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**Appendix 1:** Interlocutory Resolution R-10-43-1 of the Environmental Quality Board on the Draft Preliminary Environmental Impact Statement for the Renewable Energy and Resource Recovery Plant Project.

**Appendix 2:** Transmittal sheets signed by the Agencies to whom the EIS-P Draft was circulated.

**Appendix 3:** Presentation of the Proponent during Public Hearing on the Preliminary Environmental Impact Statement (EIS-P).

**Appendix 4:** Copy of Letter from the Department of Environmental Protection of the Executive Office of Environmental Affairs of the State Massachusetts.

**Appendix 5:** US Environmental Protection Agency (EPA) Guidance for Sampling and Analysis of Municipal Waste Combustion Ash for the Toxicity Characteristic Leaching Procedure (TCLP).

**Appendix 6:** Internal Vehicular Flow in the Plant.

**Appendix 7:** Copies of Agency Letters

**Appendix 8:** Metals Price Index

## 1 RESPONSES TO COMMENTS IN INTERLOCUTORY RESOLUTION R-10-43-1

On November 19, 2010, the Environmental Quality Board (“EQB”) notified the Puerto Rico Industrial Development Company (PRIDCO [sic], the proposing agency received the Interlocutory Resolution R-10-43-1 (the “Resolution”) on the Draft of the Preliminary Environmental Impact Statement (the “Draft EIS-P”) of the Renewable Power Generation and Resource Recovery Plant Project, Cambalache, Arecibo (the “Project”), submitted on October 25, 2010, and for which a Public Hearing was held on November 8, 2010. A copy of the Resolution is included as Appendix 1.

This document summarizes the comments in the Resolution and the responses of the proposing agency and the Owner. The document is organized as follows:

- Responses to general comments in the Interlocutory Resolution.
- Responses to comments by the agencies.
- Responses to comments made during Public hearing.

### 1.1 Response to General Comments in the Interlocutory Resolution

**Comment 1:** Resolution R-10-43-1 clarifies several points made in the Report of the Examining Officer. This section refers to comments and recommendations made by the EQB, which are responded to in this document as follows:

**Comment 1a:** Evidence must be submitted of the circulation of the Draft EIS-P to the agencies listed in paragraph III (2) of the Resolution, and include such comments in the EIS-P to be submitted.

**Response:** Appendix 2 includes a copy of the evidence of circulation of the draft of the EIS-P to the agencies listed in paragraph III (2) of the Resolution.

**Comment 1b:** The approximate frequency of energy generation (daily or weekly) of the Plant should be clearly indicated.

**Response:** The megawatt unit is a measurement of power. Power expended during a period of time is equivalent to energy. The plant is designed to produce 80 megawatts of power continuously, the base load. This means than in one hour the plant will generate 80 megawatt-hours or 80,000 kw-hours of electric energy.

**Comment 1c:** Reference information must be included in the Environmental Document confirming that the fly ash will be non-hazardous solid waste as described in the Environmental Document.

**Response:** Historically the fly ash and the bottom ash generated at the reference facility for the Project (Energy Answers International, Inc. SEMASS) were consistently classified as non-hazardous solid waste under applicable federal regulations. Therefore, the ash was regulated under a permit from the Department of Environmental Protection of the State of Massachusetts (MDEP) that complies with the provisions for such waste under the Resource Conservation and Recovery Act (RCRA). Routine sampling and analysis programs were used to determine that the SEMASS bottom ash and fly ash would be non-hazardous solid waste.

At present, ash residue of waste-to-energy conversion and resource recovery facilities are classified as non-hazardous solid waste under federal law; the residue is analyzed to ensure that it is non-hazardous. The US Environmental Protection Agency (EPA) developed an aggressive test called the Toxicity Characteristic Leaching Procedure or TCLP to determine whether metals will leach from this material. If the metals leach in amounts greater than a fraction of one (1) percent, the ash is considered hazardous. Years of tests at waste-to-energy conversion facilities in the country have shown that the ash is safe for disposal and reuse. In particular, the State of Massachusetts has stated that all of the plants that submitted sampling results for TCLP passed the test. See Second paragraph, page 2, **Appendix 4**. The waste-to-energy conversion and resource recovery facilities consistently pass the TCLP test, in spite of the fact that the test greatly exaggerates the potential of metal leaching from the waste. Based on prior experience and the abundance of publicly available information, we believe that the fly ash is not hazardous.

Energy Answers International was the owner and operator of the SEMASS facility from 1989 to 1996 and during the time required under the permit for the facility issued by the MDEP, TCLP testing of the ash residue every three (3) months, on a quarterly basis showed that the ash consistently passed the TCLP. Subsequently, the frequency of the sampling was reduced, based on the results that had been obtained. See the second paragraph of the first page of Appendix 4. A summary of the results of the TCLP tests on the ash during the period in which Energy Answers International operated SEMASS is shown below. After that date, information on the results of the ash analysis may be obtained by contacting the MDEP.

SEMASS CONDITIONED FLY ASH QUARTERLY MONITORING PROGRAM

SUMMARY STATISTICS

TCLP

January 1993 through June 1996

Quarterly Ash Monitoring Summary

Compound	90% Confidence Limit	Number of Data Points	TCLP Maximum Limit
Arsenic	0.0081	142	5
Barium	0.9966	142	100
Cadmium	0.0804	142	1
Chromium	0.0482	142	5
Lead	0.6164	142	5
Mercury	0.0081	142	0.2
Selenium	0.012	142	1
Silver	0.0336	142	5

1. Less than detectable data was estimated at 1/2 the detection limit for statistical calculations.
2. Upper 90% Confident Limit Calculation as per EPA SW-846 Volume II, chapter nine rev. 0.
3. All laboratory data provided by Matrix Analytical, Inc. Hopkinton, Ma.
4. Toxicity Characteristic Leaching Procedure (TCLP) as per CFR 40 part 261 Appendix II or US EPA SW-846, method 1311.

The following tables provide summaries of the results of the TCLP tests from 1993 to 1996 for the Boiler Aggregate<sup>TM</sup>, a product of the extraction of ferrous and nonferrous materials from SEMASS bottom ash and fly ash. These results show that both materials easily passed the TCLP test.

**Appendix 4** includes a letter from the MDEP summarizing how the RCRA regulations and the EPA Guidance should be administered at the SEMASS facility, among other Municipal Waste Combustors or MWCs, located in the state. This letter provides an excellent summary of the history of the TCLP tests performed for all MWCs in Massachusetts and explains why the sampling protocols changed in 1997.

**Appendix 5** of this document includes the EPA Guidance for the sampling and analysis of municipal waste combustion ash for toxicity. This document provides information on the process by which TCLP tests are administered and how the results are analyzed.

During the operation of the Project, the fly ash to be generated by the plant will be analyzed using the TCLP test, or any other test required under applicable regulations, to confirm their non-hazardous status before delivery to a facility for disposal. The fly ash to be generated at the plant will also be analyzed regularly to determine its structural characteristics before being used for commercial purposes.

**Comment 1d:** Expand on the discussion of the fly ash conditioning process, reuse or disposal in sanitary landfill systems to address the SWA comment regarding the need to clarify what sanitary landfill system would be used for disposal of the ash.

**Response:** Fly ash is composed of particulate material captured in the emissions control system, activated carbon, and lime, each of which is a critical component of the emissions control process. A small amount of water is added to this material, called fly ash, to control the dust during the handling and transportation process, if it is being disposed of in a sanitary landfill system. The water and ash are thoroughly mixed to ensure that the moisture content of the mixture is appropriate.

The ash contains a significant amount of lime from the emission control system, which raises its pH and prevents leaching of metals from the ash. When disposed in a sanitary landfill system, within a few days the ash hardens and takes on the appearance of a material similar to cement mortar, preventing the generation of dust.

Disposal at sanitary landfill sites: Unused fly ash will be disposed of at authorized sanitary landfill sites, and in strict compliance with the applicable regulations, including the analytical confirmation of its non-hazardous nature.

**Comment 1e:** The Environmental Document should include reference information that confirms that the bottom ash or Boiler Aggregate will be non-hazardous solid waste and any example of commercial use.

**Response:** See response to Comment 1c regarding the classification of this kind of ash as non-hazardous. We enclose information summarizing the results of the TCLPs of January 1993 to June of 1996 and April of 1997 performed on the bottom ash of the SEMASS reference facility:

## SEMASS CONDITIONED BOTTOM ASH QUARTERLY MONITORING PROGRAM

### SUMMARY STATISTICS

#### TCLP

January 1993 through June 1996

#### Quarterly Ash Monitoring Summary

Compound	90% Confidence Limit	Number of Data Points	TCLP Maximum Limit
Arsenic	0.0036	154	5
Barium	0.4047	154	100
Cadmium	0.1077	154	1
Chromium	0.0451	154	5
Lead	2.2369	154	5
Mercury	0.0005	154	0.2
Selenium	0.0025	154	1
Silver	0.0102	154	5

1. Less than detectable data was estimated at 1/2 the detection limit for statistical calculations.
2. Upper 90% Confident Limit Calculation as per EPA SW-846 Volume II, chapter nine rev. 0.
3. All laboratory data provided by Matrix Analytical, Inc. Hopkinton, Ma.
4. Toxicity Characteristic Leaching Procedure (TCLP) as per CFR 40 part 261 Appendix II or US EPA SW-846, method 1311.

The bottom ash to be generated at the plant will also be analyzed periodically for structural purposes before being used for commercial purposes.

**Comment 1f:** The Environmental Document should include information on the potential markets for the 280 tons of ferrous and no ferrous of metals that will be recovered daily at the Plant.

**Response:** Ferrous metals will be sold as Heavy Melting Scrap HMS #1, or as HMS#2. The mixture of nonferrous materials is known as "Zorba" and is sold according to its metal content determined by analysis. Zorba 85 (85% metal) is sold on the international market. The Energy Answers operation at SEAMASS confirms that there is a market for these materials which is consistent and commercially viable. These markets are typically international or national.

**Comment 1g:** The Environmental Document should provide details on any existing plan to use fuels alternative fuels discussed in the environmental document and the amount of these fuels that are planned to be used.

**Response:** Energy Answers currently has no plans to use the alternative fuels discussed in the EIS-P. These alternative fuels were mentioned due to the demonstrated capacity of the systems to handle these specific materials and the potential future need to manage these waste flows. If Energy Answers were to consider incorporating dedicated amount as of one or more of those materials, before initiating these activities, the facility would perform emission tests with the amount of the proposed alternative added to the PRF. This will confirm that the system can incorporate the amount and kind of alternative fuels while maintaining full compliance with established local and federal permit limits.

**Comment 1h:** Information on the capacity and location of the storage tank for #2 fuel for the boilers should be included.

**Response:** Table 1-8 of the EIS-P shows that the #2 fuel tank will have a capacity of 100,000 gallons. The tank will be located to the southwest of the boiler building in an area that is accessible to transportation trucks. In addition to what is indicated in Section 3.2 of the EIS-P, all tanks, regardless of their location will be fitted with a secondary containment system as a precaution to prevent chemicals or fuels from accessing the drainage system, soil, and water bodies through spills, as required in current regulations.

**Comment 1i:** Indicate whether the brackish water that will be used in the cooling tower and the boilers will be held in the front pond water storage pond), and indicate the disposal method and site for this water in case of any excess that may be generated.

**Response:** The brackish water that will be used in the cooling system and the production of water for the boilers will be first stored in a tank located between the MSW Receiving Building and the PRF Building, and in a front pond, which between them is storage enough to continue the operation for at least three (3) days. The flow of brackish water that will be received at the Plant will be controlled by a pump system which will be used as needed and will not generate any overflow. As stated in section 3.7.2, the residual water generated in the Plant will principally consist of purge water from the cooling tower and the boiler with an estimated total volume of 800,000 gallons a day. This will be discharged into to an PRASA sanitary sewer system connected to the Arecibo Regional Effluent Treatment Plant that has more than sufficient capacity to handle the discharge from the Plant.

**Comment 1j:** Explain the wash treatment for the different facilities of the project and where the water will be discharged.

**Response:** In the Project, the principal cleaning or maintenance requirement is the annual cleaning of the boilers that will occur as follows:

Typically, the exterior of the superheater, the turbine, the economizer, and the air heating pipes are washed with pressurized water (i.e., up to 10,000 psig) to remove ash residue from the pipes. After the washing, there is a marked increase in the heat transfer coefficient, which increases the generation of steam and lowers the temperature of the flue gas, thereby making the process more efficient. This cleaning usually happens during the annual outage of the boilers.

The used water from boiler cleaning will be used for conditioning the fly ash. Any excess used water, if any, will be sampled and analyzed to ensure compliance with applicable industrial discharge standards to the Arecibo PRASA treatment plant. Otherwise, they will be pre-treated in the facility prior to discharge into the PRASA sanitary sewer system.

The delivery area or tipping floor is swept on a regular basis. However, the area is not washed periodically and therefore its cleaning or maintenance does not generate used water. Experience shows that the sweeping is sufficient to maintain an adequate level of cleanliness and washing is not necessary.

**Comment 1k:** The Environmental Document should explain in detail why the meteorological data described in the Document was used.

**Response:** As stated in Section 3.4 of the EIS-P, the meteorological data that was used was the data available at the Luis Muñoz Marín International Airport station in San Juan for the past five (5) consecutive years (2005 to 2009). In addition, one year of historical data were used (August 1992 to August 1993) available at the PREPA Plant in Cambalache, which has a meteorological station and is located about one (1) mile (northeast) of the Plant. These sources are the best available sources of data for scientific studies related to the Project. The EPA Region 2 Office validated the fact that the San Juan data present a good correlation with the PREPA data. This is standard procedure for this kind of worst case analysis.

**Comment 1l:** Discuss in greater detail why the evaluations included in the Human Health Risk and Ecological Risk Studies were based on a 10 km radius.

**Response:** EPA guidelines indicate that the most significant atmospheric deposition from facilities as the one proposed usually occurs within 10 km of the source. See page ES-1 of Appendix K and page ES-1 of Appendix L. In accordance with the above, the modeling conducted for the Human Health Risk and Ecological Risk Studies also used this radius. Therefore, the potential for exposure and health risk was assessed for exposure scenarios and receptors located within the 10km radius of the proposed facility.

**Comment 1m:** Clarify where it is proposed to located the pump that will be used to deliver brackish water to the facility. Also provide details on the proposed measures and /or ways to manage events that could interrupt the operation of the pumps operated by the Department of Natural and Environmental Resources.

**Response:** The installation of two pumps in the existing wet well at the El Vigía Pump Station is proposed. These pumps will be in addition to the DRNA pumps and will operate in alternate manner, providing 100 % reciprocity. These pumps will operate independently from the DRNA pumps, so that it is not foreseen that they would affect the operation of the DRNA pumps in any manner. As part of the agreement between Energy Answers and the DRNA, Energy Answers is making improvements to the Pump Station and providing preventive maintenance for the pumps. The Pump Station well currently houses two 80,000 gpm pumps operated by the DRNA that discharge into a canal leading to the Atlantic Ocean. All of the water that enters the wet well is destined to be discharged in to the canal and subsequently into the ocean. The pump system is used to maintain adequate levels in Caño Tiburones and prevent flooding in the surrounding communities. In addition, it is used to maintain the equilibrium of the ecological systems and allow for maintenance. In the rare event that the proposed pumps could not be operated, the Plant has storage for at least three (3) days on the grounds, which will allow continuous operation.

**Comment 1n:** PRIDCO should clarify how vehicles that are not from Arecibo will have access to the facility, and the impact, if any, associated with the use of routes used for such access. In addition, PRIDCO should clarify whether the delivery hours have been planned for the hours during which waste is accepted at the Plant.

**Response:** One of the attractive characteristics of the location in Cambalache, Arecibo is the easy access of vehicles from municipalities not adjacent to Arecibo and the proposed facility. These vehicles may use the PR-22, an efficient route with several lanes, to reach Arecibo. These vehicles will leave the PR-22 via the Domingo Ruiz exit and travel approximately 0.65 miles through the Avenida Domingo Ruiz, a busy four-lane road, toward PR-2, another busy road with four lanes. The facility will have two access points or entrances, an entrance to the south for cars and other service vehicles, and an entrance to the north dedicated to trucks entering and exiting the facility. As indicated in Section 9 of the Traffic Study (**Appendix H**) the north entrance will be controlled by a traffic light.

At present delivery schedule for the plant has not been formally confirmed. However, it is anticipated that the scalehouse will be open for waste deliveries from 6:00 am to 6:00 pm, Monday through Friday, and Saturday from 6:00 am to 2:00 pm.

As part of the studies for the Project, Appendix H –Traffic Study was included in the EIS-P. This study was prepared according to the parameters set forth in the Department of Transportation and Public Works (DTOP) document “Guidance for the Preparation of Access and Traffic Operational Studies for Puerto Rico,” the American Association of State Highway and Transportation Officials (AASHTO) design standards, the Transportation Research Board (TRB), and the Institute of Transportation Engineers (ITE) manuals. The methodology of the study was used to analyze the current traffic conditions in the area, and to assess the potential impact on traffic caused by the proposed project. The study was carried out for a little over one hour in the morning and a little over an hour in the afternoon during which the highest the traffic volume in the system was observed. According to the study performed, the increased traffic due to the project operations would not have an adverse effect on the highway system, provided that improvements are made in the distribution of the lane and reprogramming the traffic lights, as was described in detail in the document. The Highway Authority is evaluating this document.

As presented in the study, during the operation of the plant, it was estimated that there will be a daily increase in traffic of 391 vehicles entering the Plant. The only way to enter the Plant is through PR-2, whether in a westward or eastward direction. Heavy vehicles travelling from different sanitary landfills on the island may reach this route through highways PR-22 and PR-10. Section 4 of the Traffic Study explains in detail the current conditions of this highway network. With the information provided by Energy Answers, it was estimated that 75% of the heavy vehicles would approach the project on route PR-2 in an east to west direction, and 25% would approach the project on route PR-2 in a west to east direction. A calculation was made of the volumes to be generated by the project, and the volumes were distributed among the intersections that were studied according to the origin and destination of the vehicles. The roads that provide access to the Site have the sufficient capacity to handle this load and the traffic study, as required by the DTOP, only analyzes the roads within a reasonable range of distance (i.e., not the entire island).

**Comment 1o:** Expand the discussion and /or specify the information presented with regard to the following:

- i. **Auxiliary systems for the plant.** The draft EIS-P refers to auxiliary systems for the plant that will include of brine, cleaning water, and chemical injection systems, as well as an ion exchange regeneration system that uses sulfuric acid and sodium hydroxide solutions. You indicate that during the design phase this treatment scheme will be refined to minimize the use of water and chemicals

and to minimize the generation of effluent. You should expand the discussion of the scheme and existing alternatives.

**Response:**

Brackish Water Treatment

Treatment of the brackish water that will be used in the Plant is necessary principally to remove pathogens and suspended solids. In addition, further treatment of this influent will be necessary in order to use it as replacement water for the boiler makeup. It is foreseen that this additional necessary treatment for the production of deionized water for the boilers will be by reverse osmosis followed by strong cationic and anionic exchangers.

Process Wastewater Effluent Treatment

It is foreseen that the treatment of the wastewater effluent will require the neutralization of pH and possible the dechlorination with sodium bisulfate. The final details of the treatment system will be part of the process of obtaining the corresponding authorization or permit from the PR Aqueduct and Sewers Authority (PRASA).

Boiler Water Treatment System

It is foreseen that the boiler water will be brackish water and that PRASA water could be used as a back-up. The system design depends on the quality of the brackish water and could consist of a combination of reverse osmosis or RO and resins for deionization through cation and anion exchange or any of these.

The cation and anion units require the use of acid and alkaline chemical substances. A description of these units is provided below.

Cation Unit

The cation exchanger is regenerated using a sulfuric acid solution. The sulfuric acid solution flows into the top of the cation container, down through the resin and flows to the regenerant waste holding area. After the introduction of the acid, the dilution water rinses the resin. The rinse water flows through the bed, completely removing the acid and out through the bottom of the high quality holding tank, leaving it ready for operations or service.

### Anion Unit

The anion exchanger is regenerated using hot caustic soda. The caustic soda is pumped from the caustic soda tank to the regeneration station where it is diluted, pre-heated, and sent to the anion unit. A final rinse with effluent from the cation unit removes the traces of caustic soda, leaving it ready for service.

### System Considerations and Support Equipment

The acid tank will be located outside the Plant buildings and the caustic tanks of will be located inside one of the buildings. Fifty percent (50%) of the caustic soda crystalizes or solidifies at approximately 50°F. An electric heater is used to ensure that the caustic soda flows continuously and regardless of the background temperature. The hot tank of water is shared by the resin bed units.

Each cation and anion bed system has an acid regeneration and a caustic soda pump (a total of two). Each mixed bed has an acid regeneration pump and caustic soda pump. The additional acid and caustic soda pumps are shared by all of the beds (two in total).

Regeneration waste varies from pure water to dilute acid and alkaline solutions. Residue from the cation and anion units is automatically separated according to quality by diverting valves. Given that the mixed bed residue is small-sized, this residue is not separated.

Acids and alkaline residue are directed to the regenerant waste holding tank with a capacity for the total volume generated by the regeneration unit. These residues partially neutralize each other. The residue is then sent to the neutralization tank where the pH is adjusted before the discharge. All remaining residue is diverted to the high quality pump. Safety devices will be provided for the operation of the pumps to move the regenerant waste once the regeneration cycle is completed and so that the second system does not enter the regeneration cycle until the tank pumps have emptied out the residue from the previous cycle.

- ii. **Automotive Shredder Residue:** It is mentioned that ASR generation is not currently a practice used in Puerto Rico, and that in the event of the approval of the project there would be an additional opportunity of creating a market for this alternative fuel. This would therefore promote new recycling operations in Puerto Rico and help to increase recycling and recovery rates in the

municipalities. In this regard, there should be more extensive comment on this market and it should be specified whether the Project will enter this market.

**Response:** See response to Comment 1g in this document.

- iii. **Agreements with municipalities and waste collection companies:** As shown in the draft of the environmental document, Energy Answers plans to enter into agreements with municipalities and waste collection companies to ensure a sufficient volume to produce 2,100 tons of PRF that will guarantee maximum estimated energy generation for this project. In this regard, the economic feasibility of the project should be clarified in the event that the agreements to guarantee a volume for producing 2,100 tons of PRF are not secured.

**Response:** Ensuring agreements for the receiving the necessary waste to obtain the fuel needed in the proposed facility is a critical part of the development process and essential for the economic viability of the Plant. The development process will not reach the financing and/or construction until a sufficient percentage of these agreements have been secured.

- iv. **Non-acceptable Materials:** The document mentions that non-acceptable materials are those that will not be processed into PRF and consist of, but are not limited to, radioactive materials, explosive materials, hazardous waste, and biomedical waste, among others. You state that non-processable materials are those that due to their size or kind cannot be processed at the Plant. You mention that “Energy Answers will implement strict standard operating procedures that will ensure that the waste is inspected in a strict manner at the MSW tipping floor in order to remove those materials that have been identified before it is converted to PRF”. You also state that “the technology has been refined in order to adapt it to the needs of each operation or plant, which has resulted in a decrease in emissions and a significant increase in the generation of electricity and steam per ton of waste as opposed to traditional incineration.” In this regard, you must provide a more detailed discussion of what operational procedures will be implemented to ensure that the waste is rigorously inspected at the tipping floor. Likewise, you should specify what adjustments are to be made and describe the resulting decrease of emissions at the proposed plant.

**Response:**

MSW Inspection Program

Section 1.4.5.5 of the EIS-P - MSW Inspection Program sets forth in detail the inspection procedures at the tipping floor. As indicated in that section, a comprehensive training program will be provided for the inspection and removal of unacceptable material from the tipping floor. Between five (5) and ten (10) trucks will be selected at random every day for a detailed visual inspection. The waste will be unloaded in an area separate from the active loading and unloading area of the facility. The operator of the front end loader will use the bucket to spread the waste and will inspect the cargo in the presence of the truck driver. The other waste will be unloaded at the tipping floor. The front loader operator will perform a visual inspection of the load before adding it to the waste pile for processing. At this point of the process, any non-processable or non-acceptable material will be removed and isolated or placed in a dumpster for its removal and disposal. As for the identification and handling of radioactive materials, see the provided response to Comment 1 in Section 1.2.9 of this document.

Advances in PRF Production:

One of the most significant advances in PRF production is the conversion from hammer mill shredders to shear shredders. The hammer mill shredders use high-speed hammers to pulverize the waste and force it through grates that basically break up the waste into nominally sized 4 to 6 inch pieces. The speed and impact associated with the hammers have the potential, although, to cause friction, combustion, and explosions.

Instead, slow speed shredders use high torque, and counter-rotating cutting devices to achieve the same objective. The benefit of this, in addition to reducing, if not eliminating, the risk of fire and explosion is that these systems consume much less energy and require substantially fewer hours of maintenance to sustain appropriate operating.

Advances in Power Generation

The proposed resource recovery technology involves a semi-suspension combustion boiler instead of the more traditional mass burn boiler. As with other solid fuels (e.g., pulverized coal and sawdust), combustion efficiency is

increased by reducing the size of the fuel particle and ash residue is reduced. Shredding of solid waste to produce PRF fuel increases efficiency and generation of energy.

The amount of electricity is indicative of the efficiency of the waste-to-energy system for producing electricity. The proposed system, due to waste shredding and suspension combustion generates one of the highest rates of electricity per ton in comparison with other systems. In addition, the suspension combustion and the fine bed of ash in the boiler (furnace) grate ensures that virtually any material in the waste that susceptible to combustion will be completely consumed. The amount of unconsumed matter during the combustion process found in bottom ash (in the form of small particles of unconsumed coal) is typically less than 1% of the bottom ash.

The energy generating capacity of the facility has been increased by using specialized materials in the boilers, which allow for the use of higher temperatures and pressures, producing higher efficiency in the boiler and therefore a greater energy production per ton of PRF.

Emission Reduction:

The proposed facility will have a continuous emissions monitoring system (CEMS) that determines the amount of uncontrolled emissions that are present in the flue gas entering the pollution control equipment. Based on the concentration of pollutants sensed by the CEMS, the chemical dosing to control those pollutants is automatically adjusted in the air pollution control equipment. This ensures that the emissions reduction will always be optimized. Additionally, the proposed Facility will incorporate the use of a Turbosorp dry lime injection system to replace the spray dryer absorber and a Regenerative Selective Catalytic Reduction (RSCR) system in place of the Selective Non-Catalytic Reduction alternative. The use of the Turbosorp, in combination with the management of acid gas production reduces the level of metal emissions. The incorporation of the RSCR greatly reduces the emission of NOx from the facility.

- v. The following statement was made: “Energy Answers’ goal is to continue to improve technology by finding new applications for these products, beginning with resource recovery processes until the final objective of zero waste is reached.” In this regard, you should describe the possible new applications and their corresponding marking.

**Response:**

Energy Answers' objective is zero waste, which involves an effort to find uses or reuses of materials that are discarded by society. Working towards this objective, Energy Answers patented the PRF technology that is specifically designed to maximize the recovery of energy and materials from the flow of municipal solid waste. In addition to the removal of significant amounts (approximately more than 100,000 tons annually) of ferrous metals from the waste before it is processed as PRF, the recovery of materials is maximized through (i) processing waste to convert it into a homogenous fuel that allows for better combustion, including boiler temperature; (ii) controlling the boiler and the grate temperature to prevent the formation of glass and melted metal residue, known as slag; (iii) allowing sufficient time for full combustion of the PRF fuel in the grate, facilitating the production of bottom ash that is free of organic material, which is essential for producing the highest quality reusable or recyclable products.

The new alternatives that Energy Answers is exploring include additional metal extraction from bottom ash. Currently, the technology that the proposed facility will have is designed to segment the bottom ash into ferrous materials, ferrous metals, and Boiler Aggregate, a light weight construction aggregate. While most ferrous and nonferrous metals are extracted from bottom ash, some fine metal particles remain in the Boiler Aggregate. These metals are potentially of significant value and their removal could increase the functionality of the Boiler Aggregate that is produced.

In addition, Energy Answers is working to identify commercial uses for fly ash generated in the facility. Successful tests have been performed on this material for use as an additive for cement, epoxy resins, mineral wool for insulation, plastic lumber, and other construction-related materials.

With the emergence of LEED certification, initial contacts with construction products manufacturers have been positive and the consideration of this ash for reuse appears to have increased. Energy Answers also has initiated conversations with universities in Puerto Rico that have expressed an interest in researching viable reutilization of these materials.

- vi. As for solid waste management, it is noted that "Energy Answers' philosophy is to treat ash as raw material for commercial products and not as a waste that should be discarded. Efforts in scientific research and the development of this technology have been cutting edge, resulting in using ash more effectively and in beneficial ash reuse." Discuss in greater detail the technology and the commercial products to be generated.

**Response:** See the response provided for comment number 1o(v) in Section 1.1 and the response provided for comment number 5 in Section 1.3 of this document.

**Comment 2:** The air dispersion models recommended by the EPA are conservative as indicated in the EIS-P. From the air quality impact assessment that was performed it may be inferred that no deterioration in visibility is foreseen for the area of the site. However, the studies that were carried out are based on models that are recommended for air quality assessment. To ensure that the dispersion of pollutants will not affect the surrounding communities there should be constant monitoring when the Plant initiates operations and /or tests.

**Response:** As indicated in Section 1.4.3.4 of the EIS-P, the emission control system will have continuous monitoring equipment for the following parameters at the sampling point: sulfur dioxide emission at the Turbosorp® entrance; carbon monoxide emission; NOx emission; opacity; boiler temperature; temperature at the entrance of the fabric filter unit; concentrations of oxygen and carbon dioxide at the Turbosorp® entrance and at the output side of the fabric filter unit; and steam flow.

The operation and the design of the Continuous Emission Monitoring System (CEMS), will comply with federal regulatory environmental provisions under Title 40 C.F.R. part 60, Appendix B, Sub part Eb.

Furthermore, the Plant will have a dedicated computer system for gathering and processing data from the stack emission monitors and the data from the operational unit or boiler. Subsequently, reports will be prepared on stack emissions using this data, as required and in compliance with the EPA and the EQB. This data will be shared with the digital control system of the Plant to monitor efficient operation.

**Comment 3:** PRIDCO should submit a revised Preliminary Environmental Impact Statement (EIS-P) to address the issues indicated above, and in compliance with R-10-26-1.

**Response:** PRIDCO is submitting a revised EIS-P that addresses all of the comments and in compliance with R-10-26-1, this document is attached as Appendix R.

## **1.2 Responses to Agency comments**

### **1.2.1 Energy Affairs Administration (1 November 2010)**

**Comment:** The EAA endorsed the Project in a letter dated 1 November 2010 stating that the Project is consistent with the economic development and energy public policy of Puerto Rico.

**Response:** No response required.

### **1.2.2 Aqueducts and Sewers Authority (29 October 2010)**

**Comment:** The use of 2.1 MGD of brackish water discharged into the Atlantic Ocean from the Caño Tiburones by the DNER, is an alternative source of environmentally viable water that will help the PRASA supply potable water in the region.

**Response:** No response required.

### **1.2.3 Highways and Transportation Authority, Department of Transportation and Public Works (27 October 2010)**

**Comment:** The Highways and Transportation Authority expresses that there are no pending or planned projects in the area that could be affected by the location of the Project, so there is no objection to the Project.

**Response:** No response required..

#### **1.2.4 Solid Waste Authority (1 November 2010)**

The responses to the SWA communication dated 1 November 2010 are presented below in the same order and format as they are shown in the communication:

**Comment 1a:** The EIS-P indicates that the approximate energy generation of the Plant will be 90 Megawatts. However, the frequency of generation (daily or weekly) is not clearly established.

**Response:** With regard to the generation capacity of the plant proposed by Energy Answers International, Inc., the EIS-P establishes that the plant will generate 80 Megawatts of energy, not 90 Megawatts. Megawatts is a unit whose frequency is always measured by the hour.

**Comments 1b:** Section 1.3.2.1- Schedule Infrastructure Projects

- i. Third paragraph - Should read: the SWA developed the Dynamic Timeline for Infrastructure Projects, 2008 (Timeline), for the purpose of ...
- ii. Fifth sentence-Should read: One of them, the solid Waste Characterization Study, 2003...
- iii. Sixth sentence - Should read: the second Study: Evaluation, Diagnosis and Recommendations for the Sanitary landfill Systems, 2004, better known as the Useful Life Study ...

**Response:** Recommendations accepted and are included in the revised EIS-P to be submitted.

**Comments 1c: Section 1.3.2.3-Recycling rates for Puerto Rico**

- i. the sentence-Should read: Public Law No. 70, The Solid Waste Reduction and Recycling in Puerto Rico Act, enacted on September 18, 1992,
- ii. Tables 1-3 and 1-4 – Distribution of Standard Recycling Index Published by the SWA, for 2006 and 2007. The data do not agree with the Table published in the Dynamic Timeline. We recommend including it in a different Section, since they are confused with the Timeline data.
- iii. Correct in those tables, the last line should read: Recycling Index required in Public Law No. 70.
- iv. Tables 1-5 and 1-6-These Tables were prepared based on an internal assessment done by the SWA for the selection of the six expansions recommended in the final public policy document (Dynamic Timeline). The Tables were used as a working guide. Data was gathered during that time (2007-2008); however, the

figures have varied due to modifications made in different SRS. We do not recommend including them in this document.

**Response:** As for the content of the comments in paragraphs I to IV, they will be adjusted according to your recommendations so that is how they will appear as so in the EIS-P.

**Comment 2a:** Section 1.4-Description of the Project. It is stated that 280 tons of valuable recyclable ferrous and nonferrous material will be recovered. The document does not have a market projection for these materials.

**Response:** See response to Comment 1f in Section 1.1 of this document.

**Comment 2b:** The fly ash will be processed for reuse or disposal in landfill. Currently there are no sanitary landfills in Puerto Rico for ash disposal.

**Response:** Please note the statements in Section 1.4.3.5 of the EIS-P, Management and Recovery of Combustion Residue, where the conditioning process for the fly ash is indicated as EAI proprietary technology. The process produces a material that has consistently been shown to be non-hazardous in testing procedures (Toxicity Characteristic Leaching Procedure or TCLP) established by USEPA. The treated ash has a consistency similar to mortar. In addition, see response to comment 1c in section 1.1 (Responses to General comments in Interlocutory Resolution) of this document.

**Comment 3:** Section 1.4.2- Raw Material for the Production of PRF. Third paragraph- It does not mention the municipalities that will process their waste at the Plant. The Plant will have a greater capacity than the Plants recommended in the Timeline for the northwest (1,350 tons) and northeast (1,560 tons daily) regions of the Island.

**Response:** Figure 1-12 shows the municipalities that constitute the region that geographically should provide the raw material or solid waste for the production of PRF. Table 1-7 of the EIS-P summarizes the estimated generation of waste for the geographical area described above. The table was generated using as a source the Planning Board population projections as of August 22, 2006 and the estimated daily generation rate in the 2008 Itinerary. As specified in Section 1.4.2 of the EIS-P, once the region reaches the goal of 35% recycling, there will be a large amount of waste that must be managed in an environmentally responsible and safe manner.

This estimate is aside from the amount of waste that might become available as a result of closing landfill sites in the future, commitments with municipalities outside of the geographical area mentioned above or agreements with third parties that could possibly use the plant to dispose of their waste. In addition, the comment requesting the correction of the date and source of Table 1-5 of the EIS-P was attended.

**Comment 4:** Section 2.15 Transportation and Traffic measures: This section describes the existing transportation infrastructure in the area close to the site. However, there is no diagram of vehicular flow inside the facility.

**Response:** See **Appendix 6** of this document, which includes an illustration of vehicular flow inside the facility.

**Comment 5:** Chapter 3- Environmental Impact of the Proposed Action and Mitigation Measures: There are several communities, farmland, and cattle ranches near the site. According to the air quality impact assessment that was done, it is not foreseen that there will be any deterioration in visibility in the area of the site. However, the studies are based on models that are recommended for air quality assessment. Therefore, to ensure that the dispersion of pollutants will not affect the surrounding communities there should be constant monitoring when the Plant initiates operations.

**Response:** See the response provided to Comment 2 in Section 1.1 of this document.

**Comment 6:** Section 3.74 Solid Waste Management during the Construction Phase; during this phase there will be debris generated, construction materials, and waste produced by the workers, estimated at 100 cubic yards a month. The document indicates that these can be hauled to Toa Alta or Arecibo because both facilities have a limited lifespan, check with the landfill managers to enter into agreements to ensure that they can receive the waste.

**Response:** As part of the construction plan, Energy Answers will verify with the managers of sanitary landfills to enter into agreements and ensure that they can receive the waste according to your recommendation.

**Comment 7:** Section 1.4.6- Flood Prevention Design of the EIS-P. This section of the EIS-P summarizes the methodology, conclusions, and recommendations of the Hydrology and Hydraulic Study that was done to establish an effective flood prevention design for the Project, which is in full compliance with Regulation Number 13 of the Planning Board.

**Response:** The comment does not require any response.

### 1.2.5 Ports Authority (1 November 2010)

**Comment 1:** Figure 1-23 illustrates the proposed route of the pipeline. However, due to the scale of the photograph and the lack of information regarding the owners of the land where the pipes or other associated utilities will run, we cannot ascertain the effect, if any, in land that the Authority owns in this area.

**Response:** As indicated in Section 1.4.8.1 of the EIS-P the forced line will be installed within the rights-of-way of public highways PR-681, PR-6681, and PR-2 up to the Plant. The line will be installed at a depth of approximately 1.25 meters from the existing level of the highways mentioned above. Appendix F of the EIS-P includes an archeological assessment report showing in greater detail the proposed route of the water line that will run from the El Vigía Pump Station to the proposed plant site. Therefore, this forced line as proposed should not have any adverse effect on Authority land in the area.

**Comment 2:** We recommend that the Proponent contact the FAA as soon as possible and submit an official consultation to that agency. It is our understanding that the stack that is part of the project should be sufficiently high to allow for the optimal diffusion of emissions and at this phase of the project it is relevant to determine whether or not this will be a hazard for aerial navigation.

**Response:** CFR Part 77.13, Title 14, provides that any individual or organization that seeks to carry out any construction or alteration that could interfere with navigable airspace should submit a consultation with the Federal Aviation Administration (FAA). The FAA should review the possible air safety navigation impact in addition to any possible impact on radar system. The FAA requires the developer to submit a Notice of Proposed Construction or Alteration (NPC), Form 7460-1, for structures that are more than 200 feet higher than the surface. In the case of the stack that is proposed as part of the power generation project, due to the fact that the stack is over 200 feet high, Form 7460-1 will be submitted for consultation with the FAA, as soon as possible.

### 1.2.6 Puerto Rico Fire Department (27 October 2010)

**Comment 1:** Application should be filed with the Puerto Rico Fire Department in the construction phase for permits for the proposed inflammable liquid and /or fuel tanks.

**Response:** Before initiating the construction phase of the Project permits for the proposed inflammable liquid and /or fuel tank will be requested for the corresponding evaluation.

**Comment 2:** In their letter dated 27 October 2010, the Puerto Rico Fire Department stated that it has no objection to the construction of the Plant.

**Response:** No response required.

### **1.2.7 Department of Agriculture / Land Authority (1 November 2010)**

**Comment 1:** The land identified belongs to the Land Authority of Puerto Rico, Finca Monte Grande, measuring 92.76 *cuerdas*.

**Response:** Evidently the Land Authority erred in making this assertion and the deed of the site was submitted to the Land Authority as evidence that the Land Authority does not own the land and that Energy Answers has entered into an option contract for the purchase of the land proposed for the development of the Plant.

**Comment 2:** The Department of Agriculture made recommendations for mitigation on contiguous land if it were necessary, such as frequently stirring the soil to restore it from the compaction that is due to heavy equipment traffic. The land should be irrigated frequently to control fugitive dust and the equipment should be cleaned to prevent pathogens from passing into pasture areas.

**Response:** During the construction of the Project the recommendations will be implemented as applicable and necessary.

### **1.2.8 Department of Natural and Environmental Resources (29 October 2010)**

**Comment 1:** Before obtaining any permit, franchise, authorization or concession from this Department related to this project, you must submit evidence of the amendment to the Flood Insurance Rate Map made by FEMA and adopted by the Planning Board. The provisions of Section 6.00 of Planning Regulation No. 13 (Regulation on Special Flooding Risk Areas) must be complied with.

**Response:** Evidence of the amendment to the Rate Map will be submitted. The provisions of Section 6.00 of the Planning Regulation of No. 13 (Regulation on Special Flooding Risk Areas) will be complied with. A Hydrology-Hydraulic Study was performed using the best applicable engineering practices and methodologies, to ensure that the proposed project does not raise the levels in the floodplain during a base flood discharge event and complies with the applicable requirements to mitigate the effects of floods (Section 6.1a). Map amendment procedures, Section 4.04, and FEMA procedures will also be complied with.

**Comment 2:** Before obtaining any permit, franchise, authorization or concession from this Department related to this project, there must be a certificate from the Survey Division of the legal banks of the Río Grande de Arecibo and its 10-meter riparian zone, measured from the border of the legal banks. Also a certified copy of the deed of assignment and transfer of the 5-meter way along the River must be submitted. To obtain information on the procedure to follow in order to comply with the provisions of Regulation No. 7624 dated December 5, 2008 (Regulation on the Acquisition of Real Estate and Real Rights of the Department of Natural and Environmental Resources), you may contact the Real Estate Division at (787) 999-2200 Ext. 2500 or 2505

**Response:** Survey maps of the legal banks of the Rio Grande de Arecibo and its 10-meter corridor will be submitted along with the certified copy of the deed of assignment and transfer of the 5-meter corridor of the River to the Survey Division of the DRNA.

**Comment 3:** Once the topography of the land between the banks of the Río Grande de Arecibo and the project is modified to release the development site from inclusion in the Floodplain Zone, the land must be kept free and clear of all development, as a buffer zone between the River and the project. In addition, where slopes are intended to be created, if any, along the river, the base of the slope must be outside the vegetation corridor of the body of water.

**Response:** The land that lies between the riverbank of the Rio Grande de Arecibo and the project will be kept free of any development, and the land will be reforested with species of the region that will provide a wildlife habitat for the area.

**Comment 4:** The forced line for transferring brackish water to the project should be installed in rights-of-way on existing highways and the construction of the line should not alter the mangles mangroves that exist along some parts of route PR-681.

**Response:** The alignment of the proposed brackish water line along routes PR-2, PR-6681, and PR-681 will be next to the road and will not impact mangroves or other areas considered to be sensitive.

**Comment 5:** The impact that will be caused to 2.49 cuerdas of wetlands on the site should be mitigated in a 3:1 ratio. For this purpose a mitigation plan should be submitted showing the areas that will be used to comply with the required mitigation, prior to obtaining any permit, franchise, authorization or concession from this Department related to this project. This is in compliance with the parameters established in the New Wild Life Act of Puerto Rico (Public Law No. 241, enacted on August 15, 1999) and Regulation 6765 (Regulation to Control Wildlife, the Exotic Species, and Hunting in the Commonwealth of Puerto Rico). Furthermore, you must

comply with the provisions of Section 404 of the Clean Air Act and obtain a permit from US Army Corps of Engineers for the proposed impact on the 2.49 *cuerdas* of wetlands.

**Response:** With regard to the mitigation of 2.49 *cuerdas* of jurisdictional waters, in prior conversations with DRNA it was agreed to mitigate inside the Caño Tiburones Nature Reserve (RNCT), to improve degraded areas of the reserve which are currently not in optimal condition for regional wildlife. The Proponent accepted carrying out the mitigation in a 3:1 ratio due to the impact on wetlands. This mitigation to be done in the RNCT would result in an area of greater ecological value that would benefit the reserve.

**Comment 6:** A Construction Permit for the Service Connection should be obtained as well as an application for a Franchise for the use of 2.1 MGD of the excess brackish water extracted by the DRNA from the Caño Tiburones Nature Reserve. This is in compliance with the Regulation for the Consumption, Use, and Construction [sic] of Public Waters of Puerto Rico (Reg. No. 6213). In addition, at this stage the exact location of the pump will be determined and any other aspect related to the extraction of water.

**Response:** Applications will be submitted, as required, for a Construction Permit for the Service Connection and a Water Franchise for the use of 2.1 MGD of the surplus brackish water.

**Comment 7:** You must comply with the provisions of Planning Regulation No. 25 (Regulation on Planting, Cutting, and Forestation for Puerto Rico). You are advised that Public Law No. 133, enacted on July 1, 1975, as amended prohibits cutting and pruning trees with out the corresponding permit from the Department.

**Response:** During the detailed design process an inventory of trees will be done and a mitigation plan will be prepared, both for the proposed site and for land where off-site work will be done in order to apply for and comply with Planning Regulation No. 25.

**Comment 8:** You must establish a reforestation program using native species, which in addition to helping minimize erosion will benefit wild life. This is consistent with Public Law to Foster the Planting of Trees whose Fruit and /or Seeds Provide Nutrition for the Wild Bird Species of Puerto Rico (Public Law No. 97, enacted on June 24, 1998), which establishes the following: “Any reforestation project in which public or private funds, or a combination of these, are used, of the total number of trees to be planted fifteen percent (15%) of the trees planted in rural areas and ten percent (10%) of the trees planted in urban areas, shall belong to those fruit or seed-bearing species which provide food for the wild birds that reside temporarily or permanently therein.”

**Response:** The applicable mitigation for the trees that it may be necessary to cut will be done with species that are appropriate for the region that benefit wildlife and increase the diversity of native

flora. The species that will be used are those recommended in Public Law to Foster the Planting of Trees whose Fruit and /or Seeds Provide Nutrition for the Wild Bird Species of Puerto Rico.

**Comment 9:** You must comply with the provisions of the Planning Regulation No. 3 (Regulation on Subdivision and Urbanization), Section 14 (Storm Water Management). You are advised that if the storm sewer system should discharge into the Río Grande of Arecibo, you must interrupt the discharge at a concentrated point. This implies that the vegetation corridor cannot be affected, so that an alternative design must be integrated that will allow the water to flow as it did in its natural state.

**Response:** The provisions of Planning Regulation No. 3 (Regulation on Subdivision and Urbanization), Section 14 (Storm Water Management) will be complied with. The proposed system for management of runoff water will discharge the catchment water in a manner that is similar to the existing conditions.

**Comment 10:** You must obtain the General Consolidated Permit from the Environmental Quality Board, which affects the permit for the Control of Erosion and Prevention of Sedimentation to minimize erosion to water bodies. In addition, you must obtain any permit required by that entity to carry out the project or activity.

**Response:** The Project will apply for a General Consolidated Permit from the Environmental Quality Board.

**Comment 11:** You must comply with the provisions of Regulation No. 6916 (Regulation for the Extraction, Excavation, Removal, and Dredging of Earth Crust Components). You are advised that Public Law No. 132, enacted on June 25, 1968, as amended, and its Regulations, prohibits the extraction, excavation, removal, and dredging of earth crust material without the corresponding permit from the Department.

**Response:** The provisions of Regulation No. 6916 (Regulation for the Extraction, Excavation, Removal, and Dredging of Earth Crust Components) will be complied with, as applicable, prior to any earthwork associated with the Project.

**Comment 12:** If any superficial or subterranean waterbody is discovered at the development site, whether of a perennial or intermittent nature, you must report the discovery immediately to the DRNA and other relevant agencies. Failure to report findings of this kind as well as mitigation measures that will be implemented to protect these natural resources will result in the automatic withdrawal of this no-objection communication and there may be grounds for legal action to be brought by the DRNA in the appropriate forum.

**Response:** If any superficial or subterranean waterbody is discovered whether of a perennial or intermittent nature, it will be reported to the DRNA and other relevant agencies in compliance with the applicable legislation.

### **1.2.9 Department of Health (5 November 2010)**

**Comment 1:** Under the Regulation for the Control of Radiation in Puerto Rico No. 1, promulgated under the provisions of Public Law No. 79, enacted on June 24, 1965 as amended, the Department of Health is responsible for overseeing the use, management, storage and emergencies related to sources of ionizing radiation through the Division of Radiological Health. Therefore, endorsement and approval for a plan and /or protocol for the management of situations related to the presence of sources of radiation in waste received at the plant must be obtained. The document must address safety and protection issues for employees, training for personnel, management of waste identified as being contaminated, placement of contaminated waste, etc. In addition, it should mention the Agencies to be notified of situations related to radiation.

**Response:** The necessary endorsements and approvals will be applied for from the Division of Radiological Health regarding the approval of the protocol for the management of situations related to the presence of sources of radiation in waste, if any, that may be detected in the Plant during the operational phase, according to your recommendations and under Public Law No. 79, enacted on June 24, 1965, as amended. In addition, municipal waste will be brought to the facility by truck. The facility staff will be properly trained to recognize symbols used to identify radioactive material, labels and procedures to respond to warning signs or alarm. A radiation detector will be installed in the scale house area for screening of vehicles carrying waste into the plant. The signals (pulses) of the detector will be sent by cable to monitor at the scale house. The alarm of the detector is calibrated to be heard at a level twice the level of background sound, so that staff can hear it clearly. If the alarm sounds, it is confirmed by having the vehicle pass through the detector a second and third time. If the detection of radioactive material is not confirmed in the second and third check of the vehicle, it will be allowed to enter and discharge the waste. If the alarm is activated during the second or third check, the vehicle will be directed to a pre-determined holding area (note: the alarm may be because the truck driver recently received radioactive medical treatment). The Shift Supervisor will be notified and will inspect the load with a handheld radioactivity meter. If it is confirmed that there is radiation and its location inside the truck, the truck will be cordoned off and the Nuclear Incident Advisory Team (NIAT) will be notified immediately of the incident for further instructions. The Shift Supervisor will complete an incident report. A protocol will be part of the O & M manual of the facility and it will comply with the applicable legal provisions.

**Comment 2:** The database used for the modeling in the study of the health hazards should be more current than those indicated in the EIS-P. This database refers to the use of USGS land use drawings and weather information of Cambalache Ward.

**Response:** See response to Comment 1k in Section 1.1 of this document.

**Comment 3:** Perform analysis to determine the physical and / or chemical end product known as lightweight aggregate (Boiler Aggregate). After identifying the lightweight aggregate components, then the proper use of said end product can be determined.

**Response:** The reuse of lightweight aggregate will be done in compliance with the applicable legal requirements.

**Comment 4:** The Department of Health expressed in a comment letter received on 9 November 2010 that at this time in Puerto Rico the appropriate disposal of tires is not efficient. Given that in the EIS-P of the EAA it is indicated that in the long term (in the future) the tires could be one of the wastes to be processed, documentation on this process should be submitted.

**Response:** See response to Comment 1g in Section 1.1 of this document.

#### **1.2.10 Electric Power Authority (8 November 2010)**

**Comment:** In the 8 November 2010 communication, PREPA stated that the Project complies with applicable requirements and that PREPA considered the proposed endorsed action.

**Response:** No response required.

#### **1.2.11 Institute of Puerto Rican Culture (26 October 2010)**

**Comment:** The Institute of Puerto Rican Culture has no objection to the Project.

**Response:** No response required.

#### **1.2.12 State Historic Preservation Office (28 October 2010)**

**Comment:** There are no historic properties identified by SHIPO within the areas that will be potentially impacted by the Project. If any historic property is discovered during any phase of the construction of the Project the SHIPO shall be notified immediately.

**Response:** If any historic property is discovered during any phase of the construction of the Project the SHIPO will be notified immediately.

### **1.2.13 Department of Labor and Human Resources (29 October 2010)**

**Comment 1:** The employer must comply with occupational safety and health measures, as applicable, in the proposed operation. These measures are set forth in Regulation 4 OSH 1910-Safety and Health Standards for Industry in general.

**Response:** The Owner will comply strictly with applicable standards set forth in Regulation 4.

**Comment 2:** In the construction phase the employer must comply with occupational safety and health measures set forth in Regulation 10 OSH 1926-Safety and Health Standards for the construction industry.

**Response:** The Owner will implement the applicable standards of the regulation of reference during the construction phase.

**Comment 3:** Other regulations that could be applicable to the Plant are Regulation 2- 2 OSH-Records and Reports of Injuries and Occupational Illness, Regulation Number 17-Boilers and Pressurized Containers, as well as a Domestic Violence Protocol.

**Response:** All applicable regulations for the proposed activity will be implemented as recommended by the Department of Labor.

### **1.2.14 Municipality of Arecibo (8 November 2010)**

**Comment 1:** The EIS-P does not state the manner or degree in which this project will continue to reduce and stabilize the high cost of electricity in Puerto Rico

**Response:** In the Description of the Project chapter it is stated that approximately 110,000 gallons of fossil fuel day will be substituted or more than 35 million gallons a year. This project by itself will not have a significant impact, but as there other renewable projects they will begin to have an impact on the cost of power. In addition, the agreement with the PREPA is to supply the generated energy at a fixed price and much less than the current price for a term of 30 years.

**Comment 2:** The option of the operation of the sanitary landfill sites in compliance with applicable local and federal regulations was not considered or discussed, which is a lack of essential information in the EIS-P. This means that the data on the situation of the landfill sites in PR should be corrected with an accurate and verifiable database before considering this EIS-P

process, or otherwise the purpose of the EIS-P will not be met in terms of being an essential requirement for the environmental planning for this proposal, but will rather be a mere formality.

**Response:** As described in the EIS-P, under Energy and Solid Waste Management Situation in Puerto Rico of the Executive Summary, the EPA Region 2 expressed that most of the landfill sites in PR do not comply with federal and local regulations, so that the alternative of compliance is limited principally to the design of future expansions that will comply with all of the location and design criteria. The established public policy is to reduce the use of landfill sites as the principal method of disposal of solid waste. These are considered within an overall management scheme that includes reduce, reuse, recycle, waste-to-energy conversion, and in the last instance, disposal in sanitary landfill sites that are in compliance with current regulations. In addition, the EPA itself and the EQB have acknowledged the precarious situation in terms of compliance and environmental impact of SRS in the karst area in northern Puerto Rico. It is evident also that there is a pattern of closings that have been ordered and are foreseeable in this same area, which further justifies the proposed project.

**Comment 3:** In the EIS-P disposal or tipping fees are not specified.

**Response:** This information is not required in an EIS. Nevertheless, the average price per ton of waste entering the facility will depend on several factors including the final cost of the facility, the sales price of power to PREPA, and the kinds of contracts the facility has been able to obtain. This information varies continuously and is highly confidential given how it is related to the competitiveness a whole of the facility in today's market.

**Comment 4:** The EISP did not include an estimate of noise levels and the control measures during the operation and construction.

**Response:** In Appendix G: Noise Levels Study of the draft EISP, existing and projected noise were analyzed due to the construction and operation of the Plant. In addition, sections 2.14 and 3.11 summarize the findings and conclusions of the study. These indicate that the Plant will comply with the noise standards of the EQB during the day and the night.

**Comment 5:** There is no information provided to support that the fly ash is not hazardous. And there is no data on the hazard presented by the Boiler Aggregate.

**Response:** See responses to comments 1c and 1d in the Response to General comments in the Interlocutory Resolution.

**Comment 6:** There is no discussion of the impact on the ecosystems of the proposed extraction of 2.1 MGD at Caño Tiburones.

**Response:** Sections 3.5.3 and 3.5.4 of the EIS-P discusses the potential effects on Caño Tiburones. See also the response provided to Comment 1m in Section 1.1 of this document and Appendix O of the EIS-P.

**Comment 7:** Proponent does not provide information on residual waste water and process water.

**Response:** Wastewater does not require treatment prior to discharge into the PRASA sanitary sewer system. As for the process water, see the response to Comment 1o in Section 1.1 of this document.

**Comment 8:** The meteorological data used is from 18 years ago.

**Response:** See the response provided to Comment 1k in Section 1.1 of this document.

**Comment 9:** This project wants to be justified based on the Dynamic Itinerary of the ADS, which is not a final document, is plagued by significant errors of data and information, and has not been validated by the approval of a Final Strategic EIS.

**Response:** The proposed project is not justified or rests on the Dynamic Itinerary, but used the information available in it as one of several sources that outline the public policy of the Government of Puerto Rico regarding, among other things, the state of the infrastructure related to solid waste management in Puerto Rico. The EIS-P is a planning document based on scientific information collected and analyzed for the project.

**Comment 10:** The EIS-P does not offer information on how this project is justified in light of the objective and strategies for a recycling rate of 35% in Puerto Rico.

**Response:** See the response provided to Comment 3 in Section 1.2.4 of this document.

**Comment 11:** The EIS-P does not meet the criteria of the socioeconomic factors established under Rule 253 (B) (10) of the Regulation for the Application Process, Evaluation and Processing of Environmental Documents of the Environmental Quality Board.

**Response:** Evidently, this statement is not correct. See Section 2.6 of the EIS-P which discusses the important socioeconomic factors related to the implementation or non-implementation of the proposed action, including permanent and temporary employment to be generated during

the construction and operation phases. See **Appendix I** of the EIS-P which contains the Socioeconomic Study conducted as part of the EIS -P.

**Comment 12:** The EIS-P does not offer information or discusses why and how the benefits of the proposed facility outweigh the environmental and social costs that will result because of its location, construction and operation in Arecibo, as required by 253(A)(34)(d) of the Regulations for Application Process, Evaluation and Processing of Environmental Documents of the Environmental Quality Board.

**Response:** The proposed project will be located in an attainment area, therefore the cited rule does not apply.

**Comment 13:** The definition of the proposed project is one general and accommodative. For example, it is stated that the plant will have a capacity to process 2,100 tons a day of processed waste fuels, to generate a gross amount of 80 Mega Watts of energy (Daily or annual?).

**Response:** The discussion of the definition of the proposed project is not general or accommodative. See the discussion contained Chapter 1 of the EIS-P. See also the response provided to Comment 1b in Section 1.1 of this document.

**Comment 14:** The EIS-P merely indicates that weighing, unloading, inspection, shredding of the solid waste after a recovery of ferrous and nonferrous metals is contemplated. The EIS-P does not describe the processes and equipment to be used at this stage of the operation.

**Response:** The discussion contained in the EIS-P describes the processes and equipment to be used in said stage of the operation. See Sections 1.4.3.1, 1.4.3.2 and Chapter 1 in general of the EIS-P. See also the response to Comment 1o(iv) of Section 1.1 of this document.

**Comment 15:** We assume that we must accept by faith that the proposed facility will use technologically advanced emissions control systems, as nowhere in the EIS-P is written, or provides details and technical information on the technologically advanced emissions control systems.

**Response:** The EIS-P not only describes, but also provides details of the emissions control system to be used in the proposed facility. Furthermore, the emissions control system will be approved by the EPA to meet BACT (Best Available Control Technology) standards and MACT (Maximum Available Control Technology) standards. See Section 1.4.3.4. of the EIS-P and Appendix C of the EIS-P.

**Comment 16:** The EIS-P does not offer information or discusses why and how the the solid waste will be handled, as required by the Regulations for Application Process, Evaluation and Processing of Environmental Documents of the Environmental Quality Board in Rule 253(A)(34)(d).

**Response:** The preceding comment was transcribed as it appears in the document from the municipality. It is unintelligible and seemingly repetitive of comment 12 of this Section 1.2.14. See the answers provided in Comments 12, 13 and 14 of this Section 1.1.14.

**Comment 17:** It indicates that the project will be conducted in compliance with environmental protection standards established by the EPA, EQB and other federal and state agencies concerned. However, the EIS-P does not indicate what these standards are, nor demonstrates how it will comply with them.

**Response:** The Environmental Impact Statement is not a permit, but a planning document. It is precisely from a duly approved EIS that it is continued on to the sequential process of endorsements, permits and authorizations required for the construction and operation stages of a proposed action. Each relevant agency, includingbut not limited to, the DNER, PRASA, EPA, Fire Department, has individual or particular requirements for achieving the obtaining of the corresponding endorsements or permits, with which the proponent of any action, including Energy Answers will have to comply. Notwithstanding the foregoing, the EIS-P includes information of the permits, endorsements or approvals that are expected to be applicable to the project. See in general the EIS-P and Chapter 6 of the EIS-P.

**Comment 18:** The top ash will be collected and stored in a silo treated resulting in a non-hazardous "consistently checked by analytical methods." Again, we must accept by faith as described in the EIS-P as the analytical data demonstrating that the resulting material is non-hazardous is not included in the EIS-P.

**Response:** See the responses provided to Comments 1c, 1d and 1o in Section 1.1 of this document.

**Comment 19:** No data is provided on the quality and hazardousness of the "Boiler Aggregate<sup>TM</sup>".

**Response:** See the responses provided to Comments 1c, 1e and 1o in Section 1.1 of this document.

**Comment 20:** The EIS-P is silent as to the disposal of the process waters, rejected water from the reverse osmosis system and others. The premise on which this proposal is based is flawed,

DNER does not operate a brackish water pumping system to help promote the restoration of Caño Tiburones. The pumping system operates to maintain the levels of Caño Tiburones and prevent the surrounding farms from flooding.

**Response:** Regarding the disposal of process water, rejection water from the reverse osmosis system and others, see the response provided to Comment 1o in Section 1.1 of this document. See also the response provided to Comment 1m in Section 1.1 of this document, Section 1.4.8.1 of the EIS-P and Appendix O of the EIS-P which confirmed the availability and viability of the indicated brackish water volume whose pumping will occur after the DNER extraction point.

**Comment 21:** Again, we must accept by faith that the pump station transfers 100 MGD, the EIS-P is silent regarding ecosystem impacts for the proposed extraction of 2.1 MGD from Caño Tiburones.

**Response:** See the response provided to Comment 1m in Section 1.1 of this document, Section 1.4.8.1 of the EIS-P and Appendix O of the EIS-P where the availability and viability of the indicated volume of brackish water is confirmed, pumping of which will occur after the DNER extraction point.

**Comment 22:** The EIS-P only mentions the possible use of alternative fuels.

**Response:** See the response provided to Comment 1g in Section 1.1 of this document.

**Comment 23:** Construction of the facility requires the modification of the Flood Insurance Rate Map, Panel 230J of November 18, 2009. The EIS-P does not provide details on this important component of the project.

**Response:** See Sections 2.5 and 3.3 of the EIS-P and Appendix B of the EIS-P.

**Comment 24:** Regarding the financing of the project the EIS-P indicates that the construction of the project will be privately funded. This statement is not entirely correct. The economic viability of the project depends on a contribution of \$30 million in ARRA funds and about \$300 million in tax credits from the Government of Puerto Rico.

**Response:** The last sentence of the above comment is not relevant to the evaluation of the potential environmental impacts of the project.

**Comment 25:** The EIS-P does not provide information on mitigation measures to be implemented during the construction period.

**Response:** See the discussion included in Chapter 3 of the EIS-P and the response to comment 17 of this Section 1.2.14.

**Comment 26:** Quality of the wastewater and process water that is generated by the Plant.

**Response:** See the response provided to Comment 1o and to comment 17 of this Section 1.2.14.

**Comment 27:** Regarding air quality the EIS-P is limited to conclude that the project is not expected to adversely affect air quality during construction and operation stages. However, we question this assertion. The meteorological data was collected by PREPA at Central Cambalache in 1992-1993 and at the Luis Munoz Marin Airport in Carolina, Puerto Rico. Without the benefit of the time required to fully analyze the technical report on air quality we question its validity based on the fact that the weather data used was collected approximately 57 miles from the proposed site and some of the data is over 18 years old. Also, the EIS-P does not indicate if the EPA has evaluated and approved the PSD and if the application for EQB preconstruction approval of a major stationary source has been submitted.

**Response:** See the response provided to Comments 8 and 17 of this Section 1.2.14, to Comment 1k in Section 1.1 of this document and Appendix C.

### **1.3 Responses to comments made during Public Hearing**

The responses to the comments in this section reflect the range of topics presented at the Public Hearing and those that were frequently repeated by the deponents.

**Comment 1:** Is the fly ash toxic?

**Response:** See response to comment 1c in Section 1.1 of this document

**Comment 2:** Does Energy Answers have agreements for landfill sites in Puerto Rico to receive the fly ash for which the company has not been able to identify a reuse?

**Response:** The fly ash has consistently passed the EPA test known as the TCLP, based on which it has been shown to be non-hazardous. Therefore, there is nothing to prevent their disposal in a sanitary landfill system for non-hazardous waste in compliance with applicable regulations.

**Comment 3:** What are the potential reuses of fly ash? What are the options for final disposal of fly ash for which a reuse has not been identified? It must be stated where it will be disposed of on day one of the plant, the agreements that exist for disposal, at what landfill site, the certification of landfill site to receive this kind of ash in particular, and

what the procedure will be to ensure that for the subsequent operations of the plant this landfill site will be able to receive this residue. Because if not, we are going to end up like in Guayama, where AES is leaving ash all over the south of Puerto Rico because they didn't know and the disposal of the ash was not clearly specified in the Environmental Impact Statement.

**Response:** See response to Comment 1d in Section 1.1 of this document

**Comment 4:** Are the bottom ash or Boiler Aggregate toxic?

**Response:** See responses to Comments 1c and 1e of Section 1.1 of this document.

**Comment 5:** What commercial use does bottom ash or Boiler Aggregate have?

**Response:** See responses to Comments 1e and 1o of Section 1.1 of this document. Also, we include a table below with a list of specific commercial uses for bottom ash or Boiler Aggregate.

SEMASS Boiler Aggregate Use	
Year	Description
1989	BA was used to make approximately 3 pallets of 3 core 8" X 16" blocks for the Southeast Construction Demonstration Block Project
1989	BA was used to make concrete used in a pad located in the fly ash loading area at SEMASS
1990	BA was used to make concrete used in a pad located in the hazardous waste storage area at SEMASS
1991	BA was used as structural fill in a parking lot at SEMASS
1991	BA was used to make concrete used in 2 precast catch basins, one of which was installed in the Access Road at SEMASS; the other was left above ground and was studied as it aged
1991-1992	BA was used as structural fill and to make asphalt used to pave the Access Road at SEMASS
1992	BA was used to make concrete for 6 Jersey Barriers and 6 push walls which were used at SEMASS
1993	BA was used as structural fill and to make asphalt used to pave the Perimeter Road at SEMASS
1993	BA was used to make asphalt to pave the Vestibule at SEMASS
1993-1998	BA is used as daily cover and structural fill on roads at the CMW Sanitary landfill
1995	BA was used to make asphalt used in paving near the SEMASS scalehouse
1995	BA was used to make about 4,500 2 core 8" X 16" cement blocks using 12 different mix designs at A. Jandris and Sons.

SEMASS Boiler Aggregate Use	
Year	Description
1996	BA was used to make pavement used in parking lot at Ward Melville High School, Long Island, NY
1997	BA was used as vent layer material in a sanitary landfill capping project at United Waste Chicopee Sanitary landfill
1997	BA was used to make asphalt used in paving an approximately 1,000 foot section of a public road (Rt. 1/106)

Source: Memo to Pat Mahoney (cc: Paula McBath & Ken Smith) from Scott McLane on June 29, 1998 regarding the historical usage of Boiler Aggregate.

**Comment 6:** Does Energy Answers have any agreements for the purchase of Boiler Aggregate?

**Response:** At present, EA is actively evaluating commercial options for the Boiler Aggregate. It should be noted that this material is sought for use in green buildings and as a recyclable construction material. Also see response to Comment 1o(v) of Section 1.1 of this document.

**Comment 7:** Using this ash in glass blocks or in construction or landfill may lead to exposure of living beings to highly toxic agents with very adverse health effects.

**Response:** See responses to Comments 1c and 1e of Section 1.1 of this document. See response to Comment 1 of this Section 1.3.

**Comment 8:** The EIS-P dos not provide information on how this project is justified in light of the objective and strategies for 35% recycling in Puerto Rico.

**Response:** See the response provided to Comment 3 in Section 1.2.4 of this document.

**Comment 9:** We recommend that the document include a marketing projection for these materials and we call your attention to the fact that at [www.uneteyrecicla.com](http://www.uneteyrecicla.com) there is a directory of recycling companies in Puerto Rico.

**Response:** See the response provided to Comment 1f in Section 1.1 of this document. Note that as a result of the favorable conditions prevailing in relation to the marketing and sale of these materials, we do not foresee any difficulty in placing them in the relevant markets, locally or internationally.

**Comment 10:** As for receiving and managing the raw material for the plant, we recommend that consideration be given to divert organic material to the Arecibo compost plant, provided that the

plant has the capacity to receive it. Currently the plant capacity is one hundred tons, but at times its operations are affected by a lack of material.

**Response:** The facility will not accept dedicated organic loads. If a truck is identified that it is carrying that kind of dedicated cargo it will not be allowed to unload and will be redirected to a regional compost facility.

**Comment 11:** The agreements include Put or Pay clauses.

**Response:** As indicated in Section 1.1 of the EIS-P that discusses this issue, the structure of the waste disposal services agreements that Energy Answers will enter into with the municipalities, such as the Municipality of Arecibo or any other municipality, does not include a Put or Pay clause. The structure of the Energy Answers agreements does not prohibit or penalize the continuation and /or implementation of recycling programs by the participating municipalities or communities. On the contrary, the waste that the Energy Answers facility will receive is “post consumer recycling waste,” that is to say waste that is left over after any recycling or recovery initiatives by the participating communities or municipalities.

**Comment 12:** The project does not provide incentives for recycling, does not discuss and in fact is dismissive of recycling.

**Response:** See responses to Comments 3 and 8 of this Section 1.3 and to Comments 1c and 1o in Section 1.1 of this document, which discuss this issue.

**Comment 13:** The EIS-P does not say where the waste is going to come from. A plant of this kind must enter into waste agreements before being installed because that establishes the moving of the waste from the towns in which there are 20-year contracts. Because otherwise they do not have what is known as a feed stock. This plant lives from receiving waste and converting it into energy. If there are no 20-year contracts, there is no plant. Therefore the concern, when there is this kind of condition where there is a guarantee already for the feed stock, it is that they will be importing from the Virgin Islands through the docks at Arecibo. That then they will bring it from different that could include from Mayagüez, from Ponce, from Humacao, from San Juan, where does the waste come from?

**Response:** See Section 1.4.2 of the EIS-P and Figure 1-12 in which it is shown the geographical area that is foreseen will be served by the project. See in addition, the responses to Comments 3 and 8 of this Section 1.3 and Section 1.1 of the EIS-P, which discuss this issue.

**Comment 14:** At this time in Puerto Rico the appropriate disposal of tires is not efficient. Given that in the EIS-P of the EAA it is indicated that in the long term (in the future) the tires could be one of the wastes to be processed, documentation on this process should be submitted.

**Response:** See the response provided to Comments 1g and 2 of Section 1.2.9 of this document.

**Comment 15** The Plant is going to use scrap automobiles.

**Response:** See the response provided to Comments 1g and 2 of Section 1.2.9 of this document.

**Comment 16:** Urban Wood Waste?

**Response:** See the response provided to Comments 1g and 2 of Section 1.2.9 of this document.

**Comment 17:** There is no established balance of materials. A balance of materials is also fundamental. I did not see a balance of materials in the explanation of this plant. Especially, as mentioned by the representative from the Department of Health, the balance of materials in terms of input and output, ash, emission, and intake, when tires are burned or shredded automotive waste is burned. Because that is very important. Tires have a high sulfur content that is not the same as the sulfur content of waste in general and this creates a situation where you have waste that is different from tires. When you burn automotive waste it is similar but with chlorine. Plastic automotive waste contains a lot of PVC, vinyl; the vinyl contains chlorine. And the ash residue with chlorine raises dioxin levels much more than when organic matter is being burned or food is being burned, etc., because those do not have chlorine bound to organic compounds the way vinyl has in the event that automotive waste is being burned.

**Response:** See the response provided to Comments 1g and 2 of Section 1.2.9 of this document.

**Comment 18:** What is the company's plan for these metals? Is there a market for these metals?

**Response:** See the response provided to Comment 1f of Section 1.1 of this document.

**Comment 19:** The project increases the risk of flooding.

**Response:** As stated in Section 3.3 of the EIS-P, the floodplain limits have been revised to run along the perimeter of the Project and thereby reclassify the land as Zone AE, outside of the floodplain, where Section 7.03 of Regulation No. 3 is applicable. Figure 20 in Appendix B of the EIS-P shows the proposed limits of the flood plain. The proposed amendment requires modifying the topography of the area between the Project and the channel of the Rio Grande de Arecibo so that the maximum elevation of the land is 3.5 meters-msl, and provides a larger flow area along the banks of the Rio Grande de Arecibo as shown in Figure 21 of Appendix B.

**Comment 20:** The proposed stack is that high because the emissions have to be dispersed from the stack. The height of the stack is proportionate to the amount of emissions.

**Response:** The height of the stack is based on engineering best practices and numerous other factors. One of the most important factors is the height of surrounding buildings. The relevant analysis and calculations were done for the Project to determine the necessary height of the stack for this kind of facility.

**Comment 21:** the EPA has suggested that the safe concentration or ambient amount of dioxin or other incinerated plastic is zero. In other words, there are no absolutely safe concentrations of this compound in terms of health.

**Response:** The purpose of the Human Health Risk Assessment is to evaluate the potential for exposure to emissions from the combustion source at the proposed facility that causes adverse health effects. As discussed in the Human Health Risk Assessment (Appendix K), EPA has determined that cancer risks during the life of one in a million to one in ten thousand, or less, are acceptable for chemicals regulated as potentially carcinogenic to humans. A hazard ratio of 1.0 or less has been determined protector of noncancerous effects. This applies to dioxins as well as other materials such as incinerated plastics, they can be emitted. The Human Health Risk Assessment, of the EIS-P that was made for the proposed facility resulted in risk factors within the established limits. Based on the scenarios and assumptions used to assess the potential risk and hazards associated with emissions from the proposed facility, the risks and hazards, fall within, or below the acceptable levels. Based on the analysis completed in the Human Health Risk Assessment, the proposed facility does not represent a concern or risk to human health. See Appendix K of the EIS-P.

**Comment 22:** Dioxins accumulate and are dangerous at picogram levels. The EIS-P does not mention anything about how much dioxin and other metals will be emitted per ton of waste.

**Response:** The emission of dioxins and metals may be calculated per ton of fuel, using the information in the EIS-P. The emission index in the EIS-P for these compounds is indicated as a concentration so that they may be easily compared to applicable federal New Source Performance (Title 40 C.F.R. Part 60, Appendix B, and Sub Part Eb.5) standards. The potential dioxin emissions were estimated and were evaluated in the Human Health Risk Assessment, Section 3.2.1.1 and Appendix A of this study, as well as in the Ecological Risk Assessment. Both studies concluded that the risks and dangers of the potential impacts fall within, or below, the acceptable levels. Based on the analysis completed in the Human Health Risk Assessment and at the Ecological Risk Assessment, the proposed facility does not represent a concern or risk to human health or the environment.

**Comment 23:** Heavy metals that may be present in waste are as bad as aluminum, mercury, chromium, and lead, and safe amounts are estimated at zero, according to the EPA, and therefore may not be heated and emitted into the environment under any circumstances.

**Response:** EPA regulates heavy metals in Waste-to-Energy conversion facilities through New Source Performance federal standards as discussed in the Section on Air of the EIS-P. The facility emissions comply with these standards, as has been documented. The facility will systematically process the waste to remove a portion of the metals in the fuel mixture for recycling before combustion. In addition, the facility will be using an innovative air quality control process that was designed to remove these compounds from the exhaust of the boiler and ensure that the emission standards regulated by the EPA are in compliance. In addition, the exposure to metals was evaluated in the Human Health Risk Assessment (Appendix K). Based on the analysis completed in the Human Health Risk Assessment, the proposed facility does not represent a concern or risk to human health.

**Comment 24:** The database used in the model of the health risk study should be more up to date than those mentioned in the EIS-P. This database refers to use of USGS land use maps and the Barrio Cambalache meteorological information.

**Response:** See the response provided to Comment 1k of Section 1.1 of this document.

**Comment 25:** Mercury is not analyzed in the EIS- P, it should be clarified, why isn't it minimal?

**Response:** EPA and the EQB of Puerto Rico regulate the mercury emissions at waste-to-energy facilities. The project has been designed to comply with the mercury emission standards established by these two regulatory agencies. The air quality control system is designed to remove mercury from the boiler exhaust and ensure that the EPA and EQB standards are always complied with. The mercury was evaluated in the Human Health and Ecological Risk studies.

In Table 3.1 of the EIS-P and in Appendix C there are estimates of the potential emissions of mercury, lead and others in tons per year. The mercury and lead emissions are lower than their respective PSD values which means that the Plant is classified as a minor source of these substances. Based on the analysis completed in the Human Health Risk Assessment (**Appendix K**) and at the Ecological Risk Assessment (**Appendix L**), the proposed facility does not represent a concern or risk to human health or the environment.

**Comment 26:** The analysis of the Arecibo wind gradient, which is a polluted area (air emission violations are high).

**Response:** As discussed in Section 2.6.1 of the EIS-P and at the investigative Public Hearing on 8 November 2010, Puerto Rico has been designated by EPA as an attainment area for all air quality standards, except for the municipality of Guaynabo which has been designated as a recovery zone. Based on available information there are no violations of air quality standards in Arecibo.

**Comment 27:** Ultrafine particulate, PM, lead, cadmium, and beryllium are harmful, when emitted in low values, but are not captured by emission control equipment.

**Response:** As discussed in the previous response, these compounds are all regulated by the EPA and the EQB and the facility will comply strictly with these limits. In addition, these are controlled with control equipment with a highly efficient fabric filter designed to act as a vacuum cleaner to capture dust, fine particles, and metals. The evaluation of the potential exposure to lead, cadmium, and beryllium was evaluated in the Human Health Risk Assessment mentioned above and that is included in the EIS-P.

**Comment 28:** EPA says that WTE facilities will not reduce the emission of greenhouse gases, that they cause worse climate change.

**Response:** This resource recovery facility will reduce the emission of greenhouse gases. The way this is done is as follows: first, the facility deployed the energy generated by oil combustion, and the greenhouse gases of the resource recovery facility are approximately equal to those of the oil. However, the waste that which is incinerated at the facility would otherwise have been sent to a landfill site and would have emitted methane that is more than twenty-five times more powerful than CO<sub>2</sub> as a greenhouse gas. Therefore, although the facility will emit greenhouse gases, it will achieve a considerable reduction in these gases when compared with those that would be emitted from fossil fuel use.

**Comment 29:** Deposition in 10 Km. – apparently there is a discrepancy in Appendix K regarding the deposition area (2km).

**Response:** The studies in Appendix K, the Human Health Risk Assessment, and Appendix L, the Ecological Risk Assessment, evaluated the potential exposure within a 10 kilometer radius around the facility. However, the report includes an aerial photograph of a more detailed view of the region in Figure 4 of Appendix K. See the response to comment number 11 in section 1.1 of this document.

**Comment 30:** How can we be sure that the facility will operate in compliance with all federal and state regulations?

**Response:** See the response provided to Comment 17 of Section 1.2.14 of this document.

**Comment 31:** Will the 80 MW be produced daily?

**Response:** See the response provided to Comment 1b of Section 1.1 of this document.

**Comment 32:** The plant requires more energy to operate than the energy it produces.

**Response:** Of the 80 mega watts/hour that the plant will have the capacity to produce, the plant will consume approximately 10 mega watts and sell approximately 70 mega watts.

**Comment 33:** The EIS-P does not state the manner or the degree in which this project would help with reducing and stabilizing high-energy costs in Puerto Rico.

**Response:** See the response provided to Comment 1 of Section 1.2.14 of this document.

**Comment 34:** The Project threatens the Caño Tiburones.

**Response:** The Ecological Risk Study carried out as part of the EIS-P included the area of the Caño Tiburones as one of the evaluated environmentally sensitive areas (i.e., SLERA 8). See Section 3.5.4 in the page 3-30 of the EIS-P. Based on what is inferred from the EIS-P and the Ecological Risk Study itself, the following conclusions were reached with regards to the potential ecological risk associated to the Project:

- In all of the analyzed ecological risk areas it was determined that the concentrations of components of possible ecological concern in the soil were several orders-of-magnitude less than the detection limits. As a result, potential risks to ecological receptors exposed to soil were estimated to be minimal.
- In all of the analyzed ecological risk areas it was determined that the concentrations of components of possible ecological concern in the surface water and sediments were several order-of-magnitude less than the detection limits. As a result, the potential risks to ecological receptors exposed to surface water and sediments were estimated to be minimal.
- Since the maximum concentrations of the components of possible ecological concern in each area are used, for the purpose of the preliminary data assessment, the assessment is deemed to be conservative and the potential risks to ecological receptors are probably less than the ones discussed above.

- Based on the analysis of the soil, surface water, and sediment, in terms of order-of-magnitudes, the concentrations of components of possible ecological concern are less the calculated conservative levels that were initially detected. Therefore, minimum ecological risk is estimated in the habitat areas within 10 Km. from the facilities.
- The Ecological Risk Study established that it is not necessary to carry out additional studies of possible potential environmental exposure related to the operation of the Plant.

See Section 3.5.4 of the EIS-P and Appendix L.

In addition, it should be noted that according to data provided by the DNER, the channel discharges an average of 100 million gallons of brackish water per day and the facility will use an average of 2.1 million of gallons per day. The facility will have backup brackish water, stored in one (1) aboveground storage tank and one (1) retention pond, for at least three (3) days of operation. See Section 1.4.8.1 of the EIS-P and Appendix O.

**Comment 35:** What guarantee is there that the emissions produced by this Plant will not put at risk the safety of the public?

**Response:** Based on the analysis completed in the Human Health Risk Assessment (**Appendix K**) and at the Ecological Risk Assessment (**Appendix L**), which included these emissions, the proposed facility does not represent a concern or risk to human health or the environment.

**Comment 36:** Does that mean that you have the technology needed to solve this situation, and, besides that, you will be regulated and monitored?

**Response:** Section 1.4.3.4 of the EIS-P discusses in detail the Safety systems that will be implemented as part of daily operations and that will be used for continuous monitoring. The processing operations of Municipal Solid Waste (MSW) are monitored from Storage and MSW Processing Building. The functioning of the boiler and the power block will be monitored where they are located and the ash processing will be controlled from the structure where the ash will be processed.

The general control and monitoring of the Plant will be performed by a Distributed Control System (DCS). The DCS will include process control units based on a microprocessor and redundant data. Programmable controls for individual systems will be provided for the individual systems will be provided, such as water treatment system, the lime wash preparation room, and the fire protection system.

An operating system interface will control the turbine through an electro-hydraulic regulating system. Generator synchronization control, voltage regulation, and operation of the generator switch will be directly wired to the main control room. The unit protections will be directly connected to the boiler relay, the turbine relay, and the lock-out relay systems, etc. with a minimum amount of interposing relays or solid-state instruments in the circuit. There will be two operating stations as part of the main control room's control panel. Boiler and turbine control panels will be integrated to the control room's auxiliary control panel. In addition, printers and workstations will be provided so that the engineers may carry out program modifications.

The stations will be equipped with indicator screens. Likewise, alarm printers will alert the operator of the conditions that may arise during operations.

**Comment 37:** Then, there are safety systems?

**Response:** See responses to Comment 36 of this Section 1.3 and Chapter 1 of the EIS-P.

**Comment 38:** The project is a health threat due to particulate matter emissions (PM).

**Response:** See response to Comment 25 of this Section 1.3 and Section 1.2, page 4, of the Human Health Risk Study included as Appendix K of the EIS-P.

**Comment 39:** When you say that the air emissions produced by this plant and the management of the ash produced by burning waste will be safe operations since the levels of such that will be released to the environment will be within the parameters of the EPA (Environmental Protection Agency), you are being dishonest. To think that levels established by the EPA as acceptable parameters does not mean that such are healthy.

**Response:** The Clear Air Act regulates the quality of the air by establishing the NAAQS for the compounds that are transported by air that cause a decrease or the deterioration of the ambient air quality. The NAAQS are defined as the primary and secondary standards for ambient air quality established by the EPA in Title 40 C.F.R. part 50. These compounds are generally known as "criteria" air pollutants since the concentrations of such in the ambient air are used to measure ambient air quality. The NAAQS are the maximum concentration levels for average periods of time, which establishes the air quality levels required for the wellbeing and protection of the public with an adequate margin of safety. The purpose of the NAAQS primary standards is to protect public health, while the purpose of the NAAQS secondary standards is to protect public welfare from any anticipated adverse effect associated to the presence of air pollutants, such as damage to soil, vegetation, or wildlife.

**Comment 40:** The EIS downplays the impact of the health threats.

**Response:** Based on the analysis completed in the Human Health Risk Assessment (**Appendix K**) and at the Ecological Risk Assessment (**Appendix L**), the proposed facility does not represent a concern or risk to human health or the environment. These studies document, on the basis of scientific data and analysis methods established by EPA to ensure the protection of health, that this proposed facility does not represent such a threat.

**Comment 41:** Extracting water from Caño Tiburones will affect the channel.

**Response:** See the response provided to Comment 1m in Section 1.1 of this document, Section 1.4.8.1 of the EIS-P and Appendix O of the EIS-P where the availability and viability of the indicated brackish water volume is confirmed, the pumping of which will occur after the DNER extraction point.

**Comment 42:** Where will the water be extracted from when there is a drought and the Caño Tiburones does not have enough water?

**Response:** See the response provided to Comment 1m in Section 1.1 of this document, Section 1.4.8.1 of the EIS-P and Appendix O of the EIS-P where the availability and viability of the indicated brackish water volume is confirmed, the pumping of which will occur after the DNER extraction point.

**Comment 43:** The extraction point is not specified.

**Response:** See the response provided to Comment 1m in Section 1.1 of this document, Section 1.4.8.1 of the EIS-P and Appendix O of the EIS-P where the availability and viability of the indicated brackish water volume is confirmed, the pumping of which will occur after the DNER extraction point.

**Comment 44:** It does not specify what will happen with the saline water that will be extracted from the Tiburones Estuary, which will be used for cooling. The water is evaporated; the saline water is concentrated and it is heated, and it does not clearly state the salinity level or where – it doesn't specify the flow that will be discharged to the Arecibo treatment plant. It doesn't stipulate the water disposal temperature, which is basically a big gap in one of the most important issues in any industrial facility, which is water disposal.

**Response:** See the response provided to Comment 1o in Section 1.1 of this document.

**Comment 45:** Handling of radioactive materials

**Response:** See the response provided to Comment 1 in Section 1.2.9 of this document.

**Comment 46:** Risks of fire and explosions as occurred at SEMASS.

**Response:** From beginning of operations in 1989, SEMASS, the reference facility, has maintained a successful operational history. An Energy Answers affiliate designed, built, and operated SEMASS between 1988 and 1996. During more than 20 years of operations, SEMASS has processed over 20 million of tons of solid waste and has had only one event that interrupted the operations of the facility. In April of 2007, under the operation by the Covanta Energy Company, which purchased the facility in 2005, there was a fire. As with any large solid waste management facility, there is some limited operational risk. It is believed that the 2007 event may have been caused by ash and coal materials that entered the facility in waste flow. After this event, SEMASS took further steps to prevent a similar event from occurring in the future. The fire affected the structure, but it did not cause any injury to employees or firefighters and was controlled and extinguished within 24 hours. EPA and the Massachusetts Department of Environmental Protection (“MassDEP”) took air samples and reported that there were no hazards to air quality, and consequently, to human life or the environment. The proposed Arecibo facility will incorporate the best operational and design practices implemented at SEMASS after said event. Furthermore, additional improvements will be incorporated into the design of the PRF production system, which will further reduce the limited risk of events of this nature.

**Comment 47:** During the Public Hearing it was mentioned that a fire occurred at SEMASS in which according to reports in the press the sheriff told resident to seal off their windows.

**Response:** See the response provided to Comment number 46 in section 1.3 of this document (above). The MassDEP in conjunction with the federal Environmental Protection Agency (EPA) quickly began monitoring the air when the incident occurred in 2007. These were the federal and state agencies with the expertise and jurisdiction to conduct the tests and determine the existence, if any, of risks. The MassDEP reported that the results of emission monitoring confirmed that the emissions during said event did not pose an imminent danger to air pollution. Is important to point out that the expressions made by the Sheriff's Office included in the newspaper article to which reference was made at the public hearing of November 8, 2010 were not based on analysis or sampling, or technical expertise.

**Comment 48:** During the Public Hearing it was mentioned that violations of occupational health and safety regulations (OSHA) have occurred at SEMASS.

**Response:** Energy Answers has safety as its first priority. The Occupational Safety and Health Administration (OSHA) has awarded Energy Answers several recognitions and awards for the SEMASS operation and other facilities. For example, in 2000 the SEMASS plant received the Star Facility certification of the OSHA Voluntary Protection Program and was re-certified in 2003. Energy Answers is not familiar with the nature of the alleged violations mentioned above.

**Comment 49:** You should do it by explaining the contradictions that arise from the countless citations, fines and cases against incinerators, including a plant in Hartford, Connecticut, that was subject to a stipulation to pay \$355,000.00 in fines and to purchase a device that costs \$70 million dollars to monitor its daily emissions.

**Response:** Energy Answers is not familiar with the violations associated with the facility being referred to and was not the entity that built, owned or operated the facility.

**Comment 50:** Energy Answers has alleged in its presentations that in the State of Massachusetts, where the only plant that is identical to the proposed plant is operating, there are no environment problems that are derived from its operations. If you visit the website of the Environmental Quality Department of that State for Covanta, you will find that 20% of its production is converted to ash. Energy Answers states that it will burn 2,500 tons a day of solid waste in Arecibo. According to the study 20% is converted into ash. Of that 20%, the 5% that escapes at SEMASS Covanta is fugitive ash that goes into the air. How many pounds of fugitive ash a day would this represent for Arecibo?

**Response:** Although the comment is not clear about the source of this information, it is not correct that the emission control system at the SEMASS facility allows 5% of the ash that result from plant operations to escape into the air. This would not occur either during any activity related to the handling of the ash.

**Comment 51:** Energy Answers should explain to Puerto Rico the technology, the fine that was imposed on that incinerator and others, why there is a requirement for daily measurement; and the results of those samples, as well as those taken for SEMASS Covanta in Rochester, Massachusetts, where environmental contamination problems are shown as a source of mercury and carbon monoxide. The truth is that they claim that the technology that they use is identical to Covanta, but we do not know whether they will end up using something else. Covanta was sued in PLCV 2009-0752 A by the state of Massachusetts, for changing the technology without prior authorization from the Massachusetts Department of Environmental Protection.

**Response:** The proposed systems for the Arecibo plant are described and discussed in the EIS-P. See Section 1.4.3.4 of the EIS-P. It is important to note that the technology proposed for Arecibo is based on SEMASS, but also incorporates all the technological advances of the last 20 years - because the technology proposed for the Arecibo facility is more modern and advanced. The case referred to is not related to design or operational history of the facilities but to the process through which some of its permits were modified.

**Comment 52:** There are numerous studies that establish a relationship between the incinerators and their emissions that cause fetal damage, leukemia, cancer, respiratory disease heart disease, and brain diseases.

**Response:** Regarding the evaluation of potential impacts of the facility on human health, see the Risk to Health Study included in the Appendix of the EIS-P and Section 3.10 of the EIS-P in which the results of the study are discussed. These studies document, on the basis of scientific data and analytical methods established by EPA to ensure the protection of health, that this proposed facility does not represent such threats.

**Comment 53:** We must point out that in addition Energy Answers not only is proposing a single contaminating activity. The goal of using waste residue as fill in highways puts the entire island at risk from high concentrations of pollutants that could negatively affect water bodies, e agriculture, cattle operations, and life all over the island. You have to establish what the effect of the EIS-P will have for the island. The EIS-P that you have before you does not cove the island.

**Response:** See the response provided to Comment 21 in Section 1.3 of this document.

**Comment 54:** The Energy Answers EIS-P does not say how water bodies will be protected from the emissions of particulate matter, fugitive ash, (an average of three weeks a year), of its emissions of its emissions [sic] that allegedly are under the permitted levels, but that include particulate matter, cadmium, mercury, lead, dioxins, sulfur dioxide, hydrogen chloride, nitrous oxides, and carbon monoxide.

**Response:** See Appendix L: Ecological Risk Assessment of the EIS-P for a detailed discussion of the topic.

**Comment 55:** The Covanta workers union website shows that in 2008 the Environmental Protection Agency, EPA, fined Covanta at Rochester for \$7,653,001.

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<sup>1</sup> [http://www.cjcw.org/notice/Covanta\\_Massachusetts\\_environmental\\_violations.pdf](http://www.cjcw.org/notice/Covanta_Massachusetts_environmental_violations.pdf)

**Response:** The violation referred to occurred in a facility of the Pittsfield Resource Recovery Facility. Energy Answers was owner and operator of that facility between 1994 and 2007, in other words, before the period in which the violations occurred. See also the response provided to Comment 48 in Section 1.3 of this document.

**Comment 56:** You mouth SEMASS propaganda and do not include contamination problems that SEMASS has, how the harm health.

**Response:** Although this is a general comment, it should be noted that the performance of the facility is available to the public. See also the response provided to Comment 52 in Section 1.3 of this document.

**Comment 57:** How far from the town of Arecibo will the project be located?

**Response:** As can be seen in Figure 2-17: Residential and Quiet Zone Closest to the Site, the town or town center of Arecibo is approximately more than one (1) mile from the Project. See also **Appendix 7** which illustrates the distance from the town to the project and offers comparables of the location of similar facilities in Europe and the continental United States.

**Comment 58:** Discrepancy in the slide and appendix of the EIS with the radius for one of the studies

**Response:** See the response provided to Comment 29 in Section 1.3 of this document.

**Comment 59:** Will all of the structures described in the EIS-P be built if this project is approved, or are there existing structures?

**Response:** The only existing structures are those that were part of the former paper mill where the project will be located. Up to now, the plan is to keep them and basically renovate them. The rest would be new construction.

**Comment 60:** The Price is a mystery.

**Response:** See the response provided to Comment 3 of Section 1.2.14 of this document.

**Comment 61:** Tipping fees that may be imposed for the incineration of the waste are not specified so that the municipalities can evaluate the economic impact of these fees. This data is indispensable for evaluating this project from the point of view of the economic impact and feasibility for the municipalities that would be the prospective clients for this kind of incineration project.

**Response:** See the response provided to Comment 3 of Section 1.2.14 of this document.

**Comment 62:** How much of the 500 million that it is said that this project will cost will really stay in Puerto Rico and how much would be used to purchase machinery elsewhere?

**Response:** The construction cost of the Plant is estimated at \$350 million of which 150 million will be spent in Puerto Rico on labor, products, and materials. In addition, the proposed project, during its operation will require, among other things, \$40 million in annual purchase of goods and services that are expected to be supplied all or mostly in and from Puerto Rico.

**Comment 63:** Fragmentation because it does not mention the other WTE plant mentioned in the itinerary.

**Response:** The EIS-P includes all of the proposed action components so that it complies and is consistent with the provisions of the Regulation of the Environmental Quality Board for the Process of Submission, Evaluation, and Processing of Environmental Documents.

**Comment 64:** Energy Crisis is a LIE – the fast-track process violates the due process.

**Response:** This is not a matter relevant to the evaluation process of the environmental document EIS-P.

**Comment 65:** Availability in Spanish of the studies.

**Response:** Under the provisions of the Rules of the Environmental Quality Board for the Filing Process, Evaluation and Processing of Environmental Documents, environmental documents may be written in Spanish or English, but if prepared in English, Spanish versions will be provided to people who request them. During the comment period no requests were received to that effect. However, Spanish versions of the following studies are included as Appendix S of the EIS-P: H & H Study, Impact on Air Quality Study, Jurisdictional Wetlands Study, Traffic Study, Human Health Risk Assessment, Ecological Risk Assessment and the update to the Site Selection Study.

**Comment 66:** Allegation of limited public participation due to fast-track process.

**Response:** The EIS-P was submitted according to the provisions of the EQB Resolution, R-10-26-1<sup>2</sup>, the Rules of the Environmental Quality Board for the Filing Process, Evaluation and Processing of Environmental Documents (RPPETDA), as applicable, Executive Order No. OE-201-

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<sup>2</sup> On Fast Track Process for Submission, Evaluation, and Processing Environmental Documents for Energy Projects, dated August 12, 2010.

0-034<sup>3</sup> and Law No. 76, enacted on May 5, 2000 and according to the terms established in said provisions of law.

**Comment 67:** The alternative of no action is not substantially discussed as required under Rule 253(C) (2).

**Response:** See Section 4.1.1 of Chapter 4 of the EIS-P. The draft EIS-P discusses extensively the no-action alternative. Among other things the no-action alternative perpetuates environmental problems caused by the landfill Arecibo and have been identified by the Department of Justice of the United States.

**Comment 68:** The option of operating the sanitary landfill sites in compliance with applicable local and federal regulations was not considered or discussed, which constitutes a lack of essential information in this EIS-P. This requires that information on the situation of the landfill sites in the PR zone be corrected with an accurate and verifiable database before this EIS-P process is completed; otherwise, the purpose of the EIS-P is not met as an essential requirement for environmental planning but is rather a mere formality.

**Response:** As described in the EIS-P, Chapter 1 Section 1.3.2, the EPA Region 2 expresses that the majority of the landfill sites in PR do not comply with federal and local regulations, so that the alternative of compliance would be limited principally to the design of future expansions that comply with all location and design criteria. It is important to note that due to the topography, subsoil, among other factors, the Island has limited areas for the location of landfill sites. This situation is even more intense in the northern part of the island due to the prevalent karst topography. Established public policy is to reduce the use of landfill sites as the principal method for solid waste disposal – and very particularly in the North karst zone. Therefore, these are considered within a comprehensive management plan which includes reducing, reusing, recycling, waste-to-energy conversion, and last of all, disposal in sanitary landfill sites that are in compliance with current regulations. See also the response provided to Comment 67 in Section 1.3 of this document.

**Comment 69:** No evaluation is provided of any alternative to the proposed action, and alternatives that might be comparable to it. I think that this is fundamental because if not we are forced to decide yes or no, and that there is no alternative.

**Response:** The EIS-P in fact does provide an evaluation of alternatives to the proposed action that might be comparable to it. On the other hand, as discussed in Chapter 4 of the EIS-P, five (5)

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<sup>3</sup>Executive Order dated July 19, 2010, Administrative Bulletin approved to implement the provisions of Public Law No. 76 enacted on May 5, 2000.

principal goals and objectives were established for the proposed action that were evaluated in this chapter of the EIS-P. These are defined below as they appear in the environmental document:

- To develop an environmentally sustainable source of energy generation that will be capable of producing energy in a sustained manner;
- To develop an alternative source of renewable energy that will contribute to the stabilizing of the cost of electricity in Puerto Rico, in compliance with Energy Reform public policy of the Government of Puerto Rico;
- To provide a viable alternative for solid waste management in Puerto Rico, that will have a significant solid waste processing capacity and comply with the SWMA Itinerary;
- To provide an alternative that will contribute in a real and effective manner to the goals of recycling, recovery, and reuse in Puerto Rico; and ,
- To provide an alternative that is proven, operationally and environmentally, on the proposed scale.

Chapter 4, Section 4.2 meets the requirements of the Regulation for the Filing Process, Evaluation and Processing of Environmental Documents.

**Comment 70:** There is an attempt to justify this project based on the Dynamic Itinerary that is not a final document, contains significant errors in the data and information, and has not been validated by the approval of a Final Strategic EIS. The EIS-E [sic] was effectively challenged in court but the alleged errors have not been corrected.

**Response:** There is no attempt to justify the proposed project or rely on the Dynamic Itinerary, but rather the information available in the Itinerary was used as one of several sources that outline the public policy of the Government of Puerto Rico regarding the situation of the infrastructure related to the management of solid waste in Puerto Rico. The EIS-P is a planning document based on various sources of information, laws, regulations, scientific information and analysis made for the proper evaluation of the proposed action.

**Comment 71:** So there are certain federal regulations that the operations of this plant must comply with?

**Response:** See the response provided to Comment 17 of Section 1.3 of this document.

**Comment 72:** How would traffic increase in the area once the Plant is operating?

**Response:** See the response provided to Comment 1n of Section 1.1 of this document.

**Comment 73:** Does not consider travel from distant municipalities to bring in waste.

**Response:** See the response provided to Comment 1n of Section 1.1 of this document.

**Comment 74:** It is fundamental for traffic studies and the Environmental Impact Statement for an industrial facility to have a clear and specific traffic study and this does not have it.

**Response:** See the response provided to Comment 1n of Section 1.1 of this document.

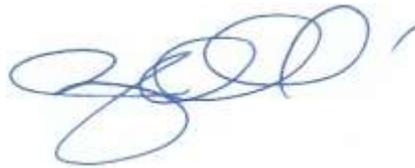
**Comment 75:** It is not specified what will happen with the saline water that will be extracted from the Tiburones Estuary, which will be used for cooling. The water is evaporated; the saline water is concentrated and it is heated, and it does not clearly state the salinity level or where – it doesn't specify the flow that will be discharged to the Arecibo treatment plant. It doesn't stipulate the water disposal temperature, which is basically a big gap in one of the most important issues in any industrial facility, which is water disposal.

**Response:** See the response provided for Comment 1o in Section 1.1 of this document.

**No. 2013-014 TRANSLATOR'S CERTIFICATE OF ACCURACY**

I, Mayra Cardona Durán, of legal age, single, resident of Guaynabo, Puerto Rico, Certified Interpreter of the United States Courts (Certification No. 98-020) and certified member of the National Association of Judiciary Interpreters (Member No. 10671) member in good standing of the American Translators Association (Member No. 230112), and admitted to the Puerto Rico Bar Association (Bar No. 12390) hereby CERTIFY: that according to the best of my knowledge and abilities, the foregoing is a true and accurate rendition into English of the original Spanish text, which I have translated and it is stamped and sealed as described therein. This document is comprised of Fifty Seven (57) Pages, including this certification page, and does not contain changes or erasures.

In Guaynabo, Puerto Rico today, Friday, January 11, 2013.



**Lcda. Mayra Cardona**  
**United States Courts Certified Interpreter**  
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