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Comments Concerning the draft RUS EIS

Related to Energy Answers Arecibo Incineration Project

Submitted by:

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I. Introduction

CAMBIO is a non-governmental organization whose mission is to promote sustainable and responsible development for Puerto Rico and the Caribbean Region. We are hereby presenting comments to the draft Environmental Impact Statement prepared by the Rural Utilities Services (draft RUS EIS).

As previously stated in comments submitted to RUS during the Scoping Process, our interest in commenting on the draft RUS EIS process for the Energy Answers' Arecibo, Puerto Rico Renewable Energy Project ("Energy Answers incineration project"), as provided for under the National Environmental Policy Act ("NEPA"), the Council on Environmental Quality's regulations for implementing NEPA (40 CFR Parts 1500-1508), and RUS's Environmental Policies and Procedures (7 CFR Part 1794), stems from the reality that the local or state EIS process related with the Energy Answers incineration project was a biased and irresponsible one designed to fast-track the approval of the Energy Answers incineration project by denying constitutionally-protected public comment and participation rights, as well as preventing the legally-required local agency evaluation of the same. Hence, the local EIS process resulted in an EIS document prepared exclusively by Energy Answers' consultants that essentially justifies and promotes the approval of

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this incineration project, instead of the critical analysis instrument it is meant to be to facilitate the consideration of environmental issues in the local agencies' decision-making process.

In our prior comments, we have emphasized the need for RUS to discard the local EIS prepared in 2010 because it does not comply with either NEPA or Puerto Rico's Environmental Public Policy Act (Law No. 416, September 22, 2004), as both require the final EIS be an independent and objective document. (*See, e.g.,* Greene County Planning Board v. Federal Power Commission, 455 F.2d 412, 420 (2nd Cir. 1972), *cert. denied,* 409 U.S. 849 (1972) ("The Federal Power Commission has abdicated a significant part of its responsibility by substituting the statement of PASNY for its own. The Commission appears to be content to collate the comments of other federal agencies, its own staff and the interventors and once again to act as an umpire. The danger of this procedure, and one obvious shortcoming, is the potential, if not likelihood, that the applicant's statement will be based upon **self-serving assumptions**." *Id.*) (citations omitted; emphasis added); Natural Resources Defense Council, Inc. v. Callaway, 524 F.2d 79, 87 (2nd Cir. 1975) ("[T]he preparation of the [Environmental Impact Statement] by a party . . . with an individual "axe to grind", i.e., an interest in seeing the project accepted and completed in a specific manner as proposed. Authorship by such a biased party might prevent the fair and impartial evaluation of a project envisioned by NEPA." *Id.*); Municipio de San Juan v. Junta de Calidad Ambiental, 149 D.P.R. 263 (1999) (not improper for public agency to receive assistance from private party in drafting of Environmental Impact Statement (EIS), however, it is indispensable that the agency maintain an independent and objective posture, *Id.*at 278, fn. 6).

In our December 2014 Scoping Comments, we welcomed RUS's decision to cancel its prior Supplemental Final Environmental Impact Statement process related with Energy Answers Arecibo, LLC's financial assistance request for the construction of its proposed municipal waste incineration facility in Arecibo, Puerto Rico as well as RUS's determination to prepare an independent RUS EIS. We believed an independent RUS EIS would provide an unbiased process that complies with its responsibilities under NEPA, the Council on Environmental Quality's regulations for implementing NEPA (40 CFR Parts 1500-1508), and RUS's Environmental Policies and Procedures (7 CFR Part 1794).

However, and very much to our disappointment, **the draft RUS EIS incorporates the same incomplete, inaccurate and flawed information used in the 2010 local EIS**. The use of this information is irresponsible and misleading. It is incredible that a federal agency that is considering investing millions of dollars in a project has not bothered to conduct a single independent study, and has not even bothered to conduct a desk analysis or verification of basic information. Furthermore, it is alarming to see that RUS is not evaluating or giving serious consideration to the

comments submitted by the public thus far, as most the issues we will mention in this document were pointed out in detail by us and other participating entities and individuals as deficiencies, inaccuracies, flaws and self-serving assumptions of the local EIS document during the Scoping process. The deficient and inaccurate summary of the Scoping Process and comments included in Section 1.5 of the draft RUS EIS clearly demonstrates this point (we incorporate by reference Attachments 1, 2 and 3, which were the comments submitted by CAMBIO during the Scoping Process).

II. The local EIS process

Since our comments, offered during the Scoping Process, regarding the deficiencies of the local EIS process were obviously not even considered in the course of drafting the RUS EIS, we want to again emphasize the deficiencies of the local process so you can see why you have to discard every study and analysis contained in the local EIS and now in the draft RUS EIS. A document that is the product of an antidemocratic and illegal process cannot be the basis for a federal document upon which a federal agency will make a decision of investing tax-payers' monies.

The local EIS document did not follow the ordinary process provided for under Puerto Rico's Environmental Public Policy Act (Law No. 416 of September 22, 2004) and the Puerto Rico Environmental Quality Board's Regulation No. 7948 on the Evaluation and Process of Environmental Evaluations (September 2010). Instead, the local EIS process followed an exceptional or extraordinary evaluation process. More specifically, Puerto Rico Executive Order 2010-034 declared an "Energy Emergency" regarding energy generation in Puerto Rico, and ordered an expedited evaluation process for the development of renewable energy projects on the Island, including for the environmental evaluation mandated by the Puerto Rico Environmental Public Policy Act (Law No. 416 of September 22, 2004). The 2010 Executive Order explained that the basis for an expedited evaluation process was the "alleged" energy crisis faced by Puerto Rico due to the Island's heavy dependence on fossil fuels (~70% oil based) and the elevated price of fossil fuels at the time (2010). It is worth noting that said Executive Order also recognized the deterioration of Puerto Rico's air quality due to fossil fuel burning and the health effects of said air contamination; important facts which were superficially evaluated in the local EIS document.

Over thirty renewable energy projects were submitted through the expedited process between 2010 and December 2012. Most of them were solar or wind projects, which generally pose positive environmental trade-offs. The exception, however, was the Energy Answers incineration project. A municipal waste incineration facility that was evaluated through the expedited process on the alleged basis that the project would come to alleviate Puerto Rico's elevated energy costs. Clearly, this is a "self-serving assumption" in and of itself, as energy production is just a small by-product

of the main operation of the facility: waste handling through incineration. The emergency, exceptional or extraordinary evaluation process under the 2010 Executive Order was so accelerated that the local EIS document was made accessible to the public through a public notice issued on October 26, 2010, while the period for public comments closed on November 9, 2010, after a November 8, 2010 public hearing (pgs. 2-3, November 26, 2010 EIS transmittal letter from the Puerto Rico Industrial Development Company to the Puerto Rico Environmental Quality Board). Merely eleven working days from the date of notification and only one day after the public hearing were afforded to the public and local agencies to evaluate and comment on such a complex and ambitious project! RUS should view with suspicion the fact that local agencies submitted comments to the local EIS document within days of its receipt:

> "Energy Affairs Administration – letter dated November 1st, 2010; Puerto Rico Aqueduct and Sewer Authority – letter dated October 29, 2010; Puerto Rico Highway and Transportation Authority, Department of Transportation and Public Works – letter dated October 27, 2010; Solid Waste Management Authority – letter dated November 1st, 2010; Puerto Rico Ports Authority – letter dated November 1st, 2010; Puerto Rico Fire Department – letter dated October 27, 2010; Department of Agriculture/Land Authority – letter dated November 1st, 2010; Department of Environmental and Natural Resources – letter dated October 29, 2010; Department of Health – letter dated November 5, 2010; Puerto Rico Electric Power Authority – letter dated November 8, 2010; Institute of Puerto Rican Culture – letter dated October 26, 2010; State Historic Preservation Office – letter dated October 28, 2010; Department of Labor and Human Resources – letter dated October 29, 2010; and the Municipality of Arecibo – letter dated November 8, 2010." (pgs. 2-3, November 26, 2010 EIS transmittal letter from the Puerto Rico Industrial Development Company to the Puerto Rico Environmental Quality Board).

Hence, our characterization of the local EIS process as biased and irresponsible. The fact that a municipal waste incineration project was allowed to be evaluated in this extremely short timetable must ring alarms in the context of Puerto Rico.

On October 28, 2015, Professor Luis E. Rodríguez-Rivera presented the paper titled *Uso de órdenes ejecutivas, declaraciones de emergencias y otros instrumentos para lograr aprobación expedita de proyectos complejos en detriment del interés público y en violación del orden jurídico – El caso del incinerador de Arecibo* ("Use of Executive Orders, Emergency Declarations and Other Instruments for the Expedited Approval of Complex Projects in Detriment to the Public Interest and in Violation of the Legal Order – the Case of the Arecibo Incinerator"), during the

International Congress on Administrative Law, jointly sponsored by the Latin American Forum on Administrative Law and the University of Puerto Rico School of Law, held in San Juan, Puerto Rico. We are incorporating such analysis as Attachment 4, which we incorporate by reference to our comments.[3]

In this thorough analysis, Professor Rodríguez-Rivera concludes that the incinerator proposed for Arecibo violates the Island's public policy, which clearly limits the use of incinerators to waste that cannot be reduced, reused or recycled, as said proposal would incinerate **ALL** waste including that which could be reduced, reused or recycled. *See* Puerto Rico's Solid Waste Reduction and Recycling Law of 1992, Law No. 70 of September 18, 1992. Prof. Rodríguez-Rivera further presented that the expedited evaluation of the proposed incinerator for Arecibo under the "emergency" exception is *ultra vires*, thus, illegal since the "emergency" conditions mandated by Puerto Rico's Emergency Law, as amended, were not satisfied nor was the incinerator a reasonable response to an energy crisis. Prof. Rodríguez-Rivera further indicated that the expedited nature of the government's evaluation of the proposed incinerator, in and of itself, is contrary to constitutional due process guarantees, as well as important environmental and administrative procedural and substantive obligations imposed to the Puerto Rico government by special laws, including Puerto Rico's Environmental Public Policy Law (Law No. 416 of September 22, 2004), among others.

It must be highlighted that currently municipal waste burning facilities are non-existent in Puerto Rico precisely because public policies enacted through the years by both the Executive and Legislative Branches have limited the use of incinerators as a major waste-handling option for the Island. The Puerto Rico Waste Reduction and Recycling Law of 1992 specifically spells out that incinerators may only be used for "solid waste that cannot be reused or recycled". The incinerator proposed for Arecibo does not comply with said restriction because its process is a variation of a mass burn facility, thus, it cannot be considered as a solid waste management alternative under Puerto Rico law. Since RUS cannot consider providing financial assistance for an illegal project, it must deny *a priori* Energy Answer's request.

[3] Of course, we expect RUS will translate Prof. Rodríguez-Rivera's paper, as well as, other documents originally prepared in Spanish, which we have included by reference in our current comments to the draft RUS EIS.

III. Economic Issues of Energy Answers' Proposal

The information contained in Section 2.2.2 of the draft RUS EIS, which presents the need and basis for the project, is deficient, flawed and simply incorrect. RUS based its discussion on outdated and incorrect information presented by Energy Answers in the 2010 local EIS.

Appalled by the lack of objective analysis and criteria in the draft RUS EIS, CAMBIO decided to ask Advantage Business Consulting to conduct an evaluation and analysis of the Energy Answers proposal. Advantage Business Consulting agreed to do the study on a pro-bono basis (we incorporate by reference the Advantage Business Consulting report, included herein as Attachment 5). It is important to note that Advantage Business Consulting is one of the main local economic and management consulting firms used by the Puerto Rico Government in dealing with the current fiscal crisis. They have participated in presentations to credit rating agencies, and have in depth knowledge of current fiscal and economic conditions on the Island.

The Advantage Business Consulting report (ABC report), titled *Issues económicos del desarrollo de la incineradora propuesta por Energy Answers* ("Economic issues associated with the development of the Energy Answers proposal"), contains an up-to-date analysis of population and waste production projections. Table 2-1 of the draft RUS EIS regarding population growth and waste production is simply incorrect. This incorrect information is what Energy Answers uses as justification for the viability and need for the incineration facility.

The Table included on page 9 of the ABC report compares the incorrect information on the draft RUS EIS Table 2-1 with correct U.S. Census Bureau data and clearly shows an overstatement in the RUS data of over 300,000 people and over 300,000 tons of waste per year for the waste catchment area. This alone should trigger a more profound, in depth and transparent evaluation for this project, and invalidate the use or reliance of the local EIS document and attachments for RUS' analysis. The fact that RUS continues to rely on incorrect and misleading information is alarming.

The ABC report (Attachment 5) summarizes its evaluation in its Executive Summary. The report was prepared in Spanish, but we are translating here the Executive Summary to ensure understanding:[4]

> "Energy Answers (EA) can become the *Solyndra* of the US Department of Agriculture (USDA). The viability of the project depends on a contract between the

[4] Of course, we expect RUS will translate the ABC report, as well as, other documents originally prepared in Spanish, which we have included by reference in our current comments to the draft RUS EIS.

Puerto Rico Solid Waste and Management Authority (SWMA) and EA to guarantee the waste flow from the different municipalities. The municipalities were not part of the contract and many mayors have already expressed their opposition to the EA project. There was an intent to legislate the guaranteed waste flow, but that intent was defeated. If EA does not receive the waste it requires to operate at capacity, the project is not viable and USDA will have an uncollectible loan.

Even if the contract between EA and SWMA were valid and could force municipalities to haul their waste though the Island to the EA facilities, the fact is that the government of Puerto Rico is immerse in a debt crisis. It is not clear if municipal governments or the central government will have the liquidity to pay contractors such as EA, which in turn would be paying RUS. There is a possibility that the government will not be able to honor the commitments from the General Obligations bonds (GO's) debt, which are guaranteed by the full faith and credit of the Commonwealth of Puerto Rico and the Puerto Rico Constitution. The risk is even greater for contracts, like the one signed by EA and SWMA, a public corporation of much lower credit ranking than the GO's. Presently, bondholders from another public corporation, the Puerto Rico Electric and Power Authority (PREPA), already accepted a 15% reduction in the value of their debt principal and a reduction in the interest rates.

This brings about another issue: EA's Power Purchase Agreement with PREPA. PREPA's financial weakness undermines its' agreement with EA. One of the problems faced by PREPA is a decline in energy consumption, or demand, on the Island. The forbearance agreement being negotiated between PREPA and its bondholders will provide greater guarantees of repayment to bondholders in the future. Therefore, when faced with future difficulties, the adjustment will fall on PREPA clients and providers. EA is seeking to become a PREPA provider.

The EA project not only represents a risk in terms of the use of public funds, but it is also inconsistent with RUS's mission. Even though the EA project is located in a rural area, the magnitude of the project is such that it will serve a big part of Puerto Rico, including municipalities in the metropolitan area.

The Environmental Impact Statement prepared by EA indicates that to reach and obtain the level of waste material required they will serve the following municipalities of the San Juan metropolitan area: Bayamón, Guaynabo, Toa Baja and Cataño. In the case of Bayamón, it is the second largest municipality in terms

of population, surpassed only by San Juan, with a population of 194,210 according to the 2014 Census Population estimate. In the case of Guaynabo, it is the municipality with the highest per capita income, with some of the more exclusive communities and a population of 92,799. Toa Baja has a population of 84,165 and Cataño has a population of 26,274. Other municipalities that the EIS prepared by EA indicate they will serve, although outside of the San Juan Metro area, include Arecibo (population 91,540) and Aguadilla (population 57,290).

Another risk for RUS is that the projections for waste catchment defined by EA will not materialize because contrary to the population increase expected by EA, population in Puerto Rico has been decreasing. Recent population decreases in Puerto Rico are reaching the levels experienced in Detroit between 2000 and 2010. It is estimated that the population decrease in 2015 will exceed 2%. A reduction in population results in a reduction of waste, an extension in the life of landfills and an increase in the catchment area needed to supply waste to EA.

For 2025 it is expected that Puerto Rico will generate 20% less solid waste than what EA estimated. The population decrease alone will be responsible for an accumulated waste reduction of approximately 7 millions of tons between 2015-2025. In addition, there is another incineration project in development stages, Sunbeam Synergy Puerto Rico, LLC in the municipality of Barceloneta, contiguous to EA.

Although the EIS prepared by EA does not indicate the incinerator will be serving San Juan, the reality is that because of the population reduction in Puerto Rico, and because landfills that EA assumed would be closed by now are still operating, EA would have to include San Juan to meet its waste needs. Thus, RUS would be financing an infrastructure project that would serve the capital of Puerto Rico, San Juan, with a population of 391,000.

The initial waste disposal tariff per ton proposed by Energy Answers for the Arecibo incinerator is $36/ton.* However, experience in the United States proves that this type of service poses a higher cost than the base tariff proposed by EA.[5] The higher the tariff the more difficult it will be to obtain waste from municipalities.

[5] Refer to page 3 of the "17th Nationwide Survey of MSW Management in the US: The State of Garbage in America". A joint study by Biocycle and the Earth Engineering Study of Columbia University, October 2010. http://www.biocycle.net/images/art/1010/bc101016_s.pdf

> The increase in transportation cost to take the waste to EA would put the municipalities in an even worse fiscal condition than they are today.
>
> *Section 2.11 of the contract between SWMA and EA includes an escalator to increase the disposal tariff annually, following the parameters included therein."[6]

As stated in the ABC report, Puerto Rico's current fiscal and economic crisis is making it very difficult for municipalities and the central government to offer basic services to the people of Puerto Rico. If USDA and RUS approve this project, they will be contributing to the crisis instead of helping Puerto Rico overcome it.

The refusal from mayors to deliver the trash to the proposed incinerator makes the project not viable.[7] The incinerator requires 2,400 tons/day of trash in order to guarantee a return on investment. If no trash is to be delivered, RUS would be providing significant federal money (in the millions) to finance a facility knowing that it will never be repaid.

The content of the ABC report should replace all information and data in the draft RUS EIS regarding fiscal/economic impact, financial risk to RUS, population projections, waste production, and waste catchment area of the proposed Energy Answers incinerator.

Milk industry

The draft RUS EIS fails to recognize that the Arecibo region is home to Puerto Rico's milk industry. Studies conducted in Europe and elsewhere have demonstrated higher concentration of contaminants, particularly dioxins, in milk from cows that graze near waste incinerators (http://www.greenpeace.org/international/Global/international/planet-2/report/2001/2/incineration-and-human-health.pdf) . That is because through the production of milk cows eliminate toxics and contaminants from their system.

A couple of years ago, milk produced in the Arecibo region was decommissioned because of contamination with lead from a battery recycling industrial operation located a few hundred meters from where the incinerator would be operating (http://www.primerahora.com/noticias/puerto-rico/nota/decomisanlechecontaminadaenarecibo-700259/) . The continuous contamination of

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[6] ABC Report, pp. 1-3 (translation added).

[7] It is important to note that on June 6, 2013 the Puerto Rico Secretary of Justice issued a formal opinion declaring the Contract 12-000060 between Energy Answers and the SWMA null and void because it violates municipal autonomy provided in the Municipal Autonomy Law (Law No. 81 of Aug. 30, 1991, as amended), it unduly interferes with existing and future contractual relations, it is in conflict with SWMA public policy regarding reduction and recycling, and it violates the U.S. Constitution interstate commerce clause.

Puerto Rico's milk industry by this project will decimate the industry and significantly affect the health and economy of Puerto Rico. None of this is considered in the draft RUS EIS.

IV. Impact area

The draft RUS EIS ignores and does not consider the impact the project will have beyond the limited range defined. However, it is clear that the project will impact beyond the limits established due to:

- waste will be hauled from all parts of the Island, (as discussed in the ABC report, the waste catchment area will need to be expanded beyond the 34 municipalities in order to comply with the waste volume required by the facility. The impact of and cost of transporting waste from all over the island is not even considered),
- toxic ash will be disposed of in the South and East of Puerto Rico,
- adverse effect on the milk industry and agricultural activity which could impact food security and costs to all Puerto Ricans on the island,
- negative effect of the project on recycling efforts all throughout the island,
- adverse effect on the fiscal condition of municipalities that would be forced to take their waste to the incinerator, and
- negative effect on the surrounding environmentally-sensitive, ecologically-rich and important natural resources that serve the entire Island.

V. Municipal Solid Waste characterization

Puerto Rico recycles less than 14% of its waste stream (http://www.ads.pr.gov/ads/mapas/mapa-reciclaje.html). The last waste characterization study was commissioned over 10 years ago (2003) by the Puerto Rico Solid Waste Authority. Surprisingly, this is the waste characterization Energy Answers and RUS use as basis in the draft EIS document. It is more than reasonable to argue that waste generation practices and behavior on the Island have changed considerably in the past 10 years. For one thing, over 500,000 inhabitants have left the Island during said period, and our demographics now show a much older population with different consumption and waste disposal behavior. Manufacturing jobs and production have been reduced by more than a half in said period.

The Energy Answers incineration project proposes to separate and recycle only the metal components of the waste stream (~10%), leaving plastics and other toxic waste commonly found in municipal waste streams to enter the incineration process. Having no recent waste characterization study, it is impossible to know what will in effect enter the incineration waste

stream and the amount and toxicity of resulting air pollutants to be released. At a minimum, a new waste characterization study should be completed as part of the evaluation of the Energy Answers process to better assess the type of pollutants and amounts that can be expected to be released, thus, allowing for a more certain assessment of the environmental and health impacts of this polluting activity.

VI. Public Policy

On April 2015, USDA Secretary Tom Vilsack unveiled a plan to reduce CO_2 emissions by 120 million metric tons in the next decade.[8] This plan followed President Obama's public policy encouraging agencies to address climate change. The Arecibo incinerator is contrary to this public policy statement. This incinerator will generate and contribute almost 1 million tons of CO_2 to the atmosphere per year.[9] Contrary to what is stated in the draft RUS EIS, there would be no reduction of greenhouse gases as there will be no waste mining as part of the project, meaning that waste in landfills will continue to decompose and produce gases for decades to come. A proper course of action would be to propose and establish efficient systems that recover gases from landfills.

The incinerator will also emit an excessive load of toxic substances (lead, mercury, cadmium, dioxins, etc.) and acids that will inevitably contaminate, acidify and dissolve karst rock in the region and impact the karst forest and aquifers. This cannot be in tune with climate change policy being adopted by the Federal Executive Branch.

This is an enormous contribution of greenhouse gas and toxic substances, and is a contradiction to President Obama's and Secretary Vilsacks' policy to reduce CO_2 emissions. A reference to this policy actions by the USDA and policy determinations by the President is not mentioned or considered in the draft RUS EIS as it should have an effect on decision-making within RUS and the USDA.

VII. Waste responsibility

Section 1.2.1 of the draft RUS EIS incorrectly states that the Solid Waste Management Authority (SWMA) and the Environmental Quality Board (EQB) have local responsibility for managing solid waste on the Island. RUS should know that the responsibility for managing solid waste on the Island resides in the 78 municipalities and not on SWMA or EQB, as per the Autonomous

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[8] http://www.cnsnews.com/news/article/barbara-hollingsworth/sec-vilsack-we-have-get-ahead-climate-change-reducing-co2

[9] Refer to the Energy Answers' Prevention of Significant Deterioration (PSD) permit.

Municipality Law, Public Law 81, Aug. 30, 1991, as amended, which states in Article 2.004 (a), when defining the powers and responsibilities of municipalities:

> "Establecer servicios y programas de recogido o recolección de desperdicios y de saneamiento público en general y adoptar las normas y medidas necesarias o útiles para el ornato, la higiene y el control y la disposición adecuada de los desperdicios."

Clearly the municipalities are the ones with legal authority to establish and manage waste collection and disposal in Puerto Rico. SWMA has the responsibility to coordinate with municipalities and offer assistance to ensure compliance with public policy and the hierarchical waste management structure established in Law 70 of 1978, as amended. EQB, on the other hand regulates and ensures compliance with environmental conditions.

This is a FUNDAMENTAL error in the draft RUS EIS. Not understanding which is the entity responsible for handling solid waste distorts the basis for decision making. All throughout the development process of the Arecibo incinerator, the entities that have been negotiating and making commitments regarding waste flow to the incinerator have been SWMA and EQB, none of which have the legal authority to do so. Both the Association and Federation of Mayors, which group all municipalities on the Island, have expressed to RUS in writing their unwillingness to take their waste to the incinerator, and their intent to take both SWMA and RUS to court if this project proceeds. [10]

VIII. Energy

This is a major municipal waste management project and therefore does not fit RUS's renewable energy program. This needs to be considered in the draft RUS EIS. Furthermore, Puerto Rico's current energy demand fluctuates between 2,700 MW and 3,200 MW. Energy Answers will produce 67 MW to be sold to the Puerto Rico Energy and Power Authority (PREPA). This project will produce less than 1% of Puerto Rico's energy demand, burning an incredible amount of resources at very high economic, health and environmental costs. Puerto Rico faces an energy crisis, precisely because of expensive and dirty power generation. The incinerator would be another dirty and expensive operation.

Furthermore, energy produced through incineration will not be targeting rural communities as it will enter Puerto Rico's island-wide electric grid system for distribution. If RUS is interested in promoting energy projects in Puerto Rico, it should pursue financing wind and solar power projects

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[10] Letter from the *Federación de Alcaldes* to the Rural Utilities Services, August 19, 2015; letter from the *Asociación de Alcaldes* to the Rural Utilities Services, August 20, 2015.

to help lower energy costs and decrease contamination. Furthermore, RUS needs to evaluate in the EIS the benefit of implementing other legally-mandated and favored waste management (reducing, reusing, recycling) and energy (solar, wind) alternatives that have much less environmental and health impacts. This is fundamental in the alternatives analysis and is neither discussed, or considered in the draft RUS EIS.

It is also important for RUS to know that pursuant to Law 57 of 2014, PREPA prepared and submitted on August 17, 2015 an Integrated Resource Plan (IRP) to the Puerto Rico Energy Commission that identifies PREPA's preferred energy strategy for satisfying energy requirements until 2035 (http://www.aeepr.com/Aeees/ley57.asp) . The IRP is PREPA's "proposal of the most efficient plan to meet its electric power requirements over the study period, in consideration of reliability, stability and future renewable generation levels."[11] **RUS should note that the Arecibo waste incinerator is not included in PREPA's Integrated Resource Plan, therefore the future of Energy Answers' Power Purchase Agreement with PREPA at this point is uncertain.**

IX. Job creation

The draft RUS EIS states that the Energy Answers project will create 4,283 direct jobs and 4,004 indirect and induced jobs during construction phase and 150 direct jobs and 675 indirect and induced jobs in operation phase. These numbers are grossly overstated from a basic comparison with other similar facilities in the United States. Again RUS relies on incorrect and outdates information from the 2010 local EIS.

An article published in 2013 by the MSW Management, a journal for municipal and waste professionals, provides comparative data on other waste to energy facilities and the job creation during construction and operation phase (http://www.mswmanagement.com/MSW/Editorial/SWANA_News_Economic_Benefits_of_WastetoEnergy_Jobs_21552.aspx). The range of direct employment for a 1,500 TPD facility during construction is close to 250 and during operation phase between 50 and 75. A reasonable expectation for a 2,100 TPD facility would be 350 direct jobs in the construction phase and between 70 and 105 jobs during operations. Thus, once again, the information provided in the draft RUS EIS document is misleading and incorrect. Job creation has been one of the most persistent arguments used by Energy Answers proponents in defending the project. A more in-depth analysis and comparison of what really will be the job creation benefit from the Energy Answers facility needs to be performed.

[11] Puerto Rico Electric Power Authority Integrated Resource Plan, Vol. I. p. 1-2. August 17, 2015

X. Reduce, reuse, recycle

As indicated earlier, Puerto Rico recycles less than 14% of its waste. Also important to emphasize is that according to the Puerto Rico Solid Waste Authority's Strategic Plan for the Management of Solid Waste in Puerto Rico (November 2003), our waste composition is: 35% organic material and yard waste (compostable); 41% paper, cardboard, plastic, metals and glass (recyclable and reusable); 17% construction and demolition waste (recyclable and reusable); and 7% other. These percentages are prior to any effort to reduce our waste production. Hence, the development of a municipal waste incineration facility at this time, when acceptable recycling rates have not yet been attained and no reduction, reuse or recycling plans are in place, will inevitably jeopardize the effective implementation of reducing, reusing, and recycling efforts. Further, given the 2,400 ton/day waste stream required to make this project economically feasible for the proponents, it is reasonable to anticipate that at least 1,400 ton/day of recyclable materials will necessarily enter the Energy Answers incineration waste stream.

XI. Site location

⇒ Floodzone

Energy Answers is required to amend the FEMA Flood Maps since the project is located within the Río Grande de Arecibo flooding zone (Junta de Planificación, Consulta Número 2010-06-0231-JPU). It must be noted that this process with FEMA has not even initiated yet. Furthermore, reference maps used in the draft RUS EIS do not reflect real and existing land elevations relative to sea level. Thus, RUS cannot rely on information contained in the maps for decision-making, since the present outdated information.

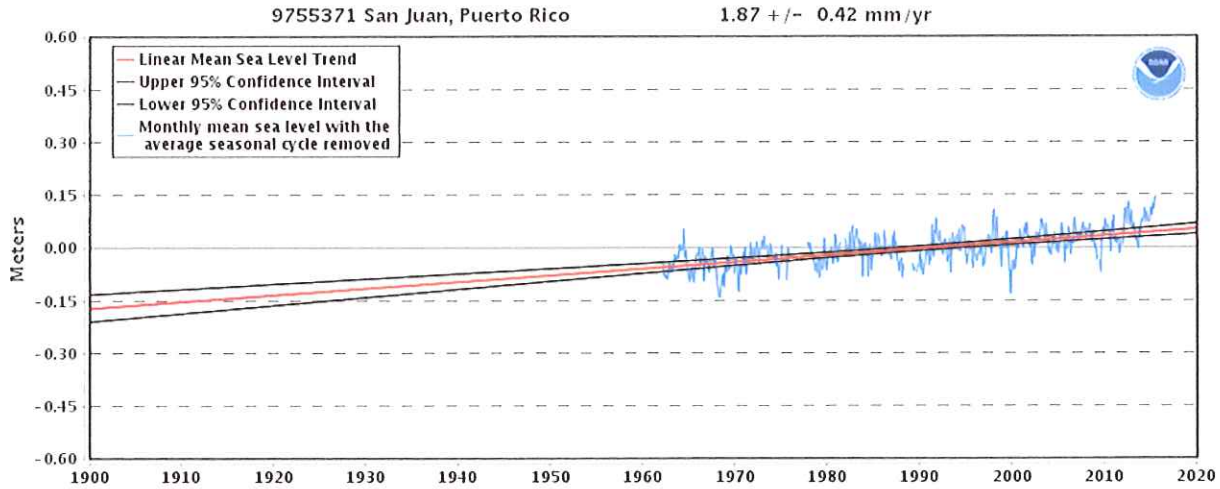
Locating an incineration facility within the floodzone of one of Puerto Rico's main rivers should be questioned particularly when the Puerto Rico Department of Natural and Environmental Resources has identified:

> "Los meandros en la desembocadura del río al mar forman uno de los estuarios más importantes en la Isla, penetrando la cuña de agua salada hasta la vecindad de la Central Cambalache, aproximadamente una milla aguas arriba de la desembocadura del río al mar."(http://www.drna.gobierno.pr/oficinas/saux/secretaria-auxiliar-de-planificacion-integral/planagua/inventario-recursos-de-agua/cuencas-hidrograficas/Cuenca%20del%20Rio%20Grande%20de%20Arecibo.pdf).

It is precisely in these ecologically rich last miles of meanders of the Arecibo River that the Energy Answers project is to be located. When the draft RUS EIS discusses the various alternative locations evaluated by Energy Answers there is no mention to the impact of locating the project within a floodzone.

Furthermore, there is no evaluation or consideration to the potential effects of sea level rise on flooding levels. Documentation is available through the National Oceanic and Atmospheric Administration (NOAA) that evinces the rise in sea level already being experienced in Puerto Rico.

Mean Sea Level Trend
9755371 San Juan, Puerto Rico



The mean sea level trend is 1.87 millimeters/year with a 95% confidence interval of +/- 0.42 mm/yr based on monthly mean sea level data from 1962 to 2014 which is equivalent to a change of 0.62 feet in 100 years.

Source: http://tidesandcurrents.noaa.gov/sltrends/sltrends_station.shtml?stnid=9755371

Energy Answers proposed that the project site be elevated to 6.3 meters above mean sea level to protect it from expected floods at the site. However, already floodwaters from Hurricane Georges in 1998 presented flooding at the site ranging from 5.2 to 7.3 meters above mean sea level, as indicated in the draft RUS EIS. To this one must add the increase in the water table to be expected from rising sea levels (already occurring in Puerto Rico), and one must conclude that the modifications to be made by Energy Answers scarcely represent any protection against real potential flooding. What would be the impact to Puerto Rico and Arecibo of concentrating waste management for almost the entire island on a single facility prone to flooding and climate change

effects such as rising sea levels? None of this is evaluated in the draft RUS EIS. The site is clearly too sensitive and vulnerable and any investment there would be at risk.

⇒ Land Use

The draft RUS EIS lacks a serious analysis of a No Action Alternative or an analysis on the cumulative impact of polluting activities in the area. Arecibo is a very contaminated zone because of previous industrial activities developed throughout the municipality and a No Action Alternative in the proposed project site could actually be the best alternative in terms of adequate land use for the zone. A thorough No Action Alternative and a cumulative impact analysis need to be responsibly evaluated and addressed as part of the RUS EIS.

Furthermore, Arecibo has suffered from the lack of adequate land use planning. Arecibo does not have an approved Land-Use Plan to provide orderly logic to development zones. The result has been the careless and chaotic development of areas near ecologically sensitive and important natural resource areas for the Island. In the absence of an approved Land-Use Plan, EIS documents and processes for high impact projects proposed for Arecibo, such as the Energy Answers project, need to be thorough.

XII. Water

The draft RUS EIS completely ignores the fact the Department of Natural and Environmental Resources (DNER) denied in 2013 Energy Answers' request to extract water from the Caño Tiburones Natural Reserve because of the environmental impacts such an extraction would impose on this valuable natural ecosystem. The DNER has not changed its position to date, leaving Energy Answers with no water source for its incinerator. On September 4, 2015, in a news story published by *El Nuevo Día*, the director of DNER's legal office, Mildred Sotomayor, stated that DNER reaffirms its position that water would not be taken out of the Caño Tiburones for the incinerator:

"'El DRNA se reafirma en su posición. Entendemos que el agua de ese cuerpo – que desemboca en el mar – tiene una finalidad en todo su trayecto. No estamos dispuestos a que se saque agua del caño', dijo ayer la abogada Mildred Sotomayor, directora de la Oficina Legal del DRNA".[12]

As indicated in the draft RUS EIS all other alternative water supply are deemed unviable.

Furthermore, Puerto Rico faced in 2015 a significant drought due to the effects of climate change. People were subject to water rationing, in which potable water service is provided only 2 or 3 times

[12] Gerardo E. Alvarado, *Faltan permisos y financiamiento para la incineradora,* El Nuevo Día, Sept. 4, 2015. p.12.

a week. The proposed incinerator would utilize 2.1 mgd of water that is presently recharging aquifers and serves as an essential element to Puerto Rico's most important wetland reserve at Caño Tiburones. The use of water from Caño Tiburones will have major negative impacts on the wetlands, mangrove and wildlife in that ecosystem.

In the drought condition experienced, and even with no drought, the extraction of 2.1 mgd of water would redistribute the use of water from potable water for people to water for the incinerator. It would be outrageous for USDA and RUS to authorize a project that would commit to the incinerator water supplies vital and needed for the people and environment of Puerto Rico.

XIII. Air Pollution and Human Health

Since 2011, USEPA has classified the Arecibo area as non-attainment because of exceedance in lead air limits (http://www.epa.gov/airquality/greenbook/mnp.html). The main source for lead pollution is related to the battery recycling operation in the same Cambalache Ward where the Energy Answers facility is proposed. Neither the Environmental Justice, nor the Human Health Risk Assessment (HHRA) study in the draft RUS EIS consider this, yet another FUNDAMENTAL flaw in the draft RUS EIS.

During a public hearing held in December 2013 regarding the Battery Recycling operations, the Puerto Rico Medical Board ("Colegio de Médicos" in Spanish) indicated:

> "'Tomamos nota de que ya en 2004 había evidencia de niveles elevados de plomo en empleados de la compañía. En el 2008, EPA ordenó la investigación de los suelos circundantes, viviendas y negocios cercanos a TBRCI, habiéndose encontrado el metal tóxico plomo en un número significativo de muestras. En el 2010, se encontró plomo en sangre de niños de Head Start, familiares de empleados de TBRCI, lo cual causó que la agencia federal CDC de Atlanta hiciera pruebas adicionales a otros niños y adultos, y un número de ellos también salieran con niveles elevados de plomo en sangre.' Indico Angel González presidente del Comité de Salud Pública y Ambiental (CSPA) del Colegio de Médicos-Cirujanos de Puerto Rico (CMCPR) durante la vista" (http://puertorico.sierraclub.org/blog/2013/12/exigen-el-cierre-de-battery-recycling-company-inc-en-vistas-publicas-de-arecibo).

As indicated earlier, the fact that Arecibo is a non-attainment area should constitute an important element of the Environmental Justice evaluation of the draft RUS EIS, as the Energy Answers'

project will inevitably further increase air pollution in a community that has already suffered for decades the impact of contaminating industries.

Furthermore, the Human Health Risk Assessment (HHRA) referenced in the draft RUS EIS document is the same as the one included in the 2010 local EIS. This is outrageous since the study needs to be revised as it is based on incomplete information due to an absence of: an updated waste characterization study, a cumulative impact analysis, and local studies made by Colegio de Médicos de Puerto Rico and the Center for Disease Control (http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6147a4.htm). Furthermore, the HHRA study evinces a clear bias towards favoring the project when it states on page 2, Background: "RRF provide a good alternative to land-filling wastes". This self-serving statement is made even prior to presenting any health data or information to support it.

Moreover, the HHRA study is based on data collected at the SEMASS facility at West Wareham, Massachusetts, where the waste stream is considerably different from the Puerto Rico waste stream. For instance, recycling rates from the municipalities that deliver waste to SEMASS far exceed Puerto Rico recycling rate, attaining levels that are over 3 times the Island's rate. (*See*, for example, recycling rates for Cape Cod communities). Therefore, the base information and data used in the HHRA study is not pertinent to Puerto Rico making its conclusion on health risk not relevant to the Puerto Rico project.

XIV. Landfill impact and ash

The impact assessment made in the local EIS document as to the effect on reduced contamination on landfills is highly overstated and lacks precision and quantifiable data. Statements included are biased and self-serving. As mentioned earlier, unless solid waste mining is employed (which is not proposed as part of this project) there will be no reduction on the impact of solid waste deposited on landfills.

Uncontrolled air emissions from garbage trucks having to haul waste from one corner of the island to get to the Arecibo site is disregarded and not accounted for in this analysis. In addition, ash to be deposited on landfills will have a higher concentration of contaminants than regular municipal waste stream on a per volume basis. Since information regarding the handling of this residual ash is not discussed as part of the draft RUS EIS and limited information has been disclosed by Energy Answers regarding ash disposal, the assertion made in the EIS regarding decreased impact on landfills is false and misleading.

In February 2015 and as a result of a Court Order, Energy Answers informed for the first time of its intention to dispose in a Peñuelas landfill (municipality in the south of Puerto Rico) the toxic ash to be generated by the incinerator. The landfill which would receive the toxic ash has yet to be constructed. Furthermore, neither the local EIS, nor the draft RUS EIS evaluates the impact of transporting and disposing of this ash. Neither document evaluates the environmental justice issues associated with the indicated disposal site which is near poor communities that have fought for years the disposal of toxic ashes from Guayama's coal plant.

Currently, Puerto Rico faces an enormous challenge handling ash generated by the AES Cogeneration facility in Guayama, Puerto Rico:

> "AES dumped its toxic ash in the Dominican Republic before it spread its poison locally. When the Guayama plant opened, AES sent thousands of tons of toxic ash to the Dominican Republic, where it was dumped in Samaná Province, contaminating Manzanillo and ruining Samaria Bay. In 2005, the Dominican Republic sued AES, saying that the ash contained unsafe levels of cancer-causing metals and radioactive materials and that it polluted the environment and harmed residents' health. Citizens exposed to the ash suffered health problems. The case settled for $6 million, and AES stopped shipping coal ash to the Dominican Republic." (http://earthjustice.org/2012-september/tr-ash-talk-puerto-rico-communities-seek-justice-protection).

Over 20 municipalities, including Guayama and Peñuelas, have prohibited the use of ash (specifically, Agremax, which is a partially solidified mixture of coal combustion fly ash and bottom ash) in road and construction projects because of carcinogenic and other health concerns. A 2012 study commissioned by USEPA and performed by Vanderbilt University titled "Leaching Behavior of 'Agremax' collected from a Coal-Fired Power Plant in Puerto Rico" (http://nepis.epa.gov/Adobe/PDF/P100G02B.pdf), presents the leaching properties of Agremax collected from the AES Guayama facility. Results demonstrate concentrations exceeding maximum limits for arsenic, boron, chloride, chromium, and fluoride, among others, thus confirming concerns for environmental fate and transport of contaminants present in ash and resulting health risks. AES coal ash was in origin presented by proponents as theoretically innocuous, much in the same fashion as Energy Answers is presenting through flawed theory that ash to be generated from the proposed waste to energy facility does not present health threat or danger.

USEPA is currently evaluating how to address the health issues created by Agremax and ash generated in the AES Guayama facility.

Moreover, recently, on September 1, 2015, EQB in its approval of a construction permit request presented by Energy Answers (EQB permit IP-07-01-04-RA) specifically prohibited the use of ash as aggregate or for other construction purposes until Energy Answers presents a market study demonstrating the viability of such use. With an increasing number of municipalities prohibiting the use of ash for construction, Energy Answers' proposal for aggregate ash should be considered wishful thinking on their part. The draft RUS EIS should note this and incorporate this restriction when discussing the potential impact of toxic ash to be generated.

XV. Noise levels

The draft RUS EIS uses the same 2010 study included in the local EIS which states that existing noise levels at several Receptor points identified, including a quiet zone, exceed allowable noise limits. These are caused mainly by vehicular traffic from state road PR-2 (local EIS document, p. 2-84). The draft RUS EIS document minimizes the noise impact to be caused by the operation of the facility, particularly the dramatic increase in garbage trucks in the area that will precisely transit through PR-2.

The 227 garbage trucks that would have to visit the site daily to dump waste in order to supply the 2,400 tons/day required will inevitably worsen noise levels. This activity would be on-going six days a week and yet the impacts or possible mitigation measures are not adequately addressed in the draft RUS EIS document. The fact that noise conditions in the area are bad does not provide for a free pass to continue contributing to its detriment. (See section on Human Environment, *infra*, pp. 23-25).

XVI. Natural and Human environment

A glaring flaw in the local EIS document is the superficial evaluation of environmental impacts on the natural and human environment in the proposed project's very backyard.

http://www.elnuevodia.com/areciboescenariodecrisisecologica-1556715.html

⇒ Natural Environment

The ecological importance of the proposed plant's surroundings cannot be ignored (as done by Energy Answers in the local EIS document and by RUS in the draft RUS EUS). The draft RUS EIS fails to adequately describe or evaluate the natural ecosystems that exist within the Arecibo region.

1. Caño Tiburones Natural Reserve (Num. 2 in blue, above) – The proposed incineration plant is located within the western tip of Caño Tiburones. Delimited by the Río Grande de Arecibo and Río Grande de Manatí and covering an area of approximately 7,000 acres, Caño Tiburones is the largest wetland in Puerto Rico. Fresh water from the karst and salty ocean water interact creating a unique habitat consisting of estuarine, palustrine and lacustrine wetlands with around 200 bird species and more than 100 flora species. Caño Tiburones is recognized as an important migratory bird habitat in the Caribbean Region.

2. Cambalache State Forest, Arecibo – (Num. 3 in blue). A few miles to the east of the proposed incineration plant is the Cambalache State Forest, approximately 1,600 acres of limestone forest. The Forest provides an important service in the

protection of the karst ecosystem in the region, including its flora, fauna, caves, sinkholes and limestone hills, as well as underground water system. Important populations of endemic birds and trees are protected within the Cambalache State Forest.

3. Río Abajo State Forest, Arecibo – (Num. 4 in blue). A few miles to the south of the proposed incineration plant and consisting of 5,780 acres, Río Abajo houses two types of forests: a moist limestone forest with very irregular topography, subterranean drainage, caves, natural depressions or sinkholes and haystack hills (all characteristic of karst geological development); and a large subtropical wet forest. There are about 175 types of trees, 47 of which are considered endangered species. Two important programs for the recovery of two endemic birds are also underway in Río Abajo: recovery of the Puerto Rican Red-Tail Hawk and the Puerto Rican Parrot. These programs are successfully recovering these bird populations in a joint effort between the Puerto Rico Department of Natural and Environmental Resources, the U.S. Fish & Wildlife Service and the U.S. Forest Service.

4. Dos Bocas Reservoir, Arecibo – (Num. 5 in Blue). One of the Island's most important reservoirs, as 100 mgd are extracted and sent to the San Juan metropolitan area for potable water. The 2003 H/H water study of the Caño Tiburones relied upon by Energy Answers in the local EIS document was made precisely to evaluate the potential impact of the extraction of 100 mgd in the Dos Bocas Reservoir as both water systems are part of the same hydrological system. Any proposed additional extraction from the Caño Tiburones requires a new H/H water study to evaluate the accumulated impact of the Dos Bocas extraction during the past decade, as well as the impact in future extractions that may be required from the Superaqueduct system.

5. Indian's Cave and the Bishop's Waterhole, Arecibo (Num. 1 in blue). Both of these natural resources are a few hundred meters away from the proposed incineration project, and are important historic and cultural sites, as well as important components of the region's ecological system.

⇒ Human Environment

The quality of the human environment in the Arecibo region is precarious. A combination of past and present factors have aggravated the surroundings in the Arecibo region, including serious coastal erosion, contamination of its superficial and underground water systems by toxics and sediments, ground contamination by hazardous substances, and air contamination. In *Hanley v. Mitchell*, 460 F.2d 640 (2d Cir. 1972) (Feinberg, *J.*), *cert. denied,* 41 U.S.L.W. 3247 (U.S. Nov. 7, 1972), impacts significantly affecting the quality of the human environment included the following: "[NEPA] must be construed to include protection of the quality of life for city residents. Noise, traffic, overburdened mass transportation systems, crime, congestion and even availability of drugs all affect the urban 'environment' and are surely results of the 'profound influences of . . . high-density urbanization [and] industrial expansion." *Id.* at 647. In evaluating if a proposed action will significantly impact the human environment, one must consider both the comparative effect and the absolute effect.

> "(1) the [comparative] extent to which the action will cause adverse environmental effects in excess of those created by existing uses in the area affected by it, and (2) the absolute quantitative adverse environmental effects of the action itself, including the cumulative harm that results from its contribution to existing adverse conditions or uses in the affected area. Where conduct conforms to existing uses, its adverse consequences will usually be less significant than when it represents a radical change. . .
>
> Although the existing environment of the area which is the site of a major federal action constitutes on criterion to be considered, it must be recognized that even a slight increase in adverse conditions that form an existing environmental milieu may sometimes threaten harm that is significant. One more factory polluting air and water in an area zoned for industrial use may represent the straw that breaks the back of the environmental camel. Hence the absolute, as well as comparative, effects of a major federal action must be considered." (*Hanly v. Kleindeist, 484 F.2d 448 (2d. Cir. 1973).*

Though the existing environment of the area is an important criterion when evaluating a proposed action, the accumulation of additional impacts to the existing, even if a slight increase, may endanger a human environment. Such is the case of the Arecibo area. Hence, the quality of the human environment must be carefully evaluated. This was not done by Energy Answers in the local EIS document and is not done in the draft RUS EIS. Past and current activities that affect the human environment in the region include:

1. 11 Superfund Sites – Pesticide Warehouse I, Arecibo; Pharmacia & Upjohn Caribe, Arecibo; Pesticide Warehouse II, Manati; Barceloneta Landfill, Florida; Merck, Sharp & Dohme Quimica de Puerto Rico, Barceloneta; RCA del Caribe, Barceloneta; Upjohn Facility, Barceloneta;Vega Alta Public Supply Wells, Vega Alta; V & M Albaladejo, Vega Baja; Vega Baja Solid Waste Disposal, Vega Baja; and Papelera Puertorriqueña, Utuado. (http://www.epa.gov/region2/cleanup/sites/prtoc_sitename.htm). The existence of so many Superfund Sites and numerous industrial activities with potential to contaminate with hazardous substances and toxics in such a small region of Puerto Rico (a poor and mostly racial minority under EPA Environmental Justice standards) should be, in and of itself, cause of concern and in depth analysis.

2. Battery Recycling – (Num. 3 in orange). A few meters from the proposed incineration plant, this existing company is a recurrent permit violator, and has received several fines by U.S. E.P.A. and the local Environmental Quality Board. As mentioned before this is the main source for the lead air quality non-attainment area.

3. Puerto Rico Electric Power Authority's Cambalache Power Plant – (Num. 2 in orange). Just a few hundred meters away from the proposed incineration plant, the Cambalache Power Plant is one of the region's top air polluters burning low quality oil in order to produce electricity. This plant has not undergone significant improvements in order to upscale its efficiency and environmental compliance.

4. Puerto Rico Aqueduct and Sewer Authority's Barrio Islote Sewer Treatment Plant – (Num. 1 in orange) – located within 1,000 meters of the proposed incineration plant, and right in the heart of the Barrio Islote residential community. The odors and noise produced by this sewer treatment plant are constant source of complaints for the local community.

5. Arecibo Municipal Landfill – (Num. 5 in orange). For decades, the local communities have had to coexist with the RCRA non-complying landfill, which is located within the Caño Tiburones Reserve and just a few hundred meters from the proposed incineration plant. Even in its eventual closure, this landfill

will continue contaminating the Caño Tiburones waters, as well as the region's air.

6. Safetech – (not included in the map) This is a commercial and industrial non-hazardous waste incinerator located in Barrio Santana, Arecibo.[13] The contribution of contaminants of this facility is not considered anywhere in the draft RUS EIS.

The draft RUS EIS does not evaluate the cumulative effect over the natural and human environment resulting from the above industrial activities neither in a comparative nor in an absolute analysis.

⇒ Residential and Quiet Zones

The residential and quiet zones described in the document identify the closest house at 569 meters from the center of the Project site, the closest school at 1,480 meters northwest of the Project site, and the closest hospital at approximately 2,035 meters northwest of the Project site.

This superficial analysis of the proposed project's surroundings cannot hide the reality that within just a few hundred meters of the proposed project there are residential houses, and within a couple thousand meters there are hospitals and schools; nor can the draft RUS EIS document hide the fact that tens of thousands of persons live and work within a couple thousand meters of the proposed site. This reality mandates a profound, thorough and in depth evaluation of the impact that the direct and indirect activities will have in the quality of the human environment surrounding the proposed incineration plant. This is not included in the draft RUS EIS.

Furthermore, the assessment of the visual impact of the project as contained in the draft RUS EIS does not consider the impact of more than 227 garbage trucks hauling solid waste to the facility on a daily basis, and the inevitable accumulation of waste and ash at the site. The renditions of the visual impact of the project on the region and particularly from reference points outside property delimitations, although limited to the stack, already demonstrate the impact of this project siting. Who would think of locating an incinerator chute, visible from all points, in the north karst region

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13 http://www2.pr.gov/agencias/jca/Documents/Permisos%20y%20Formularios/Calidad%20de%20Aire/Permisos%20de%20Operaci%C3%B3n%20T%C3%ADtulo%20V%20Finales/SAFETECH%20CORPORATION%20-%20PERMISO%20FINAL%20TV-4953-07-1003-0001%20Espa%C3%B1ol.pdf

of Puerto Rico: an important icon and area in Puerto Rico's eco-tourism strategy? This is another example of biased and self-serving conclusions presented in the draft RUS EIS document.

XVII. Discussion of Alternatives

One of the best known axioms when studying NEPA is that the discussion of alternatives to a proposed project is the "heart of the environmental impact statement." (Section 1502.14 of the Council on Environmental Quality Regulations, 40 C.F.R. sec. 1502.14). It is precisely while discussing alternatives to a proposed project, that a government agency can truly internalize environmental considerations into its decision-making process. Without an honest and effective discussion of alternatives, the agency is many times left with a situation in which it decides to continue with a project "by default," even when faced by an accurate analysis of its significant environmental impact. This is why the Regulations of the Council on Environmental Quality ("CEQ regulations") set very clear criteria for the adequate discussion of alternatives in an EIS document. More precisely, CEQ regulations clearly specify that an EIS document must:

> "(a) Rigorously explore and objectively evaluate all reasonable alternatives, and for alternatives which were eliminated from detailed study, briefly discuss the reasons for their having been eliminated.
> (b) Devote substantial treatment to each alternative considered in detail including the proposed action so that reviewers may evaluate their comparative merits.
> (c) Include reasonable alternatives not within the jurisdiction of the lead agency.
> (d) Include the alternative of no action. . ." (*Id.*).

Although the Energy Answers incineration project is primarily a solid waste management strategy, the draft RUS EIS document does not evaluate well-known and available alternatives, such as the reduction, reuse and recycling of solid waste. This is particularly irresponsible in the context of Puerto Rico, where, as we have discussed above, the long-standing public policy on the matter is to favor the implementation of reduction, reuse and recycling/composting of solid waste, particularly over incineration and landfilling.

Instead, the draft RUS EIS document presents a superficial discussion of alternatives, all within the waste to energy realm. The discussion of the No Action Alternative is limited to one paragraph and an oversimplified discussion. Here, once again, it is evident that the draft RUS EIS document is a biased and self-serving document aimed at justifying the Energy Answers incineration project.

XVIII. Conclusion

The Arecibo incinerator is a project that faces massive opposition in Puerto Rico. It is a project that has no viable or approved water source for its operation. It is a project that is not included in PREPA's Integrated Resource Plan, which delineates the Island's future energy plans. It is a project opposed by 99% of the mayors, which means that it is a project with no guaranteed waste flow. It is a project that will kill efforts to increase more sustainable reduction, reuse, and recycle strategies on the Island. It is a project that will worsen Puerto Rico's critical current fiscal condition. It is a project that will impact disproportionally the health and well-being of poor people living in Arecibo who have had to tolerate contaminating activities all their lives. It is a project that will inevitably impact the sensitive and important ecological systems of the region. It is a project that will contribute to climate change with 1 million tons of CO_2/yr. It is a project that requires violation the of U.S. Constitution's interstate commerce clause in order to be viable. It is a project that has gotten this far because of irresponsible and illegal maneuvers. In conclusion, the Arecibo incinerator is a project that, if financed by RUS, will end up as an uncollectible loan because it is financially, environmentally and socially unsustainable.

Presented on November 11, 2015 by:

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