

## **ENVIRONMENTAL PROTECTION AGENCY**

[FRL – XXXX]

Notice of a Project Waiver of Section 1605 (Buy American Requirement) of the American Recovery and Reinvestment Act of 2009 (ARRA) to the Gwinnett County, Georgia, Department of Water Resources.

**AGENCY:** Environmental Protection Agency (EPA)

**ACTION:** Notice

**SUMMARY:** The EPA is hereby granting a project waiver of the Buy American requirements of ARRA Section 1605 under the authority of Section 1605(b) (2) [manufactured goods are not produced in the United States in sufficient and reasonably available quantities and of a satisfactory quality] to the Gwinnett County, Georgia, Department of Water Resources (County) for the purchase of an Austrian manufactured Anaerobic digester gas fueled engine generator set specified as General Electric (GE) Jenbacher JMS 616, 2147 kilowatts for application in a combined heat and power system for use at the F. Wayne Hill Resources Center in the County. The product is manufactured by GE Jenbacher (Jenbach, Austria) and provided by General Electric Water & Process Technologies. The County stated that there was no apparent domestic manufactured biogas engine generator set with the specific fuel utilization/electric power

output capacity and variable fuel blending capability required for the utility's combined heat and power needs. This is a project specific waiver and only applies to the use of the specified product for the ARRA funded project being proposed. Any other ARRA project that may wish to use the same product must apply for a separate waiver based on the specific project circumstances. The Acting Regional Administrator is making this determination based on the review and recommendation of the EPA Region 4, Water Protection Division, Grants and Infrastructure Branch. The County has provided sufficient documentation to support its request. The Assistant Administrator of the Office of Administration and Resources Management has concurred on this decision to make an exception to Section 1605 of ARRA. This action permits the purchase of an anaerobic digester gas fueled engine generator set manufactured by GE Jenbacher for the proposed project being implemented by Gwinnett County, Georgia.

**EFFECTIVE DATE:**

**FOR FURTHER INFORMATION CONTACT:** Carl Biemiller, Project Officer, (404) 562-9341, Grants and Infrastructure Branch, Water Protection Division, Region 4, US EPA, Atlanta Federal Center, 61 Forsyth Street, S.W., Atlanta, Georgia 30303-8960.

**SUPPLEMENTARY INFORMATION:**

In accordance with ARRA Section 1605(c) and pursuant to Section 1605(b)(2) of Public Law 111-5, Buy American requirements, the EPA hereby provides notice that it is granting a project waiver to the County for the acquisition of the GE Jenbacher Austrian

manufactured biogas engine generator set. The manufacturer is GE Water & Process Technologies Company.

Section 1605 of the ARRA requires that none of the appropriated funds may be used for the construction, alteration, maintenance, or repair of a public building or public work unless all of the iron, steel, and manufactured goods used in the project are produced in the United States, unless a waiver is provided to the recipient by the EPA. A waiver may be provided if EPA determines that (1) applying these requirements would be inconsistent with the public interest; (2) iron, steel, and the relevant manufactured goods are not produced in the United States in sufficient and reasonably available quantities and of a satisfactory quality; or (3) iron, steel and the relevant manufactured goods produced in the United States will increase the cost of the overall project by more than 25 percent.

The County's Department of Water Resources proposes to construct the F. Wayne Hill Water Resources Center (WRC) Digester Gas to Energy Project. This project would permit a renewable energy source for use by the project and the nearby wastewater treatment plant (WWTP). The project intends to convert previously flared anaerobic digester gas to electricity and heat for plant operations. The County proposes to use a General Electric (GE) Jenbacher JMS 616, 2147 kilowatts gas engine to convert digester gas to electrical and thermal energy with the recapture of the heat from the engine-generator in a combined heat and power (CHP) design. Electrical energy generated by the CHP system will reduce the utility needs of the WRC by an estimated thirty (30) percent, partially replacing grid purchased electricity. Thermal energy from the CHP

system will be beneficially utilized to maintain the optimum temperature in the anaerobic digestion process now performed by natural gas boilers. The County's specifications require that the design rating of the biogas engine generator be sized to utilize as much of the WRC's available biogas as possible. The application states that based on this requirement, the engine generator set to be supplied must be rated for a power output in excess of 2000kw. Also, to maximize the utilization of the Center's available biogas, the engine generator must be capable of utilizing a blended fuel mixture of petroleum derived gas and biogas in order to be capable of operating continuously between the specified range of methane gas production (varying between 400 SCFM and 700 SCFM). This variable blending fuel capacity feature is known as "blend-on-the-fly."

The County's Department of Water Resources has requested a waiver from the Buy American provision for the purchase of a GE Jenbacher JMS 616, 2147 kilowatts gas engine set manufactured in Jenbach, Austria. The project specifications provided listed manufacturers for the project, and the prospective bidders consulted with multiple suppliers. All of the prospective bidders provided alternative pricing for a Caterpillar G3520C DM 5860, 1600kw/12.47V low BTU gas cogeneration system assembled in Mapleton, IL. Upon evaluation of the domestic manufacturer's product, the County determined that a single Caterpillar unit could not produce excess of 2000kw that could operate continuously over the specified range (as low as 400 SCFM and as high as 700 SCFM). The Caterpillar unit is rated at 1600kw and also has no blending capabilities. The application also states that the Caterpillar unit is not able to run continuously due to its inability to "blend-on-the-fly" until the influent flow of a facility is in excess of

approximately 50 million gallons per day (MGD). Above 50 MGD, the gas would have to be stored to burn at a later time. If the gas storage tanks are full, the gas would be burned through the flares. Conversely, the GE Jenbacher gas engine generator can utilize the full range of gas production quantities by operating at reduced engine speeds with a variable speed drive or by operating at the full engine speed – supplementing the low BTU digester gas with natural gas provided by the gas utility to provide the greatest electrical power output. This “blend-on-the-fly” technology beneficially utilizes the full amount of available gas, allowing for continuous operations through periods of variable digester gas production. Therefore, the GE Jenbacher gas engine can still be run during periods of low digester gas production to reduce utility fed electricity usage during peak consumption periods. Continuous operation of the engine-generator will also provide a constant heat source to meet the digester’s process heating requirement, thereby eliminating the need for natural gas boilers. These boilers would still be required with the Caterpillar gas engine generator. Thus, the Caterpillar unit is neither as efficient nor is it otherwise of a satisfactory quality to meet the specifications of the project.

The functional requirement to maximize biogas use is clearly essential to the objective of substantially increasing the energy efficiency of the facility and turning the current environmental detriment of flaring methane, a particularly potent greenhouse gas, into an energy asset. By doing so, the project has also qualified for the ARRA Green Project Reserve, which is a high priority ARRA objective for SRF funded projects. Requiring a less efficient product would be inconsistent with the explicit and specific intent of Congress to achieve greater energy efficiency as stated in the SRF specific 20% Green

Project Reserve requirements of Title VII of the ARRA. The County's submission clearly articulates entirely functional reasons for its technical specifications, and has provided sufficient documentation that the relevant manufactured goods are not produced in the United States in sufficient and reasonably available quantity and of a satisfactory quality to meet its technical requirements and specifications.

The April 28, 2009 EPA Headquarters Memorandum, "Implementation of Buy American provisions of P.L. 111-5, the American Recovery and Reinvestment Act of 2009," defines "satisfactory quality" as "the quality of steel, iron or manufactured goods specified in the project plans and designs."

EPA's national contractor prepared a technical assessment report dated August 14, 2009 based on the submitted waiver request. The report determined that the waiver request submittal was complete, that adequate technical information was provided, and that there were no weaknesses in the justification provided. The report confirmed the waiver applicant's claim that there are no comparable domestic products that can meet both the power output of the engine generator and the dual fuel capability needed for the project.

Furthermore, the purpose of the ARRA is to stimulate economic recovery in part by funding current infrastructure construction, not to delay projects that are ready to proceed. Approval of the waiver would permit construction to promptly proceed with positive economic benefits to the County in the form of jobs and related services and materials which would aid the economic recovery.

The Region 4 Grants and Infrastructure Branch has reviewed this waiver request and has determined that the supporting documentation provided by the County is sufficient to meet the criteria listed under ARRA Section 1605(b), OMB's regulation at 2 CFR 176.100 and the aforementioned EPA Headquarters Memorandum of April 28, 2009. ARRA Section 1605(b) (2) permits a waiver if "Iron, steel, and manufactured goods are not produced in the United States in sufficient and reasonably available quantities and of a satisfactory quality." Based on the information provided to EPA from the County, and to the best of our knowledge at the time of the review, there does not appear to be any biogas engine generator set currently manufactured in the United States available to meet the County's specifications and requirements. Therefore, this waiver request meets the applicable criteria and is justified.

The Administrator's March 31, 2009, delegation of authority memorandum provided acting Regional Administrators with the authority to issue exceptions to Section 1605 of ARRA within the geographic boundaries of their respective regions and with respect to requests by individual grant recipients. Having established both a proper basis to specify the particular good required for this project, and that this manufactured good was not available from a producer in the United States, the Gwinnett County, Georgia, Department of Water Resources is granted a waiver from the Buy American requirements of Section 1605(a) of Public Law 111-5 for the purchase of a anaerobic digester gas fueled engine generator set specified as GE Jenbacher JMS 616, 2147 kilowatts for application in a combined heat and power system as specified in the County's request of

July 22, 2009, with supplemental information. This supplementary information constitutes the detailed written justification required by Section 1605(c) for waivers “based on a finding under subsection 9b.”

Authority: P.L. 111-5, section 1605

12/7/09

A. Stanley Meiburg

Date

A. Stanley Meiburg, Acting Regional Administrator

Region 4