

# **ATTACHMENT 3**



**Energy Answers Arecibo, LLC**

**Environmental Justice  
Evaluation**

October 2011



## 1. Introduction

In response to your October 11, 2011 letter regarding the Energy Answers PSD Application and information related to Environmental Justice (EJ) concerns, we are submitting this report to consolidate the EJ related information and provide supplementary information with respect to the potential environmental and health burden in low-income communities in the Arecibo area surrounding the proposed facility. In developing this response, we refer to the procedure provided in USEPA Region 2's Interim *Environmental Justice Policy* of December 2000.

As stated in the guidance, the Office of Environmental Justice in EPA Headquarters (OEJ) has issued the following interim EJ definition:

Environmental Justice is the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. Fair treatment means that no group of people, including a racial, ethnic, or socioeconomic group, should bear a disproportionate share of the negative environmental consequences resulting from industrial, municipal, and commercial operations or the execution of federal, state, local, and tribal programs and policies.

Executive Order 12898 specifically addresses situations where minority or low-income communities bear a disproportionately high and adverse human health or environmental burden.

The information provided herein gives the technical foundation for concluding that the proposed Energy Answers Arecibo Renewable Energy Project (AREP) will not cause disproportionately high environmental burden or adverse human health effects in the communities surrounding the facility, especially those that are considered to be low-income areas. On the contrary, human health and ecological impact analysis and air dispersion modeling analysis for potential impacts of regulated air pollutants indicates that the Cambalache Barrio, which is not a low-income community, would bear the greatest portion of the potential environmental burden associated with the proposed AREP.

In addition, Energy Answers understands the utmost importance related to public involvement in the planning and approval process. Over the past year, Energy Answers has actively conducted extensive outreach and community education efforts to every barrio within the Municipality of Arecibo and nearly every ward of every barrio surrounding Arecibo. More than 40 public presentations have taken place, in addition to regular radio interviews, dedicated programs, and trips to the SEMASS reference



facility by community members and local elected officials. An update to the ongoing public outreach efforts by Energy Answers is provided herein.

## **2. Site Selection Criteria**

Energy Answers believes that resource recovery begins with the project site and therefore prioritizes the selection of former industrial sites in its development process. The redevelopment of impacted, former industrial sites by those entities well suited to undertake these efforts, helps to lessen potential impacts on greenfield sites; reserving these sites for residential, commercial, recreational uses or preservation. With this approach however, there are certain matters to address such as the potential for on and offsite soil and ground water contamination, industrial zoning and therefore industrial neighbors and even the potential for a community and general public that is weary of additional industrial development. Energy Answers is fully aware of the potential for these situations to arise and attempts to proactively integrate the identification and management of these concerns to the greatest extent into its development process.

For the Arecibo Project, this resulted in conducting Phase I and II Site Assessments to identify the presence of hazardous materials such as asbestos, process chemicals, fuel oil and other materials potentially used at the Former Global Fibers Paper Mill and any resulting site contamination. Additionally, Energy Answers extended this process to include the routes along which the raw water and electrical interconnections would travel. Special care was taken to avoid the use of groundwater or river water resources as these were relied upon heavily by the island agencies including the Puerto Rico Electric Power Authority (PREPA) and the Puerto Rico Water Authority (PRASA). Instead, Energy Answers selected brackish waste water from a regional flood control system being pumped into the ocean as its primary water source to avoid increasing the burden on this essential local resource.

Realizing that the site is in an industrial area, the Project conducted an Environmental Justice study to determine if the area was an economically disadvantaged area or underrepresented area. After reviewing the initial draft which indicated that Barrio Cambalache had one of the highest income levels in the municipality and region, however had less than 65 residents, the focus area was expanded to include several additional barrios to make sure that the broader region did not fall into the category of economically disadvantaged or underrepresented. This was confirmed by the final study results and incorporated into the Environmental Impact Statement, which was reviewed by numerous local agencies and approved by the Puerto Rico Environmental Quality Board. A copy of the Environmental Justice Study is provided in Appendix A and is summarized in Section 4.1 below.



### **3. Prior Submittals**

As noted above, the submittal of this document represents a consolidation of supporting information related to Environmental Justice concerns provided in the following documents:

- Human Health and Ecological Risk Analysis included in the Environmental Impact Statement (EIS).
- Prevention of Significant Deterioration (PSD) Air Permit Application submitted February 2011.
- Responses to Permitting Comments dated June 2011.
- PSD Air Quality Modeling Analysis (Revised) dated July 2011.
- Responses to Modeling Comments dated August 2011.

### **4. EJ Procedure**

Region 2 Interim Guidance recommends the following steps for identifying potential EJ communities:

- 1) delineate the boundaries of the COC and conduct, as appropriate, a preliminary environmental burden analysis;
- 2) compare the demographics of the community to an appropriate statistical reference;
- 3) determine whether the community is either minority or low income;
- 4) develop a comprehensive environmental load profile (ELP) for any community that is either minority or low income;
- 5) assess whether the burden is disproportionately high and adverse; and
- 6) summarize and report the results.

Efforts taken for identifying potential EJ communities in the project study area were completed as described below, consistent with the guidance.

#### **4.1. Demographic Screening (steps 1-3)**

An environmental justice study was prepared as part of the EIS by Estudios Tecnicos Inc and CSA Group in San Juan, Puerto Rico for the proposed AREP. The Environmental Justice Study was performed following the EPA guidelines and definitions. The EPA defines the concept of environmental justice as the fair treatment