarize our position previously set out in Attachment 5 to our October 17, 2012, memorandum to you, and discuss the Agency's December 15, 2012, written proposal for resolving our concerns. (Both documents are attached.)

Section 4(a)(2) of the Inspector General Act of 1978, as amended, requires the IG to review existing and proposed legislation and regulations relating to the programs and operations of the Agency. We have reviewed the American Recovery and Reinvestment Act and its implementing regulation in this and related Recovery Act audits. In Attachment 5, we described in detail the risks resulting from Region 5's application of a new, alternative substantial transformation test created by OW. Region 5 used OW's alternative test to determine that products that were discussed in the audit had been substantially transformed and therefore were in compliance with the Buy American requirements of the Recovery Act. However, as articulated in Attachment 5, it is our position that OW failed to show that its alternative test for substantial transformation is based in statutory, regulatory, or case law definitions. Consequently, the application of this test means that foreign products that were allowed to be used in Recovery Act projects because they passed (rather easily) the OW alternative test may well have been wrongfully purchased with American dollars.

We further stated that the established test for assessing whether a foreign product is substantially transformed in the United States is the change in character or use test. This test is found in statute (19 U.S.C. § 2518(4)(B)), regulation (19 C.F.R. § 177.22(a)), and in virtually all case law cited by OW and the Office of General Counsel. The test is used regardless of whether the transformation in the United States involves assembly or any other process. Under the rigorous change in character or use test, there must be ultimate proof that a foreign component is not just

subjected to treatment, labor, and manipulation in the United States, but rather that it ultimately is truly transformed into a new and different article with a wholly distinctive character or use.

By contrast to the established change in character or use test, the OW alternative test for substantial transformation (embodied in question three of the OW substantial transformation questionnaire) has no apparent legal basis. The OW test in question requires an "answer" to two out of five factors. Those five factors are: a substantial amount of time for manufacture, a costly process, a high level of skill is required for manufacture, the manufacture process involves different operations, and substantial value was added by the manufacturing process. The source of these factors is not identified, nor is it clear why an answer to two factors suffices to evidence substantial transformation.

The Agency, in its response on December 15, 2012, suggested a solution to the concerns set out in Attachment 5. It proposed that question three (OW's alternative test) in the substantial transformation questionnaire be modified so it is clear to users that by providing answers to two out of five factors it necessarily follows that the character or use test would be satisfied. In short, OW is suggesting that the factors in question three represent operational definitions of the established change in character or use test. However, as we noted in Attachment 5, there is no legal support for the claim that the items in question three can be used to establish change in character or use. Spending time or money on a foreign component in no way ensures that it has been significantly transformed as to use or character. Merely stating that question three is a legitimate method of assessing change in use or character does not make it so. Therefore, the proposal does not solve the problems related to OW's alternative test and the potential risk for incorrect decisions still exists.

For that reason, OIG continues to conclude that the prudent action going forward is for the Agency to modify its guidance as we propose, in order to mitigate risk. We propose that the cleanest resolution of the issue would be to eliminate question three from OW's substantial transformation questionnaire. In our view, question three is not a legally supportable test for determining substantial transformation. Removing question three would mitigate further potential risk to the Agency through incorrect application of the Buy American provision of the Recovery Act. If the Agency ultimately concludes that it does not need to or wish to mitigate the risk, it can so declare. It simply goes forward without mitigating the risk.

If you have any questions regarding this memorandum or any related materials, please contact Melissa Heist, Assistant Inspector General for Audit, at (202) 566-0899 or [Heist.Melissa@epa.gov](mailto:Heist.Melissa@epa.gov); or Robert Adachi, Product Line Director, at (415) 947-4537 or [Adachi.Robert@epa.gov](mailto:Adachi.Robert@epa.gov).



Arthur A. Elkins Jr.

#### Attachments

cc: Acting Assistant Administrator, Office of Water  
Principal Deputy Assistant Administrator, Office of Water

Regional Administrator, Region 5  
Deputy Regional Administrator, Region 5  
General Counsel  
Deputy General Counsel  
Deputy Associate General Counsel for Civil Rights and Finance Law  
Director, Office of Ground Water and Drinking Water, Office of Water  
Acting Director, Office of Wastewater Management, Office of Water  
Audit Follow-up Coordinator, Region 5  
Director, Water Division, Region 5  
Chief, State and Tribal Programs Branch, Region 5

## Exhibit 10

## EPA Audit Resolution Submission Form

**Action Office:** OW/R5

**Report #:** 11-R-0700

**Date:** 1/29/13

**Audit Title:** *American Recovery and Reinvestment Act Site Visit of Wastewater Treatment Plant – Phase II Improvements Project, City of Ottawa, Illinois*

**Current Status of Audit:** Management position disputed

**Brief Description of Audit:** The purpose of the site visit was to determine whether the City of Ottawa, Illinois, complied with selected requirements of the American Recovery and Reinvestment Act of 2009 (Recovery Act), P.L. 111-5, pertaining to the wastewater treatment plant project jointly funded by the Recovery Act and the Illinois Water Pollution Control Loan Program. Among other findings no longer at issue, the Office of Inspector General (OIG) found that the city could not provide sufficient documentation in four instances to assure compliance with the Buy American requirements of the Recovery Act for the installation of blowers used in the project. Region 5 disagreed with the findings and proposed a management plan asserting that the blowers met Buy American requirements because the blowers were substantially transformed in the United States in accordance with a test articulated by the Office of Water (OW) in guidance issued in 2009. The OW 2009 guidance, "Determining Whether 'Substantial Transformation' of Components into a 'Manufactured Good' Has Occurred in the U.S.," (the Guidance) which is the subject of the OIG's September 28, 2012, memo, was designed to assist recipients in implementing the Buy American requirements of the Recovery Act. OIG's response to the Region 5 management plan – directed to both Region 5 and OW – reflected the OIG's stated belief that the substantial transformation test articulated in the Guidance for situations involving the assembly of manufactured goods was not consistent with the existing law associated with substantial transformation. OIG contends that the OW articulation of the substantial transformation test potentially resulted in some manufactured goods that were used in SRF projects being non-compliant with the Buy American requirements of the Recovery Act. OIG recommended that OW amend the Guidance. OW and Region 5 disagree with OIG's findings related to the Guidance, and more specifically, based on technical and engineering review, OW and Region 5 believe that the blowers at issue in the Ottawa, Illinois project were "substantially transformed" and comply with the Buy American requirement.

**Issue(s) Under Dispute:** Application of the substantial transformation test as articulated in the Guidance in determining whether a manufactured good is made in the US. And, whether the blowers used in the Ottawa Illinois project satisfied the Buy American requirement of the Recovery Act.

**Recommendation:** OIG recommends that OW modify the Guidance to conform to what OIG believes is the appropriate test for substantial transformation.



## **Detailed Description of Dispute**

### **Agency Position:**

The Recovery Act included a Buy American provision (Section 1605) that requires, with limited exceptions, that funds awarded may only be used for a project if the "manufactured goods used in the project are produced in the United States." Neither the Recovery Act nor OMB guidance prescribed a particular test for determining whether a "manufactured good" was produced in the United States. OW exercised its discretion to develop reasonable guidance for recipients who were going to make determinations regarding the origin of diverse manufactured goods. OW issued the Guidance on October 22, 2009. The Guidance adopted the concept of "substantial transformation" as a means of complying with the Buy American provisions of the Recovery Act, and provided 3 questions (each to address different fact situations) to further assist recipients. The current Guidance satisfies the legal requirements of the Recovery Act and is not contrary to OMB ARRA guidance. Were EPA to follow the OIG's recommendation, it would have significant implications for states, communities, contractors, suppliers and manufacturers. The recommendation could result in EPA requiring states to review over 3300 projects, 3 years after all projects were statutorily required to be under contract or construction and where applicable, apply a different BA testing threshold to determine compliance. This could lead to contract disputes, litigation and economic hardship that would be harmful to States, ARRA recipients, contractors and suppliers. Further, ARRA funds are 97% outlayed and the majority of projects have been completed for over a year.

### **OIG Position:**

This dispute involves Region 5's proposed management decision, that by applying a test of its own creation, EPA correctly ensured that this project funded by the American Recovery and Reinvestment Act of 2009 (Recovery Act) complied with Section 1605 (the 'Buy American' provision) of that Act. The region determined that in applying an alternative substantial transformation test set out in guidance prepared by the Office of Water, a number of products that were discussed in the audit had in fact met the test. The Office of Inspector General disagreed with the proposed management decision because it believed that the OW guidance on which that decision was based is significantly flawed and therefore led to approvals of products that in fact do not comply with the Buy American requirements of the Recovery Act. The OW guidance includes legal definitions of substantial transformation, but then employs an alternative test for use in assessing substantial transformation that seemingly does not comport with those legal definitions.

In materials sent to the Agency Follow-Up Official on October 17, 2012, and January 17, 2013, the OIG described in detail concerns relating to Region 5's application of the alternative substantial transformation test created by OW. As articulated in these materials, the OIG concluded that OW failed to show that its alternative test for substantial

transformation was based in statutory, regulatory, or case law definitions. Consequently, the application of this test means that foreign products that were allowed to be used in Recovery Act projects because they passed (rather easily) the OW alternative test may well have been wrongfully purchased with American dollars.

The OIG further stated that the established test for assessing whether a foreign product is substantially transformed in the United States is the change in character or use test. This test is found in statute (19 U.S.C. § 2518(4)(B)), regulation (19 C.F.R. § 177.22(a)), and virtually all case law cited by OW and the Office of General Counsel. The test is used regardless of whether the transformation in the United States involves assembly or any other process. Under the rigorous change in character or use test, there must be ultimate proof that a foreign component is not just subjected to treatment, labor, and manipulation in the United States, but rather that it ultimately is truly transformed into a new and different article with a wholly distinctive character or use.

Because the OW alternative test for assessing substantial transformation is seemingly not based in law, the relevant guidance should be modified to focus solely and effectively on the appropriate test. By doing so, the Agency would mitigate further potential risk through incorrect application of the Buy American provision of the Recovery Act.

**Proposed Agency Alternative:**

The use of the "substantial transformation" test as articulated in the OW guidance to satisfy the Buy American provision in the Recovery Act is a question of policy.

OMB regulations implementing the Recovery Act define a "manufactured good" as one "that has been processed into a specific form and shape, or combined with other raw material to create a material that has different properties than the properties of the individual raw materials." 2 CFR §176.140. It further states that "There is no requirement with regard to the origin of components or subcomponents in manufactured goods used in the project, as long as the manufacturing occurs in the United States." 2 CFR § 176.70(a)(2)(ii). The Guidance restates this OMB definition that a "manufactured good" must have different properties than those of the individual raw materials. OW believes, therefore, that the Guidance effectively requires a manufactured good made in the U.S. to be changed in character or use from its foreign components.

Neither the Recovery Act nor OMB guidance prescribed a particular test applicable to OW's State Revolving Fund Programs for determining whether a "manufactured good" was produced in the United States. Without statutory language that defines "manufactured good" or OMB guidance that required a particular test for determining whether a manufactured good was assembled in the United States, OW had the authority to develop reasonable guidance. OW concluded that the "substantial transformation" concept adopted by OMB for international agreements provided a useful framework for analysis. The OW guidance explains the concept of substantial transformation and identifies three questions, any one of which should be answered affirmatively to find that a good has been manufactured in the United States.

With respect to goods that are primarily manufactured through assembly, Question 3 in the Guidance applied. The Guidance identified that question and five sub-questions, at least two of which should be answered in the affirmative for an item to be considered to be made in the U.S.:

"Question 3 generally addresses situations where the most significant of the potentially transformative work is assembly. Because assembly is in most cases further down the spectrum towards non-transformative work, a more demanding standard is appropriate. Thus, if the answer to at least two of 3a, 3b, 3c, 3d, or 3e is "yes", then the answer to Question 3 is "yes". Manufacturers who wish to establish beyond a doubt that their product has been substantially transformed in the U.S. via answers to Question 3 will want to provide descriptions of their process(es) that support affirmative answers to as many of the subquestions as are applicable, to increase the likelihood that the answers to at least two of the questions are sufficient.

"3. Was(/were) the process(es) performed in the U.S. (including but not limited to assembly) complex and meaningful?

- a. Did the process(es) take a substantial amount of time?
- b. Was(/were) the process(es) costly?
- c. Did the process(es) require particular high level skills?
- d. Did the process(es) require a number of different operations?
- e. Was substantial value added in the process(es)?"

OW interprets Question 3 and its sub-questions, in the context of the entire guidance, to contemplate a change in character or use consistent with the concept of substantial transformation. The sub-questions establish reasonable, practical indicia for identifying when assembly will result in a good that has different properties from those of the individual raw materials, as required in the Guidance. Under the Guidance, "complex and meaningful" assembly operations, such as heavy machining involving high value labor and sophisticated equipment, are required to produce a material that has different properties from the individual raw materials and establish substantial transformation. By contrast, work that is minimal, simple, or cosmetic in nature cannot amount to the complex and meaningful process needed to change a good's character or use and establish substantial transformation.

Nonetheless, the OIG objects to Question 3 in the OW guidance because it views the five sub-questions as replacing the "change in character or use" test. OIG advises that Question 3 should be removed from the Guidance.

Despite the fact that most of the nearly 3,300 projects funded by the SRFs under the ARRA are completed and that 97 percent of the funds have been expended, OW offered to address OIG's concerns by amending the Guidance to clarify and confirm that a good manufactured through assembly in the U.S. must be changed in character and or use from its foreign components and that the sub-questions are critical factors. In the proposed amendment, as in the current guidance, Question 3 and two of the five sub-questions would have to be answered in the affirmative to determine that a good was manufactured in the U.S. The proposed change was rejected by the OIG.

As indicated above, this is a dispute about a policy choice, not a legal requirement. Substantial transformation is not required to satisfy the Buy American provision in the Recovery Act. In fact, when the Federal Acquisition Regulations (FAR) were eventually amended to address the Buy American provision of ARRA in June 2010, the "substantial transformation" test was not adopted. Instead, the FAR applied a test that essentially looked to the last place of assembly to determine the location of manufacture. Therefore, the OW Guidance does not pose a substantial risk of violation of the Buy American provision of the Recovery Act. Indeed, the best resolution is for the Agency to maintain the current language in the Guidance and address any concerns about compliance with the Buy American provision in the Recovery Act based on technical and engineering review on a case-by-case basis

Exhibit 11

supplies purchased by the Government for incorporation into the project.

d. Manufacture vs. Substantial Transformation or Tariff Shift

There were many comments on the issue of manufacture and substantial transformation.

i. Buy American Act and Substantial Transformation

*Comments:* Several respondents believed that the Buy American Act includes a requirement for substantial transformation. One respondent stated that the rule should use the "long-standing definition" of a domestic manufactured good, *i.e.*, final substantial transformation must occur in the United States. Another respondent stated that the Buy American Act of 1933 includes a substantial transformation test. A respondent also stated that the Buy American Act requires substantial transformation in the United States. The respondent was concerned that the interim rule only requires assembly in the United States.

*Response:* Whether or not the Buy American Act requires "manufacture" or "substantial transformation" is not directly relevant to this rule, but only might be used as a matter of comparison for interpretation of section 1605. The Councils have determined that the Buy American Act does not apply to manufactured construction material. Many of the respondents, whether contending that the Buy American Act still applies or using the Buy American Act for purposes of comparison and interpretation, have misinterpreted the Buy American Act. The Buy American Act includes the requirement for domestic manufactured goods to be "manufactured" in the United States. This term has been used consistently in the FAR as the first prong of the test for domestic manufactured end products and construction material. There is no substantial transformation test included in the Buy American Act. The term "substantial transformation" only comes into the FAR to implement trade agreements. The rule of origin for designated country end products and designated country construction material requires products to be wholly the product of, or be "substantially transformed" in the designated country. Even under trade agreements, there is no requirement for substantial transformation of products produced in the United States, because U.S.-made end products are not designated country products. Actually, the definition of "U.S.-made end product" allows either "substantial transformation" or "manufacture" in the United States to

qualify as a U.S.-made end product, because the Buy American Act has been waived for U.S.-made end products when the World Trade Organization Government Procurement Agreement applies. However, this is not the case for domestic construction material. Even when trade agreements apply, domestic construction material must meet the Buy American requirements of domestic manufacture, not substantial transformation. Therefore, those respondents who argue that the Buy American Act requires substantial transformation are simply wrong.

ii. Should "manufacture" in this rule include the standard of substantial transformation?

*Comment:* Further elaborating on substantial transformation, two respondents recommended that the Councils should adopt a clear rule defining the concept of domestic manufacture consistent with the "well-established standard" of substantial transformation as the first part of the two-pronged test for domestic construction material. The respondent stated that the rule should not confer domestic status simply as a result of minor processing or mere assembly in the United States. According to these respondents, by not adopting substantial transformation, the interim rule has created ambiguity. These respondents pointed out a clear administrative process in the Federal Government for making substantial transformation determinations. They also stated that U.S. Customs and Border Protection (Customs) considers the totality of the circumstances and makes determinations on a case-by-case basis. The respondents questioned why the interim rule omitted any reference to substantial transformation.

Three respondents recommended allowing either manufacture (perhaps combined with the component test) or substantial transformation. According to one of the respondents, allowing both models to determine when a product has been manufactured in the United States ensures greatest flexibility. This respondent believed that this is only relevant below the Trade Agreements Act threshold, *i.e.*, above the threshold, the requirements defined under those pre-existing regulations would apply.

*Response:* Section 1605 of the Recovery Act does not require substantial transformation. It requires that manufactured goods be "produced" in the United States. The Councils have interpreted the law to equate "production" of manufactured goods to "manufacture." To the extent that the Recovery Act domestic source

restriction is worded consistently with the Buy American Act, it is reasonable to implement in a similar fashion. "Substantial transformation" has never been applied in the FAR to domestic construction material, just to designated country construction material that is subject to trade agreements.

Therefore, the final rule continues to utilize the FAR language that parallels the pre-existing construction contract definition of domestic construction material, requiring manufacture in the United States.

iii. Definition of Manufacture

*Comments:* Other respondents were concerned about the definition of "manufacture." A respondent stated that the interim rule does not provide a clear definition of what constitutes manufacture, *i.e.*, how to determine whether sufficient activity has taken place in the United States for a material to be considered produced in the United States. Likewise, two respondents noted the various interpretations of "manufacture," *i.e.*, some believe it is similar or identical in concept to substantial transformation under Customs' rules, while others believe it is closer to the Buy American Act—Construction clause test for manufacture. One of these respondents asked that the final rule clarify the definition. Yet another respondent stated that, although the rule does not define "manufacture," the regulations suggest that the test will be similar to the requirement of U.S. manufacture applied under the Buy American Act. This may in some cases be less demanding than the substantial transformation test, which examines whether an article is transformed into a new and different article of commerce, having a new name, character, and use.

*Response:* The Councils have considered in the past including a definition of "manufacture" in the FAR but did not do so because of the case-specific nature of its application. The definition may be different for canned beans than for an aircraft. However, for those who find the word "manufacture" confusing and cite the long-standing tradition of interpretation of "substantial transformation," there is also a longstanding record of interpretation of "manufacture" under the Buy American Act. (See for example B-175633 of November 3, 1975, which addressed the issue of whether a radio had been manufactured in the United States. The GAO did not find against the Army position that, if the final manufacturing process takes place in the United States, the end product is "manufactured in the United States.")

Exhibit 12



B-175633

NOV 3 1975

The Honorable Gerry E. Studds  
House of Representatives

Dear Mr. Studds:

Your letter of May 15, 1975, on behalf of Bristol Electronics, Inc., New Bedford, Massachusetts, requested that we determine the validity of certain allegations against two firms supplying AN/PRC-77 radio sets under Army contracts awarded under invitation for bids No. DAAB05-72-B-0012. The firms involved are the Cincinnati Electronics Corporation, Cincinnati, Ohio, and Sentinel Electronics, Incorporated, Philadelphia, Pennsylvania.

We discussed the contracts with officials at the Army Materiel Command Headquarters, Alexandria, Virginia, and reviewed contract files and interviewed cognizant personnel at the Army Electronics Command, Fort Monmouth, New Jersey. We also discussed the Cincinnati contract with the administrative contracting officer, Defense Contract Administration Services District, Cincinnati.

#### BACKGROUND

The AN/PRC-77 is a portable, short-range radio set originally developed and initially manufactured by the Radio Corporation of America. The radio was later produced by various other manufacturers prior to the Army Electronics Command's award of fixed-price contracts to Cincinnati and Sentinel in June 1973.

The invitation for bids contained a Buy American Act clause, and both contractors certified that the radios to be delivered under their contracts would be domestic source end products in compliance with the act's implementing regulatory requirements.

Cincinnati's contract required the first delivery of production radios in January 1975; Sentinel's contract required first delivery in February 1975. Both contracts scheduled delivery of about 16,650 radios over a 27-month period and included an option for the Army to increase the quantity. Both Cincinnati and Sentinel priced the scheduled requirements at approximately \$431 per unit.

PSAD-76-41



B-175633

### EVALUATION OF ALLEGATIONS

Each of the allegations cited in your letter is restated below and is followed by our evaluation.

1. Both Cincinnati and Sentinel are assembling all or part of these radio sets in Mexico and Israel in possible violation of the Buy American Act of 1933.

Essentially, the Buy American Act requires that only domestic source end products shall be acquired for public use. The act, as implemented by the Armed Services Procurement Regulation (ASPR), provides that an end product is to be considered a domestic source end product (1) if it is manufactured in the United States and (2) if the cost of its components which are manufactured in the United States exceeds 50 percent of the total cost of all its components. Components are defined as those articles, materials, and supplies which are directly incorporated into the end product delivered to the Government.

We have previously examined the question of Sentinel's compliance with the Buy American Act in connection with its originally planned procurement arrangement with Tadiran, Israel Electronics Industries, Ltd. We concluded in our decision to the Secretary of the Army in 52 Comp. Gen. 886, May 31, 1973, that this arrangement, wherein Tadiran would function as a component purchasing agent for Sentinel, did not constitute a violation of the act since the majority of the components would be of domestic origin and the end product radio would be assembled by Sentinel in the United States.

We learned, however, in the course of our current review, that Sentinel now intends to purchase components directly from United States firms rather than through Tadiran. The Army Electronics Command has, accordingly, requested the Government's quality assurance representative at Sentinel's plant to review all purchase orders prior to release and to identify any orders that are for foreign firms. We believe the controls established are adequate to assure Buy American Act compliance under Sentinel's direct procurement plan.

Cincinnati has taken a different approach to the production of radios under its contract. Components are purchased by Cincinnati's Ohio plant, inspected there, and shipped to a wholly owned subsidiary (CE Sonora) in Hermosillo, Sonora, Mexico, for assembly. The Sonora plant ships back a nearly fully assembled radio for final assembly, testing, conditioning, and adjusting at the Ohio plant.

B-175633

The Defense Contract Administration Services District in Cincinnati, Ohio, inspects all components before they are shipped to the Sonora plant. The District administrative contracting officer stated that virtually all are of domestic origin.

Although we believe the monitoring system established is adequate to assure that the level of foreign-made components supplied to Sonora does not exceed the limit prescribed by the Buy American Act, we have reservations as to whether the manufacturing effort conducted by Cincinnati's Ohio plant is in keeping with the intent of the act's other provision, which requires that the end product be "manufactured in the United States."

Documents in the Army Electronics Command's contract files indicated that Sonora assembles an essentially complete radio and that only 10 to 15 percent of the total assembly man-hours are performed at the Ohio Plant.

The Army has taken the position that, if the final manufacturing process takes place in the United States, the end product is "manufactured in the United States." Thus, since the completing or final assembly operation is performed at the Ohio plant, even though it amounts to only 10 to 15 percent of the total assembly work, the Army believes that Cincinnati is in compliance.

It is reasonably clear under the act that, if all assembly operations were performed at the Ohio plant, the end product would qualify as being "manufactured in the United States," and that, if all assembly operations were performed at Sonora, the end product would not qualify.

The Buy American Act and ASPR, however, are silent with respect to situations such as Cincinnati's where the manufacture of an item is split between foreign and domestic locations and, though we have reservations, as stated above, we are not prepared to say that Cincinnati has violated the Buy American Act. We discussed both the Buy American Act issue and our conclusions with a knowledgeable official in the Office of the Assistant Secretary of Defense who told us he believed the Army's position was in accordance with the intent of the act. He also told us that, although questions regarding interpretation of the requirement that end products be "manufactured in the United States" have arisen before, they had not occurred with sufficient frequency to lead the ASPR Committee to consider amending the Regulation.

We believe that the infrequency of questions regarding interpretation of the requirement that end products be "manufactured in the United States" provides little assurance that the requirement is being either appropriately questioned or properly interpreted. Accordingly, we recommend that the Secretary of Defense amend ASPR to define and clarify the requirement that items acquired for public use be "manufactured in the United States."

2. Both Cincinnati and Sentinel are behind schedule on production.

The allegation is correct in the sense that neither Cincinnati nor Sentinel met the original delivery schedules. The Army Electronics Command, however, has issued modifications to both contracts revising the delivery requirements. At the time of our review, the modified contracts required first production delivery from Cincinnati in August 1975 (a 7-month slip) and from Sentinel in December 1975 (a 10-month slip).

The Army acknowledged that 3 months of the delay on both contracts was attributable to deficiencies in the technical data package furnished to the contractors by the Electronics Command.

Cincinnati and the Electronics Command negotiated an agreement in March 1975 that the 4-month balance of the 7-month slip on the Cincinnati contract would be incorporated at no change in contract price and that both the contractor and the Army would withdraw prior claims for monetary consideration on certain other matters.

At the completion of our review, Sentinel and the Electronics Command had not agreed on the causes for the 7-month balance of the 10-month slip on the Sentinel contract and both parties had reserved their rights. The modification revising the delivery schedule states the parties are not in agreement that the delay is excusable and that both agree that the contract modification shall in no way waive, prejudice, or alter the rights and remedies of either.

3. Both Cincinnati and Sentinel have applied for emergency financial aid which, if approved, will mean an increased cost per unit on the original contracts.

B-175633

The allegation is correct. Both contractors have requested financial relief under the provisions of Public Law 85-804 and, if the requests are granted, the unit price of radios on both contracts would be increased substantially.

The implementing regulations of Public Law 85-804 permit an increase in contract price when necessary to prevent a loss under a contract which would impair the productive ability of a contractor whose continued operation is essential to national defense.

Cincinnati's request, which was submitted in February 1975, sought relief in the amount of \$2.256 million for the full term of the contract. This would amount to a unit price increase of approximately \$136 (about 32 percent) on the Cincinnati contract.

Sentinel's request, which was submitted in April 1975, sought relief in the amount of \$1.708 million for radios scheduled for delivery in the first year of production. This would amount to a unit price increase of approximately \$258 (about 60 percent) for first year quantities on the Sentinel contract. Sentinel also requested 100 percent progress payments for first year quantities. In addition, Sentinel requested that the contract prices for the second and third year quantities be adjusted upward for inflation, using the increased first year price as a base.

Sentinel asked that the contract be terminated for the convenience of the Government if the requested relief was not granted.

The contractors' requests for financial relief and matters related to those requests are further discussed in the enclosure.

At the completion of our review, the Army had not made a decision on either contractor's request for financial relief. If the Army Electronics Command recommends approval, that recommendation would then be submitted to the Army Contract Adjustment Board, Washington, D.C., for final approval.

- - - -

It is our understanding, based on discussion with your office in early August, that you will provide Senator Edward M. Kennedy with copies of this report.

As you know, Section 236 of the Legislative Reorganization Act of 1970 requires the head of a Federal agency to submit a written statement on actions taken on our recommendations to

B-175633

the House and Senate Committees on Government Operations not later than 60 days after the date of the report and to the House and Senate Committees on Appropriations with the agency's first request for appropriations made more than 60 days after the date of the report. We will be in touch with your office in the near future to arrange for copies of this report to be sent to the Secretary of Defense and the four Committees to set in motion the requirements of Section 236.

Sincerely yours,

*R. F. Kellum*  
Deputy Comptroller General  
of the United States

Enclosure

ENCLOSURE

ENCLOSURE

DISCUSSION OF CONTRACTORS'  
REQUESTS FOR FINANCIAL RELIEF  
AND RELATED MATTERS

Under the implementing provisions of Public Law 85-804 contained in the Armed Services Procurement Regulation, both contractors maintained that their continued performance on various Government contracts was essential to national defense and that relief was necessary in order to prevent losses under the AN/PRC-77 contracts which would impair their continued operations. Sentinel stated that it would be forced into bankruptcy if the Government failed to grant relief or to terminate the contract for the convenience of the Government.

Sentinel maintained that the major portion of the expected loss under its contract resulted from a substantial increase in the cost of material. The contractor stated that its material cost estimates were developed when Phase II of the Government's wage and price control program was in effect and that, when the controls were later lifted, its material costs rose significantly.

Although the Sentinel and Cincinnati contracts both contained a price escalation clause, it was applicable only to labor cost increases after the first year of production deliveries.

Sentinel claimed that it and the Army Electronics Command were parties to a mutual mistake, as to a material fact, in failing to anticipate the escalation of prices after the elimination of wage and price controls. Electronics Command personnel advised us that Sentinel was in the process of revising its request for relief, but no specific information was available at the completion of our review.

Cincinnati claimed that the expected loss under its contract was a direct result of the Government's actions in awarding Cincinnati only half of the total procurement. The actions cited in Cincinnati's request for relief were those of the Small Business Administration and the Electronics Command's contracting officer, leading to the award of the set-aside portion of the invitation for bids to Sentinel and the non-set-aside portion to Cincinnati.

Cincinnati stated that in the development of its bid it had distributed costs over the total procurement quantity of about 33,300 radios on the assumption that it would receive an award for the total quantity and that it was unable to fully recover those costs under the contract it actually received for only 16,648 radios.

ENCLOSURE

ENCLOSURE

In connection with the matter of a split award, a Sentinel protest to us in late 1972 challenged Cincinnati's small business eligibility, and a Bristol Electronics protest in early 1973 challenged Sentinel's. We concluded in our decision to the Secretary of the Army in 52 Comp. Gen. 886, May 31, 1973, that, for the purpose of this procurement, Cincinnati did not qualify as a small business concern as required for the set-aside portion (one-half) of the invitation for bids. We found no merit, however, in Bristol's contention that Sentinel was not qualified as a small business concern because of improper affiliation or contractual arrangements with a large foreign firm. The set-aside portion of the procurement was subsequently awarded to Sentinel.

Cincinnati filed a protest with us against the award to Sentinel and, in June 1973, brought suit in the United States District Court for the Southern District of Ohio against the Secretary of the Army and the Administrator, Small Business Administration. Although Cincinnati had taken a different approach with the court than it did with us, the issues raised in the protest were so intertwined with those raised in the suit before the court that we declined consideration of the protest.

The District Court ruled against Cincinnati and, in August 1973, Cincinnati filed an appeal with the United States Court of Appeals for the Sixth Circuit. We were advised by a representative of the Army Electronics Command's Office of Chief Counsel that the Court of Appeals found that the contracting officer should have (1) forwarded Cincinnati's protest of Sentinel's business size to the Small Business Administration and (2) withheld the award of the set-aside contract to Sentinel pending a determination by the Administration.

In January 1975, the Court of Appeals declared that the contracting officer's failure to observe the above procedure was improper, but it denied Cincinnati's request that the Army be restrained from continuing the contract with Sentinel. We were further advised by the Electronics Command representative that the matter had been referred back to the District Court for further proceedings and that it had not been finally settled.