

Public Hearing - PSD Permit – Energy Answers

**LION’S CLUB OF ARECIBO**

**August 25, 2012 1:00PM-4:00PM**

*Transcription by: Aledawi Figueroa*

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1:05 p.m.

**Jose Font:**

Please take your seats so we can begin listening to the testimonials.

I want to wish a very good afternoon to all present. Please if you can begin sitting down now in the next few seconds so we can begin with the presentations of folks' points of view & their testimonials.

Good afternoon everyone, my name is Joseph Font, Acting Director of the Division for the Protection of the Environment of the Caribbean for the Federal Environmental Protection Agency (EPA). Today with me are the following EPA staff:

Mr. Ariel Iglesias, Deputy Director of the Division of Sustainability and Clean Air of EPA Region 2, Ms. Tere Rodriguez, Assistant Principal Interim of our Caribbean Division, Mr. José Rivera, Interim Acting Chief of the Sub-Division of Multimedia Permits and Compliance, and Engineer Ramon Torres, Acting Chief of the Sub-Division of Response Remediation, Mrs. Brenda Reyes, Community Relations Coordinator, and Ms. Evelyn Rivera, Community Outreach Coordinator from Energy Answers for the project, Mr. Francisco Claudio and Mr. John Aponte, of the Clean Air Program under the

Sub-Division of Multimedia Permits and Compliance, and Mrs. Socorro Martínez, of the subdivision of Remediation and Environmental Responses.

We give a warm welcome to this participating in this public hearing and thank the Administration of the Lion's Club of Arecibo for providing this space in the Municipality of Arecibo, and therefore allowing us once again meet in a place that closer to the community.

The purpose of this public hearing is to receive public comment concerning the issuing of a Prevention of Significant Deterioration (PSD) permit, which was prepared by EPA under the Federal Clean Air Act. A PSD, as it is known by its acronym in English, is a permit is a legal document that limits the amount of air pollution that may be released by a source. This action was taken in response to a request for a permit by the company, Energy Answers to establish a facility to create energy by incinerating solid waste in the town of Arecibo, Puerto Rico.

On May 9, 2012, the EPA issued a public notice in the newspaper *North*, (El Norte), proposing to issue a PSD permit to Energy Answers

for the proposed incinerator facility. In that notice, EPA requested public comment from those interested in the proposed permit for the facility. EPA also established a comment period of 45 calendar days, and EPA provided information about repositories of information and documents on file relevant to the request for permit by the company. The EPA also invited the public to attend an information session on May 23, 2012 in the Theatre at the University of Puerto Rico at Arecibo, and a public hearing on June 25 at the same location. A second notice containing the same information was published in the newspaper *El Vocero* on May 13, 2012.

As published, the public briefing on the proposed permit was held on May 23, 2012 at the University of Puerto Rico, Arecibo. The meeting provided preliminary information about the draft of the permit and how it would prevent significant deterioration of the quality of the air – as it was being developed by EPA under the Federal Clean Air Act. EPA officials answered questions from the audience at this meeting. In addition, the EPA stressed that in addition to the public hearing that would take place on June 25, 2012, the agency would accept written submissions until Friday June 29, 2012.

Following the cancellation of the public hearing of June 25, 2012, the

EPA extended the comment period until August 27, 2012, according to the notice published in the newspaper *The Spokesman* on July 23, 2012. It should be noted that this week the EPA announced the extension of the comment period until August 31, 2012.

As part of the application for our consideration from Energy Answers we at EPA received a series of documents that were submitted by Energy Answers as the industry proponent. The division of Best Available Control Technology (BACT), and the Air Modeling department carried out the analysis of these documents. After evaluating the information filed by Energy Answers, as part of their application, EPA proposed a draft permit or draft permit for public consideration.

The preliminary permit conditions developed after our analysis of the application are based on the requirements of Part 52.21 of Title 40 of the Code of the Federal Regulations. These conditions include requirements of owners and operators of a new static source or those who are planning important modifications to such a site such as:

- Number One (1) Collect and consolidate applicable emission limitations within the State Implementation Plan and standards emissions under Part 52.21, section j, sub-Section 1 of Title 40 of

the code of the Federal Regulations;

- Number two (2) Apply the best available control technology Available (BACT) for each pollutant subject to regulation under Part 52.21 (j) (3) of Title 40 of the Code of the Federal Regulations;
- And third (3) Direct the air quality analysis under Part 52.21 of Title 40 Code of Federal Regulations, sections (k) to (p), to demonstrate that emissions do not exceed national standards for air quality in the area.

The proposed emission rates will be considered to meet – do meet -- the requirements of Best Available Control Technology (BACT) and shouldn't cause or significantly contribute in any way to the air quality.

After our evaluation of the Energy Answers application, we put before the public consideration a draft permit. The final agency decision on it will not be taken until all the views collected during the comment period are objectively considered, with a view to safeguarding the environment, health and safety of all. Your comments and presentations will be heard and recorded in the administrative, written record of this public session. All comments or proposals to be

presented today will be considered by the EPA and shall be recorded in the administrative record of these proceedings provided by applicable federal regulations.

The EPA will not respond to the comments made today at this time. It should be noted that this activity today will deal only with the comments related to Energy Answers PSD permit application.

The EPA understands that the establishment of a public policy about solid waste management on the island belongs to Government of Puerto Rico and its local agencies.

You can submit your written papers to the EPA staff in the afternoon today here, or can send them to Mr. John Aponte to the address of the Caribbean headquarters of the EPA. You may obtain a copy of that address on the sheet on the table located at the rear of the entrance hall. EPA will evaluate all comments received, and answer them within the document that will be prepared as part of the final decision to be taken by the Agency.

As announced in the public notice about this view, the EPA will hold 5 sessions on 3 consecutive days. The sessions are distributed as follows: the first session is today August 25, 2012, 1:00 pm to 4:00, the second session will be held tonight, from 6:00 to 10:00, the third



morning session will be Sunday, August 26, from 1:00 to 4:00, the fourth morning session will be Sunday, August 26, from 6:00 to 10:00. The fifth and last session will be Monday, August 27, from 1:00 to 4:00 pm. All sessions will be open to the public. Persons wishing to express themselves verbally during the sessions have two ways to register. The first, we ask that you pre-register by contacting Mr. John Aponte of our Division. The second way to register is to register oneself in person at any of the 5 sessions.

The pre-registration procedure was included in the public notice of this

view. All those who pre-registered for sessions on August 25<sup>th</sup> or August 26<sup>th</sup> and who have a chance to express themselves today – excuse me – I mean who do not have a chance to express themselves today – will receive priority to speak at our fifth session on August 27<sup>th</sup>, 2012.

Furthermore, if, weather permitting, there are those who wish to participate without having pre-registered, they too will have an opportunity to do so on August 27, 2012.

In order to be able to best listen to each of the individuals interested in speaking today, we have established rules and procedure and

need that they be observed at all times by all participants. The procedures in this public hearing will be documented for record through a transcript prepared by a professional stenographer who is present. Also present here today is simultaneous translation from English to Spanish and vice versa of what is being said. Those of you who would like to listen to the translation can obtain headphones in the back of the room.

It is necessary that all participants register upon entering the room and write their name down on the list of participants upon entering the session.

Those who will give their depositions today should tell me if they will submit written comments today also. For this session we have fourteen (14)

people including those who were pre-recorded and two people who volunteered upon arrival to the meeting today. The pre-registered already been notified either by email; the others were briefed upon entry to today's session.

This session today is conducted according to the rules and procedure of Part 124 of Title 40 of the Code of Federal Regulations. The order of the deponents shall be as follows: the first opportunity will be given

to elected officials or their designees, followed by federal, state and municipal, and then, other deponents in the order in which they registered. Note that to ensure opportunity for expression of all deponents, we will be strict -

--- with strict time limits, and not be allow deponents to cede or extend their time.

Due to the number of people interested in speaking, each individual will not have more than 10 minutes.

There will be a designated person to tell each deponent when he or she has one (1) minute remaining to conclude his or her presentation, if his speech exceeds the time allotted, the microphone will be pulled to make way for the next speaker. Will go to make way for the next witness.

We ask all participants' silence and respect for diversity of opinions of all participants in order to be able to hear all perspectives and hear all deponents.

Please do not interrupt the work or cause unnecessary distractions

To maintain order, I ask you, who want to make some kind of comments or have conversations about what is being said, that you leave the room and do it outside, while the proceedings continue

here.

For purposes of the public record, when called to speak, you participants shall state clearly your name and the organization you represent, if applicable. After introducing yourself, please go directly to the table at the front of the room. If a deponent wishes to submit written copy of your presentation, please indicate that to one of the officials here today from the EPA and make sure to get the name, address and telephone number written down of the person from the EPA you spoke with and plan to communicate with.

I want to remind you that these proceedings are being recorded for purposes of transcription.

Thank you very much for your cooperation.

Immediately now we will proceed with the presentations. The table here in front is the place to be used by the deponents. I will be indicating the person who will be presenting his or her thoughts, and I will alert the next person set to follow him or her so we can move efficiently from one person to the next.

We have now officially started the hearing. Are there any elected officials here today? Having no official here present we will start with the participants who have registered. First, Dr. Ibarra Eduardo

Ortega. If Dr. Ibarra is not present spent the second speaker is Dr. Osvaldo Rosario López, the next that follows Dr. Osvaldo Rosario López then Attorney Aleyda Centeno Rodriguez. When you hear the bell that means your allotted ten minutes have concluded. You will be shown a (3) minute and then a (1) minute. time warning on a laptop screen facing you when you have three (3) minutes and one (1) minute remaining. Please, I implore you: once you hear the bell, end your speech to make way for the next participant. If you continue to speak beyond your allotted time, we will have to turn off the microphone.

Doctor Osvaldo Rosario López

**Dr. Osvaldo Rosario López:** Well, good afternoon my name is Osvaldo Rosario López, as was said, I am a professor of environmental chemistry at the University of Puerto Rico in Rio Piedras. My presentation itself must take 25 to 30 minutes, but due to the time limitation I will summarize with the expectation of having a subsequent turn later. The first point, which I want to address related to the permission you want to grant this company, has to do with the material balance. As a chemist, I have always considered this concept, to be summarized by saying that if I burn 2,100 tons of

garbage I have to have at least 2,100 tons of product left to show for that incineration. In the case that as one incinerates, oxygen is pulled in from the air, around the burning, there will be even more mass at the end of the incineration process than at the start.

In the draft turned in to EPA by Energy Answers for the processing of their PSD permit, in Table One, where there is a list of all the contaminants estimated to be produced and their respective masses, estimated to be released during the year, according to Energy Answers. If from the product named in this table we subtract the oxygen that comes from the air that serves as a basis to take stock of the mass of the materials in question. We take that number - I will not go into all the numbers, I have them in writing in detail here in my written presentation, I will simply summarize - and that amount regulated matter we take into account the so-called biogenic CO<sub>2</sub> --- that -- the very fact that the EPA allows a company like Energy Answers to not count as a contaminant CO<sub>2</sub> is flabbergasting into and of itself -- as if the argument that the fact that this material is organic or natural somehow makes it less toxic -- as if the CO<sub>2</sub> would have a different effect just because it comes from that sort of natural material is insane -- but at any rate we will still allow for this in our

calculations. To this we also add the mass of the ashes left as waste – that appear in the proposal. This total is subtracted from the total amount of burned trash for the year.

What will be left will be a level of waste, not regulated and uncounted, not counted in the table nor in the table in the permit application, which lists ash in the amount of 321,000 tons of ash as waste or emissions. We are talking about 40 to 50 percent of the garbage that is scheduled for incineration is not accounted for in the ash product. Neither the EPA, nor Energy Answers know what will be the waste byproduct of the incineration of that unaccounted for garbage. I think the EPA must answer the following questions:

- What is the composition of these unregulated emissions?
- Where they're going to put these unaccounted for emissions coming out of that plant?
- What is the health risk presented Arcibo's people of these mystery byproducts?

I do not see how the EPA thinks it can issue a PSD permit without answering such fundamental questions about this project. And again, I have all these numbers in great detail. Mr. Steve Rivas dared to come to Arcibo in May, and I confronted him with that question, the

balance of matter and he dared to try to say that that amount was unaccounted for CO<sub>2</sub>. As you can well see in the summary presentation I have just made here, there is a provision for the CO<sub>2</sub>, and that mystery byproduct is quite clearly not CO<sub>2</sub>. The great irony here is that this same Mr. Rivas is the one in charge of the office that assessed the application of PSD of Energy Answers.

This same Mr. Rivas stands before the people and says that this incinerator utilizes technology so modern that there is no possible way that in using it Energy Answers could possibly violate pollutant emission limits. The truth is that this technology is not so modern and not so new. It has been known to us since the 1970s. It is a similar technology as that found in the catalytic of automobiles, but on a larger scale. The metals in question vary, and some of the designs vary, but it's the same technology. This technology has been in operation for more than forty-odd years, so it is well known what are its problems and limitations and where it will potentially fail. This technology works reasonably well when the fuel is homogeneous, not when there is a diverse mix of fuel, with as much chemical diversity as solid waste. Among the ways the technology has proven likely to fail, all of these failures and their causes are well documented - and



about all this there are dozens of references in the literature, as a scientist I document what I say - the literature is well documented as to how the technology fails.

Types of Failures:

One is that their filters get clogged. The fabric filter called "bag houses" that Energy Answers proposes to put in front of these **Selective Catalytic Reduction** modules – as they are called – are easily clogged and break down. The catalytic are well not protected by these filters cloth or "bag houses". Because of the failure of these bags, there will be a lack of electrostatic precipitators required to efficiently filter out fine particulate so they do not reach these catalysts, and you will get fine particulate. Those fine particulates cover the porosities of these catalysts.

Furthermore, these Catalytic filters need the injection of ammonia to convert nitrogen oxides to nitrogen. But that ammonia, which is injected into the flow through these catalysts, will also react with a number of other substances such as sulfur oxides, halogenated materials, producing a fine particulate - PSD calls this condensed fine particles – which also cause clogs and release fine particulate into the environment beyond what is permitted by law. So sure are we

and Energy Answers that this will happen that Energy Answers is asking the EPA, and the EPA is considering granting, a dispensation to emit fine particles above usual regulated limits. One use of these catalysts is to reduce the oxidation of nitrogen, but otherwise it will lead to the violation of the fine particles regulations. As if the condensed fine particulate would not come out to the environment and also harm the population.

Another way this technology fails is that these catalysts poison themselves. Substances in the complexity of emissions exiting these incinerators react irreversibly, bind to the catalytic metals, and become poisonous to the technology itself and disable it so that it cannot perform its function well because the complexity of the fuel it is burning. The irony is that once deactivated, these sites, rather than serving to reduce oxidized nitrogen to nitrogen actually pull out the ammonia and oxidize it into nitrogen oxide. So these catalytic fail and this is well documented. It is a problem to use this technology in burning solid waste. In the letter dated February 6, 2012, Mr. Mark Green writes Steven Rivas recognizing they were wrong on the number of times that they will have to turn off and on the plant during the year. He is wrong by 100% he admits to

the EPA, and asks EPA to amend its original repair requests to add for more repair time. He asks EPA for permission to shut down the facility for scheduled maintenance 32 times annually rather than the originally requested 16 times a year. The problem with this is that when you shut down and cool these Catalytic it takes five to six hours to warm them up and turn them back on, and in the meantime, the system will be in violation of a number of parameters and regulations. Energy Answers asks again for a waiver so that the number of contaminants can exceed limits during this period. I have a number of other points that I hope to bring up and enter into the record, when I get another turn later on in these hearings. Those include problems associated with the classification of the material they seek to burn and problems with controlling the contaminants released from the material they burn.

**José Font:** Thank you very much Dr. Rosario.

*(Applause)*

**José Font:** The next time slot will go to Attorney Aleyda Centeno Rodríguez. The person following her will be Mrs. Mirna Conty.

**Aleyda Centeno Rodríguez:** Good afternoon. Energy Answers alleges that this project will impact 64 people per square mile, which is untrue. As part of my testimony here today I am submitting in writing Table 2-15, from pages 2-94 of the Environmental Impact Statement submitted by Energy Answers to the Government of the Commonwealth of Puerto Rico in which the company admits the population density in the sector adjacent to the site is (1,851) people per square mile. The company's statement on environmental justice denies this. It also denies that there are 4 hospitals, 20 schools, 2 universities, 10 infant care centers, 2 retirement homes, and 9 bodies of water near the site. It is known that the health effects of an incinerator cover a radius of 20 miles around the facility. The density of the population around this incinerator is not the only problem we have in Arecibo with this Energy Answers permit and also the apparent apathy of the EPA in granting this permit.

As part of its analysis of the permit application the EPA – at a minimum – is required to require that the data submitted is reliable according to 52.21(b)(48)(ii)(e) of Title of the federal code of regulations. The first inadequate data involves the air quality data

presented. It relies on data collected in the villages of San Juan, Cataño and Adjuntas at 10 PM 10, 2.5 PM, about sulfur dioxide, nitrogen dioxide, oxide carbon and lead. Readings numbered (721270003); (7201002); and (72033008), located in those places, do not even have the time of your reading. This allows you to ignore the reality of air pollution in Arecibo.

English

40 CFR Section 52.21 (2) (v) of Federal Code (CFR) states that fugitive ash shall be accounted for in an application for an incinerator permit. This is according to section (b) (1) (iii). In turn, the EPA must apply 52.21 (3) (iii) (c) of federal code 40 CFR , which provides that the emissions of sulfur dioxide, particulate matter, nitrogen oxides emission from all sources in the area must be considered when establishing the quantities of maximum emissions to be allowed in a permit. At Arecibo we have a clandestine incinerator that the EPA knows about because the Bar Association went on record to the EPA denouncing it in a letter in May 2011.

Also, Merck's Sharp and Dome has an incinerator in the town of Barceloneta already operating for biomedical waste and it has not

been included in this EIA. Valga Battery Recycling noted that both, as they have been PREPA Cambalache new levels allowed by the EPA emission. Under 40 CFR 52.21 (3) (iii) (a) the administrator must include in its assessment of this permit for Energy Answers all authorized emission levels from prior permits.

According to this logic, the EPA must review the emission levels allowed for five (5) years, at least for the following industries emission sources considered major and minor in the area. They are:

- a. PREPA Cambalache
- b. Battery Recycling
- c. Eaton
- d. General Electric
- e. Thermo King
- f. Cutler Hammer
- g. VISKASE Puerto Rico<sup>2</sup>
- h. Master Mix
- i. Nova Terra

j. Merck Sharp and Dome

k. Pfizer

l. Up John

m. all others within 50 kilometers of Arecibo.

By fining Battery Recycling, and punish the ELA by PREPA

Cambalache emissions are exempt include emissions in excess of those industries that were determined to be in emissions compliance failure when it comes to emissions of lead, antimony and mercury.

Under federal code 40, section (b) (48) (ib) the excess emissions are not counted if they have been previously sanctioned.

This penalty, that act of fining those industries for violating the Clean Air Act

and then exempting them for these very violations and from the overall pollution counts of the area is an insult to the town of Arecibo.

It allows them to oppress us and poison us with impunity by ignoring reality and amount of children in our Head Start programs whose

bodies are filled with Lead, who have been poisoned by lead It

ignores the number of people with diseases

from pollution with mercury from high school, which

have asthma, and hide that these are not the only existing toxic. It allows them to ignore their obligation to make a study of public health before authorizing this permit. EPA is known to have antimony, cyanide, copper, selenium, trichloroethane, chromium nitrates, nickel, zinc, trimethylbenzene, N-hexane, Benzoperylene, hydroquinone compounds polycyclic aromatics, lead, mercury, benzoyl peroxide, 1,2,4 trimetilbenzeno, naphtha, benzo (GHI) perylene, silver compounds and manganese. All these arise from an EPA report itself. The data from the years 2007 to 2012 are to be included, according to Federal Code 40. 52.21(3)(ii)(a). (CFR) that has to be taken into consideration the five years prior to the start date of a new source of pollution. All these compounds were present at Arecibo in that period and EPA has a duty to include them in accordance with 40 CFR 52.21 (3) (iii) (c). The EPA came last year to give a protective appearance Arecibo, when the truth is that it allows polluting industries to their wide, and



delegates sampling in those same polluting industries. Those are not reliable data on which EPA can safely base its decision to give such a permit to pollute this area. And there is no real and reliable EPA data to make a determination on this permit in Arecibo.

On the other hand, EPA is authorizing burning car tires without reliable evidence that the technologies uses Energy Answers are capable of protecting the environment and health and Arecibo residents regarding the fuel.

EPA is also allowing all documents do reference to standards of 2010 when we know that there are new 2011 standards for mercury, lead, the 8 compounds included in greenhouse gases, and a new policy public on particulate matter to prevent asthma. The EPA unknown whether the EPA proposed additions are efficient – that Energy Answers propose are efficient -. And we doubt its efficiency because Energy Answers has never been able to meet the requirements on their Baltimore plant proposed in 2011 and 2012. The Environmental Protection Agency has launched an authorization permit without requiring the use of any technology that analyzes the amount of dioxin to be issued in order to establish how this plant's release of dioxins and furans will affect the people of Arecibo. This absence of

dioxin measuring technologies in EPA's consideration of Energy Answers' permit request is a major oversight -- and is disturbing because the EPA's Technology Assessment Program has evaluated different technologies that can be used to measure dioxins in the air. I am submitting here in writing as part of my testimony the EPA documents containing assessments of these technologies.

The absence of test systems for the emission amount population exposed to dioxins to be contaminated by continuously emission compounds such as polychlorinated dibenzo-p-dioxins, polychlorinated Dibenzofurans and certain polychlorinated biphenyls.

The absence of measurement mechanisms will enable communities have no way to test exposures to dioxins and furans. This permit is being included which can be used daily alternative fuels such as: Tired derived fuel (fuel derived from tires), automobile shredder residue and processed urban wood that may be contaminated with pentachlorophenol, which generate dioxins. It authorizes burning plastic and tires, vehicle engines as well as plastic parts for motor vehicles, which also can generate dioxins and furans can also be contaminated lead. Because these vehicles

may have used leaded gasoline, which by definition is a hazardous waste.

EPA is obligated to take appropriate measures to ensure the health public, something that has not performed in this permit to allow dioxins and furans emitted without control. EPA's conduct we exposed to environmental discrimination in violation of its duty to preserve the quality, welfare and public health. This is true not only for Arecibo, if not the entire island because Energy Answers suggests burning five thousand forty (5.040) tons per day in three incinerators, according to the Web 3.3 of material separation plan and Figure 3-4 Table 3.6. They are proposing three incinerators and not one; one called North Center, one called North West and one called North East.

(Applause)

**José Font:** Thank you very much to Attorney Aleyda Centeno Rodriguez. They are telling me that Ms. Mirna Conty will not use her turn, so the next slot belongs to Ms. Natalia Arelys. Following Ms.

Natalia Arelys (Pagán Pérez as she is listed in the table of contents) will be Mr. Javier Biaggi.

**Natalia Arelys:** Hello! My name is Natalia Perez Pagan, (*translator note: she is giving her name as Natalia Perez Pagan, and was listed in the table of Contents as Perez Pagan. In the original Spanish she is identified in bold as the speaker as here as Natalia Arelys*). I am second-year student in the Department of Environmental Sciences of the University of Puerto Rico Rio Piedras Campus. I'm managing and am the current president of the environmental group Eco-Friends, and am currently enrolled in the Father Anibal Perez Belen School in Hatillo, and I remain active in community organizations that promote conservation of our resources and to encourage responsibility in each of us. This afternoon I'm here to represent my people and the youth. I'm here to say no to the waste incineration plant proposed Energy Answers. Many times we young people appear like we're ignorant and naive. They underestimate our ability to judge a problem sometimes faces. We take into consideration slightest when making decisions obviously important that affect our future, and why not?

Today I have a message for you, neither myself nor my generation, nor those who come after us can allow the deception attempts Energy Answers attempts to impose on us. And let me clarify that half-truths are equivalent to lies and a lack of honesty. Energy Answers says the garbage incinerator is a viable alternative and I quote: "to ensure a

Arecibo's citizens have a safe way to dispose of their garbage at the imminent closure of its landfill "But I say," environmental problems and replaced generating health landfill by other contaminants are also harmful to the environment and human health. " They ensure that the Arecibo incinerator will make Arecibo the technology capital in renewable energy and solid waste management facility and a model for the Caribbean, Central and South America. Why Arecibo must be an example for the Caribbean, and Central and South America, when they have been for us? When a project is proposed incinerator garbage in Costa Rica, the Global Alliance for Alternatives to Incineration (GAIA) and the EPA – you folks – said that the it would take more energy to incinerate the waste than to reduce reuse and recycle the same materials. I mean, you, the EPA are also in favor and prefer concept of 0 trash vs. garbage incineration? This is not

only true in Costa Rica; countries like Brazil and Chile have rejected such incinerator proposals. Argentina's incineration plant has released dioxins at a level fifty-two (52) percent above that which permitted by law. If these countries offer us the bad example of what Energy Answers intendeds for Arecibo, we reject their proposal. I speak clearly and with a loud voice: we do not care! To us what we are interested in is solving this problem of what to do with our garbage and landfills. We are looking for a clean, efficient and cost-effective way to deal with our solid waste without threatening in any way the quality of life. The concept of 0 Garbage is where we have begun. You have to recycle and reuse, but more importantly I think is cutting cut our original waste footprint. We live in a consumer society where the amount of waste produces is totally absurd, and a hungry incinerator, which needs garbage to survive and feeds on garbage, seems a bad answer to the question of how can we get closer to 0 garbage. It begs the question, what are we really trying to do? Is our goal finding trash to burn, or is it reducing its production in the first place, to avoid the problem of figuring out where to put all that waste? I think it is obvious that the solution here is to foster a people who are willing to recycle, reduce, reuse and compost. If you do not see it, I

suggest that take off the blindfold, and with eyes wide open, accept the reality of the matter. Incineration is not an option, I will accept, and I will convince you. Energy Answers If you want to be an example, if you want to be an example, I ask you to please listen to the voice of the young. What you do today, we have to face tomorrow. So if you have no way to fix your mistakes, do not commit to make them. There are other ways to fix things, other methods to earn money and earn it honestly. But there is no way to restore health to someone who loses it. This absurd proposal for waste incineration is irresponsible and only reflects the lack of consciousness of those seated here in this room, who claim to be professionals. So the next time you have to draw in and entice the young and ignorant and naive, and attempt to deceive us, please remember this afternoon what we have said what we want and what we do not want. I think I've been quite clear. That's all.

**José Font:** Next will be Sr. Javier Biaggi and after that will be Ángel González.

**Javier Biaggi:** Why I do believe EPA should not grant any permit to Energy Answers? There are four basic areas under which the permit is not justified: a technique of governance and law enforcement,

health and democracy. Technically consider three aspects of the Aeromon simulator. First there is no evidence of calibration and standardization program and subroutine regarding Puerto Rico in general. We know that has been evaluated and normalized to some states and countries, but there is no evidence that those standards hold true or work for Puerto Rico. You and I know that the plant passed Arecibo Cambalache modeling Aeromon twice, when he missed the first thermoelectric time to comply with the emission parameters, then everyone swore they had the best technology, and they met all applicable local, state and federal EPA guidelines. And the second time when they brought the new catalyst and returned to swear the same and also failed. Therefore EPA has yet operation hamstrung by not daring to close. Today all that we heard yesterday, including Mr. Rivas, who was the one who was in charge of EPA's assessment of that plant, it seems that we hear the same word for word but now about a plant that emits toxins from its chimney and of course toxins into the earth in the form of ashes. That's what this permission is based on, this incinerator's supposed ability to produce air with less toxins than that around facilities with the incinerators. But is it really the best technology to



which we compare and hold accountable this new project to? We know in Aeromón that you have made many changes, and debugged the program. From July 2006 to February 2012 there have been over 140 major changes, but from 2009 to 2012 107 amendments have been made, this is the magic dispersion model that has been wrong so often and rightly should not be the only reason to approve anything, nor the basis for such permit being granted and even Less so after we have seen how many changes have had to be made in other projects approved for permit for them to struggle to meet compliance standards.

The EPA needs to provide better quality assurance that this fragile toy of a mathematical model remains the best model for Arecibo.

Second, EPA has Energy Answers accepted that the meteorological data used in San Juan Airport and installation of Authority Electric Power Cambalache replacing the logical requirement, that Energy Answers do its own one-year monitoring of the Arecibo meteorology. Who in the EPA official who is the certifying meteorologist authenticating that meteorological data from Arecibo and San Juan are the same?

The only expert agency that can do this is the U.S. Weather Service.

I consider it inappropriate for EPA to approve this permit without consulting the Bureau of time to accept that proposition. Nor was appropriate to accept the data from the Power Authority without further consideration, without any analysis of the quality of the data. Not knowing if those instruments that are not owned or supervised by the Bureau of time are properly calibrated. I took several years for the weather station Arecibo East and Southeast Weather Service and instruments regularly visited them. This station is not even weather is on the network to be private. He was also unwise EPA accept Electricity these data that has already signed a contract for power purchase Energy Answers. We challenge this data because they represent reality and Arecibo weather because they are untrue. I understand that the sub-routine that added environmental physiographic data not included in the analysis of Aeromon because they were not available. It is incredible, however, that this information has been left out of this conversation because it is that very physiographic data, which is going to determine how the plume of smoke travels from the chimney. The smoke will hit many geographic landmarks and changes in temperature and elevation that will change its direction. Considering the plant's chimney height of 90 meters,

let's first look to the west to the small mountain of Cerro Marques with a height of 68 meters, which is hit perpendicularly or straight on by the prevailing winds. Ahead of that is the Cerro Santa Teresita, about 100 meters tall. In the southwest and west there is the San Felipe Plateau, which is taller than 100 meters. In other words, even with the chimney's height of 90 meters smoke will flood the entire Hato Arriba and San Felipe Plateaus. Surprisingly, it has not been taken into account the prevailing pollution, or background contamination. So much so that not even been taken into account the effects of the dust from the Sahara desert that hits this area of Puerto Rico for six months with different intensities; this year was one of its strongest years and we felt the affects here of the particle-laden, sandy air, to which you are now talking about adding the particulate generated by this incinerator. Nor does it take into account the salt that during bad time at sea is dispersed throughout the population changing the atmosphere's density and quality. These events are very frequent here on the island.

Why no mention of these phenomena in the analysis of EPA? Who hid or who ignored them, or who forgot to include them? Why did you not take into account the toxic plume illegal crematorium

Neighborhood Factor? Not even the contamination of the lead smelter? Why not include diesel emissions of nearly eight hundred (800) trucks to reach that plant? Why not have used monitors from the Environmental Quality Board if any? And now we know that they need to be there and action has been taken, they are not where they should be. Where are those results? Landfill gas then no, do not go in any analysis or any monitor. Why EPA has precipitated a PSD permit intention when proposers and the experts are lacking the actual data needed to make a proper assessment? Why EPA has not made a good quality control of the data that have offered and the data they already know? Why the EPA has not validated their programs to the reality of Puerto Rico and in particular has not been required monitoring of a year of weather reality Arecibo?

On governance and "law enforcement" Why EPA has rushed an intention to give permission to a facility that will knowing it will not be able to monitor its activity because it does not have enough staff.

How can the EPA have approved this permit without questioning any details of the statement of environmental impact and while ignoring all opposition to the project, even as annexes to the file? It was an agency that has shown little ability to manage affairs of the

atmosphere. His lack of character has resulted in major accidents such as environmental CAPECO. The agency lacks independent criteria and acts only on small polluters but does not take on the big polluters. They have closed hundreds of thousands of small businesses: garages, mechanic shops, artesian and those who work with sheet metal and paint, but have never closed a major polluter, and to be frank of the major polluters is the government itself. It is an agency in other words that is too weak, which is not able to protect anyone in Arecibo or in Puerto Rico.

For example, at the Cambalache plant, the Factor crematorium, and the Water and Sewer Authority, there have been environmental incidents, most notably, the documented injection of sludge injection into the wetland, and the contamination of the Rio Grande de Arecibo. There have been other more recent events in the lead smelter. The Environmental Quality Board has not even informed the people about these events. There has been a deathly silence. We have the right to know what happened there and details so we can protect our families. Fear, not panic is a good public protection policy. The policy of silence is criminal because of danger to an event, you do not trust them

can take protective measures. When the event was announced Lead, Environmental Quality Board said not to worry because they were watching a monitor air quality. We know where monitors are today. That's when we really started taking measures. Because when an agency head says not to worry is then that we really buckle down. EPA remember and act followed made a comment saying that four kilometers around the plant were contaminated, and no one has said anything, not even what happened with cows that tested positive for lead in milk. Also silent were the Department of Health and the Department of Culture. How can EPA grant a permit to a company to establish a contamination generator, knowing how weak the supervisory potential is here on the ground in Puerto Rico, so poor in their management of public protection and environmental? The EPA would commit a grave irresponsibility if it confers a pollution permit under the current state of governance and weak regulatory agency laws and regulations in Puerto Rico. EPA should also study the scientific aspect of the proposal and must give weight to its own past experiences with the local regulatory agencies here. EPA must realize and acknowledge that the local regulatory powers are not a right of the local Puerto

Rican state, but rather a privilege and responsibility to be assumed by the EPA under its system of accountability and agency governance. To summarize, for us to feel protected three things are needed -- strict regulations, adequate monitoring, and a strong commitment to enforce the laws. I remember a saying: "He who burns milk a cow weeps when he sees him." So this is how we the citizens of Arecibo feel when we see any representative of the Environmental Quality Board. I am opposed to granting this permit because so far the EPA has ignored the precarious environmental state the area is already in.

**Evelyn Rivera:** Your time is up.

**Javier Biaggi:** Oh, OK. Nothing, finally to summarize only wanted to ask a couple of questions in the name of democracy I'd like a show of hands to answer the question of how many here in the room are for or against this plant? "How many are against this plant?" For the record, in the record of these proceedings I would ask that you show that the vast majority of the public is against this plant.

**Jose Font:** Thank you Mr. Biaggi.

(Applause)

**Jose Font:** The Time is Now Mr. Angel Gonzalez and followed Mrs. Jessica Seiglie.

**Carrasquillo Gonzalez:** Good afternoon and thank you very much for the chance to speak. I'm Angel Gonzalez Carrasquillo; I'm a Doctor of internal medicine, an Internist, and I am chairman of the Environmental and Public Health College of Surgeons of Puerto Rico. I chair the committee in opposition to the approval of an air pollution permit to Energy Answers in establish an incinerator in Arecibo. What is scientific basis for granting this permit? And besides that, who is the person responsible for the continued policy of evaluating air pollution in isolation from other parameters, which affect the quality and cleanliness of the air? Here in Arecibo, we get carried away by the proponents, who claim that they have a technology that will basically eliminate almost all air pollution created as a byproduct from incineration.

That means that the ash or slag will include the same contaminants that the original garbage had but in much more concentrated form, because obviously, matter cannot be destroyed, so the garbage doesn't just disappear into the air, it converts to ashes. And then these will be buried in a landfill, perhaps even in the same Arecibo dump, they have not said. Then the juices of the garbage will pollute nearby water bodies. So it would be reasonable to make a



comprehensive assessment of where they are going to stop pollutants from entering our systems that are then in water and in the air and in the earth. For me, as a physician, for example, I think this assessment of air pollution is similar to examining the system a patient's respiratory system while disregarding their circulatory system. This of course would be a most mediocre and incomplete assessment. Second, Instead we want to register our insistence, we express in a letter to Mrs Judith Enck, who is the Administrator of Region 2 EPA, June 14, and Ms. Lisa Jackson is the Administrator of EPA Central on August 3. Because we are concerned that the person charged with this process has already prejudged the situation in Arecibo, and not can be objective when making a determination of this permit. Therefore we reiterate the request that Mr. Steve Rivas be removed from the consideration process for PSD permit. We ask that the proper research on the permitting process be done and you restart the PSD process outside the influence of Mr. Rivas. We reiterate our surprise and indignation at the close relationship of the company proposing, Energy Answers, officials with the EPA Region II, which are evidenced in the communication chain that we have examined. The EPA was holding the hand of the proposers to help

Energy Answers comply with its permit before their application was submitted. This company, with enormous resources, does not need the help of the EPA in submitting its permit. However, our communities have had to work alone to oppose this proposal.

Unlike this company millionaire, Energy Answers, our resources are volunteers, and we intend to use them to satiety.

The College of Physicians and Surgeons of Puerto Rico have a long history of opposition to the alternative of burning trash to dispose so-called solid waste. We are opposed for reasons of health, as the medical college has no interest in this controversy than to protect the health of our patients. We have no economic interest economic nor do we own property in the area in question, or shares in any competing interest with the incinerator. Neither I personally nor our advisors generate income from this work, which is entirely voluntary. Only we are following the mandate of our Oath, which is to protect the health of the people, which the incineration project puts at risk. We are aware of the problem caused by the landfill and its potential negative impact to the environment and health. But we believe is a false choice to argue that or buried or burned as if there were any alternatives. There are multiple jurisdictions, both in the

U.S. and outside it, that are implementing the strategy known as zero waste to deal with the situation. Our strategy should focus on reducing our waste footprint, including reducing unnecessary consumption, reuse, recycle, redesign and adjust behavior. In this way we will produce and have to deal with only a small fraction of the waste we speak of today. We see incineration as an obstacle to the goal of Zero Waste, for the combustible materials are those that could otherwise be recycled. In addition, the business will decline if incinerators consumption decreases and the projection of solid waste, whereby the Incineration is not going to encourage the reduction, as claimed. Additionally it is unwise to implement an alternative waste disposal that will result in the production of toxic products in the name of intending to eliminate them. We will demonstrate this below. We want you to understand that there are questions remaining, which should be answered.

1) Are you going to take to Energy Answers to do a health study of the surrounding community if the permit is approved? This is to verify the health of the public prior to the start the operation of the incinerator.

2) What protective measure of citizenship will require the EPA to

prevent the periods of so-called "start-ups", "Shutdowns" and unplanned events and accidents so that these events are not likely to cause the incinerator to generate any byproducts, which exceed the permitted levels of dioxin, furans, heavy metals and particulates?

3) Will the EPA to give an exemption to emission of pollutants air to the Energy Answers to these periods of "Start ups", "Shutdowns" and unplanned events?

4) During periods of normal operations how will EPA protect asthmatics and others with respiratory disease who can be made very sick by the ultra fine particulate and toxic fine (as lead, mercury, dioxins, furans) that are attached to these particles produced by the incinerator, and can travel long distances and penetrate deep into lungs?

5) We would like to know the collection efficiency of the filters, the "bag house filters "or other technology to be implemented, for particles of various sizes: PM10, PM2.5, PM less than 2.5, PM 0.1, which Energy Answers proposes using a this incinerator in Arecibo and what is its collection efficiency of various metals particularly heavy lead, mercury, zinc, cadmium and others. And we wish for this efficiency to be confirmed by a source independent of

the manufacturer or the bidder to certify or make this certification.

6) According to Dr. Howard of the University of Ulster in Ireland, which is a recognized authority of Nan particles, there are 11 million known chemicals. A hundred thousand are produced on an industrial scale and a thousand to two thousand new chemicals are introduced annually. Any of these chemicals can enter the air in the process incineration, and can create an almost infinite number of products combustion or incomplete combustion. These may be issued as particulate matter or attached to the particulate surface.

Even if these emissions will be monitored, and the vast majority are not monitored, then very little is known about the possible effects on the health of most of these emissions. An analysis of the Total organic compounds, called "Total Organic Carbons" or TOC, by J.E. Stiglie, identified 227 individual organic compounds. In the exhaust gases of an incinerator household waste can be found about 42% of these compounds. Many are toxic compounds – known toxins- and carcinogenic. Has the EPA and its officials examined these studies? Have they been taken into account by EPA officials when determining the risk to the population inflicted if this proposal is approved?

7) Does the EPA have an idea of what the minimum lethal dose of

dioxin to cause disease in humans? What will EPA when this dose is exceeded? What about the potential contamination by dioxins of the milk produced in Hatillo, Camuy and the affect this ash and byproducts of the incinerator will have on the areas' Livestock. Who is responsible for the damage to industry and from bankruptcies to farmers with consequent loss of thousands of jobs? Does this project imply the impending crippling of our dairy industry as has happened in many parts of Europe in the past?

8) In the event that the deposit of 400 tons of ash daily Weir Arecibo How prevent form a mountain ash as in Massachusetts over 40 feet tall and particles dispersed by the wind? And how do you prevent further contaminate the barrel shark? The EPA will authorize ... and then I will make an appointment for the next session ... Many Thank you.

**Jose Font:** Thank you Dr. Gonzalez. Next turn will correspond to Ms. Jessica Seiglie. Then next after her will be Mr. Carlos Mario Garcia Berrios.

**Jessica Seiglie:** Good! My name is Jessica, Miss. I'm from Arecibo,

and am a student at the Graduate School of Business Administration  
Garbage committee also belong to the group “Students Against the  
landfill and Incinerators. “

Before I address you want to direct fellow proponents. I am very  
grateful to Mr. Mark Green from the bottom of my heart and for his  
genuine desire to want to find solutions for handling solid wastes in  
Puerto Rico. A thousand blessings! But it seems that I forgot that you  
came in 98 proposing an incinerator under RENOVA name. And if I'm  
not mistaken his advisor was Luis Fortuño, the lawyer for RENOVA.

Well, **RENOVA never happened, and** now he is Governor. Care that  
Arocho, Toro and Molinari may also end up being governors this  
term. So I want to help Mark. I interested in being governor, or pay  
me travel, not a salary, or tournaments

of basketballs, nor do I need you to pay me for Christmas parties  
known as parrandas nor do I need Energy Answers to pay me \$ 25 to  
come here to support them. I just want you to give me a call; I have a  
proposal that may leave you a lot of money. And I assure you that we  
here in Arecibo will all support it. That proposal is called

Zero Waste and you know this because in the United States has  
more implemented more than ten years ago, and is creating a long,

long, long trail of additional resources. Unlike incinerators, which have not been successfully installed anywhere in the world in twenty (20) years. If looking for different results do not do the same thing and then expect a different outcome, said Albert Einstein. In Zero Waste consider products that cannot be reused, repaired, reconstructed, recycled or composted and should be restricted, redesigned or removed from production. Incineration does not allow any of these Rs first mentioned. For this we believe that restrict or stop remove from the market. You try to sell the incinerator as if out the solution to the problem of trash. But Weir Arecibo receives 600 tons of waste, of which only two hundred (200) are Arecibo. The remaining four hundred (400) come from other municipalities. This incinerator to operate, requires two thousand one hundred (2,100) tons of garbage daily, that is, we will have to produce more garbage than we currently do?

Ah! And then there is the argument that this project will create jobs in our community. If you support this project with the hope of getting jobs, make sure this company provides and pays for an excellent health plan, because you will need it to pay for the cancers working there will otherwise they will burn into your body for years to come.



Do not get me wrong, do not misinterpret me, those who support this project, my struggle is not against you. How can I fight Arecibo brothers? My struggle is against these people who play with the need of my people to convince them that an incinerator is good, when the history of this project has shown that are harmful to health, for environment for our pocket. Because if we do not meet all the crap they need you and I, not them, we will have to pay them. Lean on the case of Pennsylvania. We sell incinerator as if the solution to close the landfill. In view here this past Mr Weir said the Arecibo landfill will not close if they implement this incinerator. Moreover, the incinerator will need for a landfill to deposit the ashes. So, now we will have double the trouble, double the problems. That the EPA grants air permit does not mean that the incinerator will not pollute. This permission only provides guidelines as to where they can contaminate. Right? I grew up hearing the cries of some elderly individuals, who believed that the landfill was the great solution for solid waste management because the EPA approved and supported it. Today, not sleep peacefully watching the ecological disaster. And now I'm talking to you. Today I come here to ask, to this panel of judges, to demand social justice for those who are and

those who come after me. I fight for a just social system for Arecibo. I want equal opportunities and human rights. I feel that we are ignoring the uneasiness of my people, for the convenience of Energy Answers. We are giving away our children's futures to these gentlemen. Give them welfare to them for the health of us all, including you? Because you believe that John is not going to affect this. Milk and water coming into their homes probably come full of toxins. Neither Energy Answers, neither the air quality permit offer an integrated quality of life. Do you really think meet them? What for? Why kid yourself? As they failed to eliminate the landfill, as the company failed to stop the diffusion of lead, with the Cambalache plant, as the law fail to recycle 411. How do I ensure that they will not fail with them? "In the end Error is a weapon that shoots at he who makes the mistake," Concepción Arenal. Thanks and for the record on record, I have here two papers, one from a retired chemist: Jorge Seiglie, my father, and Mr. Angel Diaz that I will leave with you for the public record.

(Applause)

Jose Font: Thank you.

Evelyn Rivera, Go to the table and then deliver them please.

**Jose Font:** Mr. Carlos Mario Garcia. Then Mr. Francisco Pérez Aguiló.

**Carlos Mario Garcia:** Good afternoon. Before you start counting the time I will ask you to please allow me to five (5) minutes additional.

**Jose Font:** We are limiting the time to ten (10) minutes later, the end that all people can carry out their presentation, all who cared to do in the afternoon, if we have time we can accommodate as many other people have already expressed.

**Carlos Mario Garcia:** Ok thank you very much. "Beware of false prophets, which come to you in sheep's clothing, but inwardly they are wolves "Matthew 7:15. My name is Carlos M. Garcia Berrios and I am from Yabucoa, Puerto Rico, and have lived here for over 20 years in Arecibo. I have been a chronic asthmatic for the last 56 years of my life. For me the location and operation of a waste incinerator in Arecibo equals a death sentence. Without any wrongdoing without me been charged with anything, I have been sentenced without trial and without a court having found me guilty of anything, I am condemned. Is this what the EPA calls environmental justice? I

demand said justice for myself and for the thousands of asthmatic people in Arecibo and other villages, who will also be sentenced to death by the granting of this permit. Not the cackles from the EPA that the U.S. government tries to pass off as justice, as when making a killing of an innocent you call it "collateral damage" and yet a fighter defending his homeland from an invader we will say rebel. I come for three purposes, I know these views are for the record, and the decision is already taken. But I want to make my statement for 3 purposes.

First is to express my strongest protest and absolute outrage at the way the EPA has conducted this process and make a public denunciation of this fact. They have used the law of the funnel, placing the wide part up to the ear of Energy Answers and the tiny little tube on the other side, close to the people. While Energy Answers has more than two years promoting the project before the agency, the people have limited time of their papers, first three (3) minutes and now, as they want to appear as magnanimous to ten (10) minutes! Is this, the Environmental Justice for which the EPA is known? This discrepancy of time to speak shows the undemocratic nature of this process and represents an act of tyranny and a crude

exercise of power, more typical of totalitarian regimes than that of an agency that represents the nation that claims to call itself the cradle of democracy and guardian of the human and democratic rights of humanity. This process is a dishonor and disrespect to the people of Arecibo. People are being sentenced to suffer dire and terrible fate in the next thirty years by an unfair and biased decision of the EPA.

The second purpose that moves me to appear, is to remove the costume of the sheep and show the leading representatives and spokesmen of Energy Answers in Puerto Rico for what they truly are, wolves. Let the people see what moves them and how they lie, over and over and hide information, to deceive.

Let's see what I mean. In August 2008 a fire occurred in the tank tires on Integrated Waste Management facility in Peñuelas.

According to the EPA's administrative order, RCRA 02-2010-7302, the cause of the fire was the improper storage and handling of tires in open violation of laws and regulations. The toxic smoke clothed the communities of Tallaboa causing serious damage to the health of residents. See Attachment 1 – Photos. These images represent the burning tires tank of Integrated Waste Management. A year later the

tires were still burning and toxic smoke affect the health of communities.

To date, according to the testimony of residents of the affected areas, this environmental disaster is still affecting them. In late 2008 the Environmental Quality Board (EQB) and the Department of Natural and Environmental Resources (DNER) ordered to be plugged with dirt tires for allegedly stifle fire. This worsened the situation, as it became the place in a gigantic bonfire. This imprudent action Quality Board Environmental (JCA) and the Department of Natural and Environmental Resources (DNER) resulted in the extinction of the fire will be difficult, smoke and ash continue affecting communities and increase the aquifer contamination by toxic substances and heavy metals released. Under pressure from the affected communities, in March 2010 the EPA was forced to hold public hearings on the issue of Tire fire caused by irresponsibility and Integrated Waste Management negligence. I have with me a copy of presentations by Mr. José Manuel Díaz Pérez and Ms. Yvette Gonzalez Cuascut, residents of the affected communities in denouncing this situation. The EPA issued an administrative order RCRA # 02-2010-7302 against Integrated Waste Management insisting that they remediate

and clean the area with which they have failed to comply.

What does this have to do with the proposed incinerator in Arecibo?

Let us examine in more detail:

- Who was the lawyer and one of the owners and Member of the Board of Directors of Integrated Waste Management? That person by the name of Rafael Toro, who currently serves as the chief representative, advisor to Energy Answers and the company's lawyer in Puerto Rico. Has been linked to the waste tire industry for over 10 years.
- President of Integrated Waste Management, is or was, Mr. Julio Gonzalez Fortuño, who also appears as vice-president and secretary of R4 Enterprises Corporation, another company related to the industry discarded tires.
- The president and treasurer of R4 Enterprises Corporation it is Mr. Melvin Gonzalez Fortuño, which in turn appears as vice-president of Integrated Waste Management.
- Who was the Secretary of the Department Natural Resources when ordered to cover with earth burning tires which hampered the fire situation and aggravated the situation of air pollution, soil, groundwater and threatened the people's health? That person was

Sr. Javier Vélez Arocho, one of the staffers of Energy Answers, who before becoming the Secretary of Natural Resources was an employee of the EPA!

Lies and more lies. Last year, the School of Chemical Puerto Rico Aguadilla held a forum on waste management solids. One of the participants was Atty. Rafael Toro, in Energy Answers representation. In the Questions and Answers I asked Attorney Toro, that being the one of the owners of the tire recycling company which had occurred the fire in Peñuelas, if he had an agreement with Energy Answers to burn tires on the proposed trash incinerator Arecibo. Atty. Rafael Toro was agreed that counsel for the company above and a member of its board of directors. He said that although Proposed garbage incinerator had the ability Arecibo burning tires, not intended to do so, because the burning of tires would cause operational problems for its high caloric content. In public hearings of the Commission on Health of the House of Representatives, RC 1600, one representative asked if going to burn tires in the garbage incinerator, Esq. Rafael Toro said no. Energy Answers already had submitted his application



for permits to the EPA, which included the burning of "TDF". The Law for the Tire Management defines "TDF as:" whoever tire whole or shredded rubber that is used for its calorific value for energy.

Its use as a fuel is not considered recycling. "Was that Atty.

Toro did not know this fact and therefore incorrectly answered our question and the question from the representative? Or deliberately lied to knowingly and with full knowledge of the facts? It makes it very hard to believe that Atty. Toro did not know this, as he is the main representative and advisor to Energy Answers in Puerto Rico and has full knowledge of all elements of this project. Attorney Toro as a Chemical Engineering is a lawyer with a practice in environmental consulting you must know very well all environmental laws and regulations, There are several questions that need to be clarified: Why Energy Answers, if as said Atty. Rafael Toro, will not burn tires, it includes in its application for permission to EPA?

Obviously I need more time, but I want first of all, before completed, the following. Whoever wants to hear, let him hear!

Whoever wants to see,

I see! The obvious purpose of Energy Answers, their sheep and their buddies, is pushing us to the Arecibo, the more than three million

(3,000,000) from discarded tires produced in Puerto Rico annually, so that we breathe for the next 30 years! Why what? Because discarded tires are "a gold mine that never is exhausted. "They represent a lot of money and greed of some not known limits, or care about the pain of others. I hope they give me another chance.

(Applause)

Jose Font: Next round is Mr. Francisco Perez. If Mr. Francisco Perez is not present, the next turn goes to Mr. Obed Garcia. After Obed García will be Mr. Waldemar Flores's turn.

**Obed Garcia:** Hello my name is Dr. Obed García I am a doctor in the Arecibo area. I am a member of the College of Physicians, board member of the College as District President Arecibo.

This evening I propose to comment on the impact statement environment. For me what are some inconsistencies I found in the preliminary environmental impact statement submitted by the company Energy Answers.

The justification for this project speaks of the need to create "renewable energy sources", to create a source of "energy

green. "It should be noted that burning garbage should not be considered a renewable energy source. On the contrary, are burning resources, which would be needed to extract the atmosphere again and re-create them, as for example paper, plastic timber. And in addition is organic material that could burn be used to create compost.

He also notes that this technology would reduce the impact environment by reducing CO<sub>2</sub> emissions to the environment. Without But talk is talk about incineration combustion. The combustion reaction is simple. Burning a compound (for example a hydrocarbon) and produces CO<sub>2</sub> or CO and water and heat. So this is not consistent with an environmental policy to reduce CO<sub>2</sub> emissions. Which is the major effect of emissions.

Incineration does not reduce greenhouse gas emissions related to the effect emissions. Although alleges that reduce emissions methane. This is not the only greenhouse gas and gas probably the most abundant greenhouse effect and is more responsible Global warming is CO<sub>2</sub> and CO. This would go against an

environmental policy to reduce greenhouse gases.

In advertising blurred by Energy Answers, talk, said the

incinerator corresponds to the need to close the landfill.

But there is no official date for the closure of the landfill in Arecibo.

Moreover EPA has said it will close the landfill in Arecibo.

Disposal of ash created by burning, as likely, these end up in the landfill at Arecibo. On page 1 of the environmental impact statement submitted by Energy Answers it says: "Energy is actively seeking possible re-uses for these ashes, however those for which a reuse is not identified will be arranged in a landfill authorized and in compliance with applicable legal requirements. "Same statement environmental impact of these ashes talks end in the landfill.

There is also talk of a crisis in the management of solid waste, which is true. However, incineration is far from solving this problem because it creates itself tons of ashes, which end up in the landfill. If we're talking about 2,100 tons of waste daily; would create at least 420 tons of ash. This is taken that only said Energy Answers create a 20% ash, from 2.100 corresponding to 420 tons 20%, and that's a lot of waste. There is talk that this would lower energy costs for Puerto Rico. However, in the preliminary

environmental impact statement says that the plant will produce eighty (80) megawatts of power from which seventy (70) would be sold to the Electricity Authority.

The Power Authority produces five thousand eight hundred sixty four (5.864) mega watts. Energy production for this plant corresponds to 1.19% of energy to Puerto Rico. It is possible to cheapen energy production from Puerto Rico by incineration, or stabilize oil prices high in Puerto Rico as alleged by Energy Answers. In addition, a preliminary study found no public health in the environmental impact statement. Another myth that Energy Answers has disseminated the radio, in the local press, is job creation. The environmental impact statement speaks 150 direct jobs in the operational phase. They are arguing over 500 jobs, which is a lie.

My concern as a citizen and health goes beyond that build an incinerator in Arecibo. It should establish an environmental policy that is the benefit of all, that preserves our resources and improve the environment in every way possible. It must provide better public policy not only to the government of Puerto Rico but of U.S. to continue to be made no incinerators in anywhere. It should

promote reuse, recycle and reduce. As for example in San Francisco in the city of San Francisco where he has managed to divert 82% of landfill waste. This is all my paper thank you very much.

**Jose Font:** Thank you. The next person up is Waldemar Natalio Flores and after Mr. Flores it is Dr. Eduardo Ibarra's turn.

**Waldemar Natalio Flores:** Waldemar Natalio Flores, Officer of Quality Control on the Environmental Quality Board, the only one, who has been trained in Edison, New Jersey by Quality Assurance officers for a week. I prepared four (4) documents, two (2) are addressed to Attorney Rafael A. Toro Ramirez related to the information he promised me on Friday August 12, of last year about the scientific studies related to: Processed Urban Wood Waste, Auto Shredder Residue, Tired Derived Fuel, and other studies involving allegedly beneficial uses of fly ash, bottom ash and the aggregate. I have not received anything to that regard since he promised it to me. The second document is related to that in exhibit 34 and 35 of the permit application for impairment significant, including the comments made by Waldemar N. Flowers related to (QA / QC) on that day. The third document is a one-page evaluation of the application for the permit, which the boss of the division admitted to me has mistakes,

and who told me that in processing this permit some gross errors and blunders were made here.

The other document is an assessment of the other exhibit 33. In this document, my initial recommendation is the first, as a former officer of quality assurance in the Environmental Quality Board of the EPA is for an investigation to be initiated by the Environmental Protection Agency at the level of Washington, District of Columbia, including its divisions of corruption - Or whatever you can call - and federal justice: for at a minimum the blundering performance of their duties of the following EPA employees: Steven C. Rivas, Viorica Petriman and Anna Maria Coulter. It is impossible for the branch chief of air permits, in Region 2 in New York, to have on Wednesday, May 23 this year, admitted he does not know that there is a guide for quality assurance in project plan modeling. That is inconceivable unless there is some level of incompetence, corruption, negligence, or all the three involved, and as I understand it is all three. For example, let's see here you had to ask for a draft plan of quality assurance. Why do we talk about a protocol? What is a protocol if not part of a plan of project quality assurance. The draft plan of certainty quality required to be prepared as part of the objectives

of data quality: data quality objectives. It consists of seven phases of which I am in possession of five trainings on quality objective data, equivalent to seven days, and that requires public participation.

And then we'll take a look at the weather data. The meteorological data ...At one point, the president of the Sierra Club, spoke to me to inquire if the meetings Energy Answers has had with the community are to meet their requirements for public participation. With all these problems, what was understood was that the data would have to be analyzed with regard to those citizens who would be affected.

Take at the look, the weather data presented here ... look, we're talking about that were used to justify the Cambalache Station of Electric Power Authority, which has a documented history of noncompliance with laws, regulations local environmental regulations and all kind of federal violations, which the state comptroller Free Commonwealth of Puerto Rico - Puerto Rico's government, the colony Puerto Rico, call it what you will - has acknowledged. No only that, the EPA has intervened to protect these deficiencies in data.

We have here, as part of the documentation, using the data from Wednesday August 12, 1992 to Wednesday August 11, 1993



regarding Cambalache of the Central Electricity Authority - which already signed contract, which is part of this process, which has never met with a quality system (that I can not define the ten minutes) --- Also including the National Weather Service when, according to the EIA, we have Cambalache station located at 0.78 miles, 1.25 kilometers of the place in which to the plant is planned to be established. And the Luis Muñoz Marín International Airport is 45.92 miles, 73.9 km (Weather data) from the proposed incinerator. That there is no information system quality, and the National Weather Service, when the guide used, which is the part of the appendix W fifty-two of the CFR says:

Use the last five years of meteorological data, or data from one year from the very spot where the incinerator is planned. Not data they already have that is 20 years old, or at least 19 years old That what we were used to address Cambalache wind, wind speed, temperature, solar radiation, Z Sigma, Sigma Phi and temperature difference between different heights. The speed and wind direction was measured at 10 and 30 meters of altitude, (that is not at all close the actual height the incinerator chimney will have). For station Luis International Airport Munoz was used cloud cover, right height,

pressure and relative humidity. Additional meteorological winds also Station were used including temperature at the Airport, treating the area as a flat plain (which it is not) and using data from 92 to 93, what happened in the other years? Well, look I'll use that was what they used in 92. In 1992 to 1993, according to information corrected for wind study says there calm winds at 01% calm in Arecibo. When here is that during the day we will have Tierra Mala atmospheric currents and evening Tierra Mala and it there will be a calm period. At that time, Louis Airport Munoz tracked with a 4.42, that is more than 4.41, but when you take meteorology studies from 2005 – the EPA and Energy Answers have NOT utilized this more recent data – this 4.41 figure is more like 30.66%, for 2006 it's 20.9%, 2007 18.70%; 2008 15.67% and 2009 it was 21.22%. What does a lull period mean? Well what this means it hat the look at the pollution will flow out of the chimney and just fall off into the town of Arecibo because of this lull in the winds.

Energy Answers Conveniently uses data from 92 to 93, which is useless. The model that Biaggi spoke of is used in Alaska. The tropics do not compare to Alaska.

Steve C. Rivas, Anna Maria Coulter and Viorica Petriman, are the

first people that I have evidence, because they are mentioned in a point was the change of information, and are not included in a plan for quality assurance, which was what had to be ordered because such a plan mandates public participation. And they have to be investigated by the EPA, Department of Justice: Incompetent, corrupt, but Energy Answers to add me also. For they say that Energy Answers are the titans of the prairie, they know, and the EPA had to be corrected and castigated for the two years they spent simulating data with Energy Answers. Simply state here has been corruption and inefficiency.

We are talking about wind roses - a graphic tool used by meteorologists to give a succinct view of how wind speed and direction are typically distributed at a particular location. These are effective sampling reliable analysis. Look the TCLP is completely discredited as a technique. It is used for waste that we generate at home, household waste, and even the name is a fake (the leaching procedure toxicity characteristics) toxicity What are we talking about??

Carcinogenic, mutagenics and teratogenics, according as the law of Toxic Substances Control of the Environmental Protection Agency?

No.

We are saying that due to leaching, temperature, pressure, moisture, that is being removed with machinery and moving a landfill, it will generate leachate but not even the coal ash Guayama (and lots to talk about it) or the ash of this incinerator, or any incinerator (such as Barceloneta) are non-hazardous waste. There is no research to back up any claim saying that these byproducts are not hazardous. With the crappy meteorological data submitted here with this permit application, it is simply impossible to tell what will happen with the incinerator. What Region 2 of the EPA should have demanded, is the establishment of weather stations all around the area of Arecibo to take weather measurements. Because if they are generating four hundred (400) tons of ash daily will be releasing 1,700 tons of pollutants into the air. This is a license to pollute. I have this information - I have to find someone who can pass the four documents I have here to the right folks. I will be sending them and leaving them here today, demanding an investigation, to start with of Steve C. Rivas, an incompetent, who came at a time to say (I have the time) was eight twenty one in the evening (8:21 pm), and who dared to tell the Doctor Osvaldo Rosario that what came down the chimney was carbon dioxide and water.

I do not know how to Osvaldo did not have a heart attack right there when Rivas told him that but I myself almost had a heart attack listening to his ignorance. But the worst was the third witness. Viorica Petriman, I have understood to be an engineer, and Anna Mary Coulter is a programmer. Where are the official quality assurance system (ISO)? Where are the tropical meteorologists? The weather in Puerto Rico here is not the same as the weather in Alaska. Tell me when was the last time a tropical storm came to Alaska? Well I don't know. But I've never heard of an Isaac, or Hugo, or Jorge, or anything like that happened there. Simply this, information and this permit is something that causes God to weep. I'm going to ask for a full investigation. So people of Arecibo, you can count no me, because we need not only a full investigation of here Energy Answers but also of the EPA, Arcadis, and any other consultant or expert local or external who has been used in this case.

(Applause)

**Jose Font:** Thank Waldemar. Next turn corresponds to

Dr. Ibarra. After Doctor Ibarra, it will be Wilfredo Velez's turn.

**Dr. Ibarra:** Dear citizens and residents of Arecibo, representatives and Proponents of the company Energy Answers, distinguished

members of the Environmental Protection Agency (EPA), for its acronym in English, medical colleagues and friends:

We are at the dawn of the XXI century. At present the wisdom of mankind has already decided what is the way forward for the provision of so-called solid waste. The road is clear; it is unmistakable: reduce, reuse and recycling. It is dismaying that at this stage of the knowledge of mankind we seek to establish in an island measuring with an area of 100 miles X 35 miles, such a grandiose structures that is so inconsistent, or the progress already made in this area by mankind or with historical experience. We leave out even the most elementary consideration on our health, which will definitely all human beings deserve.

Puerto Rico, through its history, has designed several master plans to solve the problem of solid waste. One of these plans was in 1995, another in 2004 and another in 2008. They were unsuccessful attempts to solve the problem. No doubt, failed for the same reason the island has failed to implement a universal system health in harmony with the needs of the people. Or to meet our basic food needs. Or to have an educational system that has made possible to optimize the culture, arts, sciences and decrease crime.

The reason for these failures, everyone knows as it is clear and transparent, is political. There has been political, distinguished gentlemen EPA to resolve these problems. That's it.

Today in 2012 is told in this noble people of Puerto Rico that the last and only alternative left, perhaps as punishment for not have required political will to prevent it or solve the problem before is to resort to incineration. We are punished justly quoted. It is the equivalent of trying since September 2012 to resolve the problem of crime in Puerto Rico with the firing squad, or catastrophic illness of terminals with euthanasia, or the the absence of sustainable agriculture developing some kind of bread laboratory. All are extreme measures, reckless, irrational, disrespectful, uneducated and certainly anachronistic.

No doubt we will hear today by the expression of experts in the matter, as we just heard, the serious threats to our health that are involved in the establishment of these industries in Puerto Rico, not only for our generation but for countless generations to come. We know, according to official Authority Puerto Rico Solid Waste that 1,500 tons of solid waste produced by the area surrounding the alleged incinerator will not be enough to meet the

need expressed by its builders, by the company of 2,100 tons for maintain its operation as a character in quotes profitable. Where then will the rest of the tons of solid waste? Do you punish the people of Puerto Rico deservedly a fixed amount per day for failure complied with the contractual relationship to produce enough waste solids to keep this voracious incinerator? How does it may re-educate our children and future generations about the wisdom of reduction, reuse and recycling, when we will be tacitly forcing to produce thousands of tons of waste to meet our contractual relationships established in the year 2012? Besides, who will police this plant to determine which of toxic materials received, they will be properly separated to avoid potentially catastrophic environmental contamination the population of surrounding areas, or perhaps of all the people of Puerto Rico?

We must challenge, greatly, morality and ethics of those who have carried innocent ordinary citizens to visit the plant in Massachusetts, so that they could visually see the happiness and gratification members of the surrounding communities. These entrepreneurs know well that a population they are showing off in this area may be being irreversibly injured with a continuous barrage of



nano particulate pollutants, radiation inducing cancer and other diseases, as well as infectious agents without the sense of what humans can perceive.

Our bodies are not equipped to detect and measure small and continued aggression whose characteristics do not stimulate our senses. Contamination can take place in very small amounts steadily, second by second, minute by minute, day by day and as a result damage after prolonged periods of time, not only the present generation, but to our descendants to come to suffer as a result of our recklessness and interests of the few, for many decades or hundreds of years. It has come to call even call this server publicly ignorant for not personally visited the factory in Massachusetts and the apparent echo cleaning operation and the happiness and satisfaction of the surrounding population. I take today to confirm, yes I am ignorant, but within that Ignorance I can still feel the true motivations of those who intended to solve a problem, and solved by mankind, and that has its foundations in education and good judgment, with an alternative that certainly is a sword of Damocles for health, welfare this and future generations of the people of Puerto Rico.

In the polite thesis in 2010 on landfill versus incineration, the scholar in the field, Francisco Perez Aguiló, concludes that all we always knew, that landfills are not the solution for large problem of solid waste disposal, or Puerto Rico or anywhere else in the world. As incinerators, those are producers and polluters of the environment with hazardous substances, health and in many areas, as well as known carcinogens and possible carcinogens. It is astonishing that the conclusion of the distinguished scholar in the field is that incinerators pollute less than called landfills. However, accepting this, our answer is that what we as a people want and intend zero is zero pollution and crime. No less crime than the 2011 or the 2012, but no. Well, as I see that I ran time I'll skip to the last paragraph, which reads: With these considerations in mind, the College of Physicians and Surgeons of Puerto Rico is calling on the Environmental Protection Agency for denying here in Barceloneta, or other area of this small, naive and beautiful island permits for the establishment of a solid waste incinerator. Because of its small area, even the least amount of contamination can be transcendent and catastrophic. We invite the government of the United States and our

governments, current and upcoming leaders to exercise political will needed to echo the wisdom of mankind and implement in Puerto Rico, what has been achieved in many parts of the world in just months, a polite and sensible re-use, reduction and recycling. Let this be our legacy for this and future generations of this island, you certainly deserve a healthy environment, a clean and pure and a life in harmony with the highest intentions the people of Puerto Rico. Thank you.

**Jose Font:** Thank you. The shift corresponds to Mr. Wilfredo Velez followed by the Rev. Eunice Santana.

**Wilfredo Velez:** Very good afternoon. I have had the privilege of discussing a little with Mr. Font and some representatives of EPA here in Puerto Rico, and one of his officers in New York. And I think the message emerging from this community is clear that the EPA has failed in its attempt to justify an incinerator to Arecibo. And it seems that, just as would the Doctor Paul Conner, who has visited us on several occasions that their contribution in Puerto Rico and many parts World's only justified because there is corruption. Somebody is bribing someone. And last time when we visited here Mr. Rivas, you already heard here other proponents, proposed challenge their

participation in these processes, have said they fear that this man has been the subject of bribes. Because you cannot justify an agency that is supposed to protect the rights of citizens and the right to health, the right to live in peace and tranquility in their own territory, has the problem that we are facing. Arecibo has repeatedly rejected incineration, but we know, as said Dr. Ibarra now, that the problem here is that there will policy so we can put in place a law that has existed for Recycling. And we still have problems because there is not the political will to enforce the law.

I am a resident of Villa Los Santos, a suburb near here, which aims to according to these plans play home to the incinerator. Arecibo, we were victims of a highly polluted environment. In fact, EPA has told us in the past that Arecibo is one of the most polluted towns of Puerto Rico. And as a matter of fact, in Arecibo cases abound of people suffering respiratory illnesses, myself included. I have many relatives who have serious respiratory problems.

The Department of Health has just informed us that cancer is the second leading cause of death in our country and that it will soon

become the first cause. The same Department of Health reports that from 2004 to 2008 2.911 people died from cancer of the bronchus and lung.

Given a box like this we wonder how it is that the EPA granted a permit to establish an incinerator in Arecibo? The incinerator not only added carcinogenic poison to our air with burning trash, but we also brings diesel smoke, because hundreds of trucks on our roads will be circulating pulling other contaminants into our air. According to a recent report, the diesel has been listed as carcinogenic far more dangerous than was previously thought. Arecibo, we deserve better air quality.

Given a forum like the one we have here today we urge this agency not pay for this deception to our people. Incineration is not the solution to our problem of solid waste disposal.

Energy Answers, how can you speak of is one that is going to recycle? If they will burn trash how can burning trash and recycling coexist? It is absurd and sick minds can believe that the two are compatible. Unfortunately many of our people believe these lies. The EPA should not be complicit in this situation. Energy Answers have used a misleading campaign that has put us neighbor

against neighbor with promises of closing the landfill tacked on to the incinerator proposal. You, Mr. Font, the last time you were here, made it clear that EPA was not saying that it is closing the landfill of Arecibo. But these gentlemen go into the community with deception and lies. And so the people are misinformed thinking that the incinerator will eliminate the need for the landfill. So we have the situation we have, from a people divided, not by many but there are good people who have been deceived. My neighbors have given some little notes for you to read here. I will read two nothing more by that time that I can not afford to say:

I do not agree to incinerator proposed by Energy Answers. Through the years factories have brought to Arecibo only environmental pollutants. These decisions violate our rights to choose and enjoy good health. Our people lagging as a result of bad decisions made in relation to projects that are located here. Not taken into consideration the opinion of the people who reside here. And if from time to

Allow me one more quick minute to read one to read one other little letter.

The letter begins, the location of the Energy Answers incinerator aims to produce in our people genocide. Not only will this incinerator

destroy the health of those who live in Arecibo, their neighborhoods and villages, but also affect the town's unborn children and nursing mothers. In Arecibo, these policies have led to a decline in the lifestyle of the townspeople, in their urban structures, and stalled our pride and faith in progress. Our population has been reduced, as we have been selected to be exterminated with garbage, with the trash burning, ruining the entire Island. Are we too, human, material, disposable ones to be pushed into the incinerator once installed in Arecibo?

The letters are Jelitza Raquel Martinez and Rovira. Thank you.

Jose Font: Thank you. Eunice Santana. And then Mr. Wigberto Rivera.

**Eunice Santana:** Good afternoon: I am Reverend Eunice Santana Ordained minister of the Disciples of Christ Church in America and Canada, residing here in Puerto Rico since 1973 and in the city of Arecibo since 1980. Before starting with the thoughts I want to share in this afternoon, I would like to share the following information. Energy Answers threw a party today for the so-called supporters of the incinerator so they would not be Information is this: that it is Energy Answers to those having a party to keep these

people away from these public hearings, without the possibility of hear arguments against the incinerator that people here are taking the time to do. I want that party and that campaign associated with the part to be recorded in this public record as a violation against our people. The company should have its hand slapped for the party alone because it obstructs the permit process and makes it invalid when they do things like hold a party and promote it as an alternative to the public hearing.

I object to the construction and operation of an incinerator in Arecibo because it is neither the best nor the cheapest, nor the only alternative to dispose of solid waste. In fact, the incineration creates additional problems in terms of costs, pollution, damage to the health and quality of life of communities and the general public. Arecibo and surrounding towns already suffer from a high incidence of health problems in the field of respiratory cancer and to be resolve, and an incinerator away from solving the aggravate. The health of a people is sacred under God for everyone. Exposing people to potential adverse consequences, although difficult to detect immediately, (As it has been, for example, the problem of asbestos for years was condemned and has been accepted recently how



harmful is for healthy people) without guarantees of what they can mean in the future, it is unfair, unacceptable, condemnable and cruel. We know that particles escaping into the air as a result of the incineration would create serious problems for people and the environment.

Moreover, even minimally polluting our already saturated environment would be irresponsible, a huge lack of consideration and a death sentence to us and to the children and to future generations.

We have always known that the proponents of construction of these devices never take them into their own communities. Also notice that when folks are given tours of incinerators it is to see incinerators that are not glued to communities themselves or not taken to see the people who live nearby. These other communities do not have the number of farming and agricultural communities that we have here in Arecibo. We ask them why they have to come to Puerto Rico to sell the idea, because if incinerators are as safe and popular, not subtract time for promoting these facilities here. In a country as large as the United States and throughout Europe, where is the wonder that we present, have at least thousands of active incinerators.

Take this opportunity to ask how many were built and how they operate currently in the United States and in Europe. Also would be nice know where the funds come from for their construction projects. Today humanity is suffering the effects of climate change, product of the greenhouse effect created by the emanations environment arise. We doubt very much that the so-called experts Proponents of incineration can say exactly the possible chemical combinations of burning all waste that is submitted to incineration in Puerto Rico and its effects on climate broader levels. I suspect it is impossible to know; whom neither has raised, and then I say it is irresponsible not to know something like this while driving the project.

The basic guidelines that the EPA provides are not necessarily correct for Puerto Rico because of its size, its geography and the flow of winds and by the existing pollutant concentration. And this is if these guidelines were followed. What works on the continent, or elsewhere, must not serve as an all purpose solution here.

Project proponents have lied to the people about various things. Who's on track does not have to lie. They have been told that the not produce garbage incinerator and then had to admit that if it

produces toxic ash, superfluous and dangerous. That would dispose of them necessary to lift a landfill, or continue using the existing, to the detriment of our communities, causing further problems serious.

Continue the landfill there is no solution. We are in solidarity, solidarity with the communities that are close to him, but we cannot let us pass "bait". You cannot trust those say certain things because their pay depends on it. Who we have lied once, continue to lie. Nor can we allow representatives of a project to divide us. Not on a personal level or at the level of community they care less about them. They only care about selling the incinerator and then, as the saying goes, "God to distribute lucky".

The solution to the disposal of solid waste is reduced, recycling, reuse and composting. We have a big problem because of the lack of willingness of local governments and central level will ignore ignore its own laws and then blame the public and spend million in projects that do not agree, that worsen our relations and endanger our lives. Up to them to streamline alternatives, motivating

and educating citizens providing incentives.

The EPA gets to be objective, not to forget that it is satisfied that we have serious pollution problems in this area and to add more would be tragic, and not fall ill with those who seek to impose their projects millionaires. Granting permission for the incinerator would be a violation of the most basic foundations that give its reason for being. We participate in these hearings because we believe that we express to listen to us, they take seriously our approaches and fairly responsive. These views cannot be pro-way to say that people then had the opportunity to speak. This is necessary to answer the questions asked truthfully, with seriously. It is necessary, from these views rethink everything and get in the place of people and communities that would be affected adversely with this project, far from solving a problem would create many more, more harmful and dangerous. Thank you very much.

(Applause)

**Jose Font:** Thank you. Now it is Mr. Wigberto

Rivera's turn. Wigberto is to be followed by Mr. Mark

Green.

**Wigberto Rivera:** Very good afternoon to all. Good afternoon to

EPA members and all who are here this afternoon. I stand before you as a citizen depose Arecibo and candidate for the municipal legislature, concerned about the health and development of our people. As part of efforts to create a government plan for our people has greatly worried that the decline in find our Arecibo. We have developed an ambitious plan will make the citizens of La Villa del Capitán Correa again feel the pride we once had. I have noted that the problem of trash it must and will be treated objectively. But the incinerator is not among our plans. The incidence of cancer among residents in recent Arecibo years is alarming -- this, without the presence of an incinerator in our vicinity. It has been found that the incidence of cancer is higher in the nearby towns where such uses incineration technology. However, I have to point out that some several facilities have been imposed and affecting our health adversely. We cannot ignore these yes factories and projects approved by the EPA, and yet today found that poison our people. Example of this factory Cambalache localized batteries and also the turbine located close to the area where you plan to use the incinerator.

As has been published in medical reports, there is a real possibility

in a polluted environment that children are born with brain dysfunction and other genetic defects. The evidence tells us that products combustion are ash, gases, particles and some toxic effects carcinogens and heat, which can be used to generate power Electric. The adverse health effects caused toxins released by the incineration process has been witnessed and documented by the scientific community.

In my concern regarding the development of Arecibo, I participated with citizens here present in several views related to the development of Tourist Interest Area (ZIT). This development plan, which I have back here now, in no way supports the establishment of an incineration plant in our region.

I ask then ... How to bring more investment to this area? How to view or not view the incinerator's chimney? What investor or businessman in his right mind would be interested in investing in this area?

Finally, and with great respect, I ask those driving the incinerator project and EPA officials, if you have the opportunity to move somewhere, would you think it a good choice to live close to the incinerator? I have to draw attention to what

is happening here today. Many times we have made mistakes - that is, the EPA has committed errors - when awarding a permit and then we found that these permits resulted in deterioration of the health of the people. The people is here and expects the EPA to exercise its function, which is to help the people and provide a backup and tranquility with that if you are doing what have to do, for which they were appointed. Many thanks, and good afternoon.

**Jose Font:** next turn belongs to Mr. Mark Green. If I indicate that the person is going to speak in English, then we have the hearing aids available for those who so wish, to listen to the Spanish translation.

Mr (Ivan Elias): On the contrary, we ask the other way around, that the person translate it into the microphone so everyone can hear, not just the headset, if the translation could come out of the speakers.

Jose Font: One moment please, as we can check if... Those who need hearing aids please pass the cabin to get them. Continue, Mark.

**Mark Green:** Thank you very much. My name is Mark and I'm the project manager for the Arecibo Facility. It was not my intention today to take any of your time or to make a statement, but I wanted to

correct something stated earlier and put this response on record.

Because there is no party being held at this point in time to keep away from Citizens this event. There was an event held this morning. That event is over. That event was to thank those who sent in letters to the EPA expressing support for the project. We did not want to take the time of this hearings focusing in just comments of support. We rather do that if they were willing to submit letters, which I believe are well over four hundred (400) letters have been sent to the EPA, as well as to the Washington and New York offices.

The purpose of having those who wish to express support do it in a form of a letter was to ensure they'd get the maximum time allowed. We also, based on what happened at the last event, wanted to make sure that any potential conflicts or disruptions were minimized, to the greatest possible extent, so that those who actually wish to make comments about the project on the public record and to the EPA had the maximum time possible. Those who attended our event this morning and submitted letters were welcome to come, if they so chose.



So I wanted to make sure it's clear that we're not taking anyone's time away from this event today, tomorrow or on Monday. Thank you very much.

**Jose Font:** Thank you. Of those registered to present in this day, all have had the opportunity to speak, so let's use the remaining time to provide additional time to those so people who had indicated.

Therefore, I have five people who have expressed the desire to have additional time. We are going to grant to each of these five people seven minutes and then that will conclude the hearings, the first section of views today. So the first turn of the day it's up to Mr. Osvaldo Rosario.

**Osvaldo Rosario:** Thanks for the additional time. In my first intervention had to summarize large outlining a set of points Now, I hope to elaborate. At that moment I expressed concern about the large amount of emission to be released into the air from the incinerator, such emissions, which are not regulated and not counted. Because of this lack of measurement it is not known what the materials' risk is posed to population. I've gone through all the numbers to reach that amount, was not something I took off the cuff. I took into careful account the data presented

in Table No. (1) of the draft PSD permit. In that table regulated materials listed. As I indicated at the beginning of the hearing, but now in more detail, to each of them to be a product of oxidation burning in resting oxygen-oxygen mass - mass reported to be emitted. Why? Because oxygen in burning air comes from an incinerator, it is not in the initial material.

After this exercise with each of the pollutants, took in account the biogenic CO<sub>2</sub>, as I mentioned, a credit given to the EPA incineration industry, which need not be counted for purposes of contamination. The way I took it into account, as neither Energy Answers and the EPA says the amount of biogenic CO<sub>2</sub> to be generated by this project, was doubling the amount of carbon in the CO<sub>2</sub> they are reporting as an emission. Probably the biogenic CO<sub>2</sub> is going to be much less than this figure. So that assumption will benefit Energy Answers since more than half of the material to be burned is not biogenic material, using their own numbers. Also I calculated the amount of ash to be formed using a percent favorable also to Energy Answers. I used a figure of twenty-five percent (25%). That gives a total of five hundred twenty seven (527) tons per day, when they themselves have reported four-odd, but as the number of them

varies depending on what you read I gave this additional margin.

Despite each of these bands for Energy Answers, taking the Energy answers preferred numbers there still remain approximately 321,000 tons of material unaccounted for. This is say that the balance of what they say enters the incinerator and what comes out regulated by the chimney, and what remains inside or around as residual ash, after taking all this into account, there still remains unknown or unaccounted for an amount of material which is equal to 40% to 50% of the original material burned. It is not known what this material is, not known where it will end, therefore do not know the risk posed the population of Arecibo. There is no way a permit is deserved by this company when there is still such a high percentage of emissions unidentified and with no known impact. It would be irresponsible to grant a permit without understanding this large potential risk posed to the population. Furthermore, I want to highlight the failure of so-called catalytic systems, which have been highlighted by Mr. Steven Rivas as infallible. Such systems, again, are designed to operate with homogeneous fuels, such as diesel. When I'm burning complex material, with literally dozens of variety of chemicals elements in them, as is the case when burning the variety of substances in

solid waste, they will form a series of products that will interfere with these catalysts, which will in turn stop operating as assumed as a result. And that is well documented in the literature. Therefore the numbers listed in Table 1 of the draft

PSD application are not reliable because part of the efficient operation of such catalyst is known to fail, they become clogged, they are poisoned with substances such as CO<sub>2</sub>, halogens, heavy metals, which are known to be contained in the material they plan to burn.

In addition, it is wrong for Energy Answers to ask for waivers for plant shut downs and even more wrong for EPA to grant these waivers. Precisely because it is known that these catalysts will fail and these waivers are sure to be utilized to the real detriment of the community. It is anticipated to be violating parameters nitrogen oxides, ammonia carbon monoxide (which is powered) and fine particulate. Because there will be periods when these incinerators are turned off and then turned back on, these catalysts will not be operated under optimal conditions. And Energy Answers has requested waivers for repairs they anticipate needing to make as much as 32 times per year, according to the same Mark Green, indicates that Mr. Rivas. What are the implications for

health of that? It is not yet clear. But worse, it seems clear from original data that even Energy Answers did not realize the plant would need to be shut down so many times for maintenance and clogging issues. That throws further doubt whether they will know how they will deal along with these plants. I quote from the Energy Answers draft, in which the company agrees to remove any material that can be recycled such waste. If you do that, there is no viable material left for the incinerator to work well and efficiently. This promise is clearly a lie. These materials will not be recycled; they will be burned to keep the incinerator running.

The EPA should be required to remove the verbiage of the draft permission, which is a lie. It's not right. Finally, the vast majority, almost 75% of the material to be burned in the incinerator, they call supplementary fuels, are nothing complementary, account for nearly three quarters of the fuel, are the principal fuel. The complementary here come to make municipal waste. And here we see that this is a hoax present plant as a solution to municipal waste, because if a business to burn other materials: not produced in such quantities in this area and I have no doubt that will be import from outside Puerto Rico. Arecibo does not deserve to be

exposed to imported pollutants to the emission of the garbage they have brought in to burn from elsewhere.

**Jose Font:** Thank you. Next turn belongs to Mr. Angel Gonzalez. Followed by Mr. Angel Gonzalez will be Mr. Carlos Mario Garcia. 7 minutes for Doctor Gonzalez.

**Angel Gonzalez:** Thanks again. Following my presentation. The EPA is authorizing the incinerator of Arecibo to release into the air 4.07 tons of dioxins and furans. Given the uncertainty that exists about the dose of dioxin that may precipitate human disease how EPA talk RFDO (Acceptable maximum oral dose) of  $7 \times 10^{-10}$  mg x kilo per day? It is known that dioxins are persistent and accumulated by successive exposures to the substance and are related to multiple health conditions in people. What action will EPA take action to prevent multiple exposures of the people to the emissions blown out from the incinerator's chimney? It is known that dioxins are related to cancer, IQ deficits, impaired sexual development, birth defects, damage to the immune system's defense against diseases similar to what occurs in AIDS, conduct disorders and diabetes mellitus. If you do not make a preoperative assessment of the area and people around incinerator before it begins operating to

create baseline data, how will you know that any of these diseases is related to exposure to toxic emitted from the incinerator? Some toxins that are carcinogens, mutagens and pseudo-hormones or substances that are

endocrine disruptors, which cause various diseases in humans, are well known. Other toxins, their potential damage is or was unknown, until they were discovered. This is how we learned of the affects of other dioxins in the past, through trial and error. Who will fund these studies? The EPA? Energy Answers will pay for these studies to identify these compounds?

Established standards are designed to prevent acute toxic effects. But we cannot ignore the fact that these toxins are cumulative, and incorporate into the food chain, and can cause chronic diseases eventually, even in distant geographical areas. When will the EPA take this into consideration and order and fund studies to clarify the relationship of substances and chronic diseases can help prevent these diseases rather than trying to remedy them once folks are already sick? Heavy metals accumulate in the body and have been involved with childhood diseases such as autism, dyslexia, deficit Attention-Deficit/Hyperactivity Disorder (ADHD),

learning disabilities and crime. They have also been associated with adult diseases as dementia, depression and Parkinson's diseases. Mercury, particular, has been associated with autism and learning difficulties.

Given this uncertainty why has EPA not adopted a model principles of precaution (included in detail later) – to come from the public exposure to these toxins? Why do they not take synergistic effects into account and various enhancer toxic substances in the body? Why doesn't the EPA fund studies that can provide this information to help prevent adverse effects of these synergistic agents? Fetuses, infants and children who are in the stage of rapid growth are the more vulnerable to these attacks and all these toxic chemicals before mentioned. Specifically, in Arecibo, we know that in the path of the winds that flow down over this incinerator's chimney, there are many schools, "Head Starts" and Child treatment clinics. How Will the EPA to protect our children, the future generations? In the case of lead and recently revealed contamination of more than 10 - 130 people workers - and more than ten children due to poor management Battery Recycling what assures us that with the incinerator the same will not happen? It is assumed that the EPA and



the Environmental Quality Board, the local government were monitoring the company, yet now are trying to get to those potentially affected to prevent unconsciously continue spreading contamination. Precisely lead can be an example of how levels, safe or acceptable quotation marks, for the EPA in the past, have been progressively reduced because those supposedly “safe” levels of poisoning, have been shown to damage the health. The only emissions safe are truly zero emissions. We can continue making multiple other signs relating to incineration, the generation of toxic and health effects. We reserve the right to add signs to the deadline for comments public. We conclude by stating that in the process what must prevail are precautionary principles and attitudes, as accepted in recent decades by the scientific community, which finds that when there is uncertainty of the effect on health and the environment that may be causing such a process is the incineration should exercise caution, caution, caution, before allowing the installation of this machine. At the end of the day it is the potential effect on human health, the future victims or non-victims that is the decision of your agency. The twenty-fourth report of the Real Commission on Environmental Pollution (which studies chemical agents in the

products, and how to protect the environment and public health) indicates that the History is replete with unexpected toxicological impacts to the use of chemical compounds generated by man. I'm going to stop and plan to read this in the next turn. Thank you very much.

(Applause)

**Jose Font:** Thank you. Mr. Carlos Mario. Mr. Waldemar Flores.

Follows Mr. Carlos Mario. Seven minutes this time.

**Jose Font:** Thank you. Mr. Carlos Mario. Mr. Carlos Mario, you

Mr. Waldemar Flores continues. Seven minutes this time.

**Carlos Mario Garcia:** Thank you. The questions that must be clarified: Why, if it is not proposed Energy Answers burn tires, says Atty. Rafael Toro, which includes in its request permission from the EPA? What power does Atty. Toro that violation of laws and regulations on the part of his company, Integrated Waste Management, and no agency unpunished hand and puts them responsible for such violations? Will Atty. Toro, or any of members have "sponsors" powerful in the government of Puerto Rico?

Why the EPA, have the power to do so, does not require Integrated

Waste Management to comply fully with Administrative Order 02 - 2010-7302? Why ADS, the Environmental Quality Board and the Department of Natural Resources (the latter, under the direction of Mr. Javier Velez Arocho) threw in the towel and Integrated Waste Management turned a blind eye to the violation of regulations and laws in the case of environmental tire fire in Peñuelas? If taking action against Integrated Waste Management, why Why not make public the evidence? Would it make any decision of the EPA for granting permits to Energy Answers the fact that the current Governor Luis Fortuño outside attorney RENOVA, the company that previously tried to build an incinerator at Arecibo and whose main executive was Mr. Patrick Mahoney, owner of Energy Answers? What has interests Gov. Luis Fortuño, or any of their families, The draft proposed waste incineration Arecibo? And more importantly, the EPA must clarify: Why still considered granting of a permit to a company whose main representative, advisor and lawyer, is being challenged by a violator of laws and environmental regulations, with total disregard for the health of the citizens and natural resources and does not comply with orders EPA? "Birds of a feather flock together" said the Jibaro (local leader)

in my town. They are all close together, hand in hand: Integrated Waste Management, to Atty. Rafael Toro, R4 Enterprises, brothers Julio and Melvin Gonzalez Fortuño, Governor Luis Fortuño, to RENOVA or Energy Answers, that is, Mr. Pat Mahoney, the Authority Solid Waste, the Environmental Quality Board, the Department of Environment and Natural Resources, Mr. Javier Velez Arocho and EPA.

That tangle of characters, companies and agencies, where each other is mixed together, is the connecting link between the hundreds of thousands waste tire belonging to Integrated Waste Management and Garbage Incinerator Energy Answers. The incinerator will not. The EPA will notice that no matter whether to grant the permission to Energy Answers, the garbage incinerator not be built or in Arecibo or anywhere else in Puerto Rico. The people are not going to permit and are ready to carry out all actions necessary to avoid it. The EPA represents the Colonial Authority in Puerto Rico in environmental and responsible for what may happen in Arecibo. And meet its primary mission and responsibility, which should be protecting the environment and health of the public, and

give him back peace to our people. Cercadillo communities, Factor and Garrochales by decades have suffered from the insensitivity and incompetence of the different administrations of the parties have taken turns in power by last forty years that have condemned to live in unhealthy, subjected to pollution, pestilence, plagues from the Arecibo landfill. These unsanitary conditions they have affected their quality of life and have caused multiple problems health. Residents of these communities feel desperate and rightly claim that justice is done. This is where in the sheep costume that wolf Energy Answers entered. Found that the situation of the aforementioned communities provided fertile ground poisonous plant to plant their lies and half-truths. That way triggered an intense propaganda campaign to make believe that the liberation and salvation to the problems that caused the Weir was the construction of a garbage incinerator in Arecibo. The sheep showed her cute face to residents of these communities and I spoke of the virtues of the garbage incinerator. They promised villas and castles and hundreds of jobs. Obviously the sheep with their costumes still on, never told them about the consequences disastrous for the operation of a refuse incinerator. Never told

them of the pollution a garbage incinerator causes or the diseases such as asthma, cancer and many other serious conditions, which have been widely exposed by some of the other speakers. Be very careful who place their trust. Beware of the wolf in sheep's clothing. When the sheepskin costumes are removed the disguise and show their claws and tusks it could be too late then. Those lambs that were taken advantage of pain and despair of our neighbors in Cercadillo, Garrochales and Factor, are the same that did not care of the health effects of neighbors in Peñuelas Tallaboas by irresponsibility and negligence of the company's Atty. Toro, principal Energy Answers adviser. Should we trust those who violate laws and regulations and to advance their interests lie to individuals regardless of the people's health? If Atty. Toro lied to a committee of the House of Representatives, why not lie also communities to deceive? Can we trust that national agencies and federal regulators will enforce Energy Answers with regulations so we do not pollute? Is the agency's history such that we can trust them? Who wants to hear, let him hear. Whoever wants to see, see. The obvious purpose of Energy Answers, their sheep and their cronies, is pushing onto in Arecibo the more than three million tires which are discarded annually in Puerto

Rico, so we breathe their ash residue for next thirty years. Why?  
Because he discarded tires give ... I have an additional paragraph,  
please ... Why? Because discarded tires are a gold mine that never  
runs out and represents a lot of money and the greed of some knows  
no limits, nor cares for the pain and suffering of others. Are we going  
to allow Energy Answers, this sheep in a wolf's clothes, and his  
henchmen that threaten the health of our life and our children? No, no  
and no. Not going to allow. The neighbors of Cercadillos, Garrochales  
and Factor, with great respect and solidarity, they ask, Do you think  
that when the wind drag substances toxic waste incinerator and toxic  
ash and their sick children, to Atty. Toro, Mr. Vélez Arocho or Mr.  
Alexis Molinaris going care? By then they will be very busy, on your  
yacht, or in your beach house or in his gated mansion with its  
guarded safe, enjoying and amassing wealth that the incinerator  
Garbage will provide. What about the poor? The poor be damned.  
That is everything. Thank you.

**Jose Font:** Thank you. The next turn is Waldemar Flores. And to  
end today's session the last time slot will fall to Atty. Centeno Leyda  
Rodriguez.

**Waldemar Flowers:** The vision of the Agency for Environmental Protection U.S. EPA, for its acronym in English, is the protection of the environment and human health. Although there are different approaches, points of view, or definitions, of what is the environment, there is no doubt what is, or should, or must be, human health. The mission of the EPA is not to promote industries, technology or economic development, it is the protection of the environment and human health, and this is worth repeating.

To fulfill this mission, the EPA must be total, complete, fully and absolutely sure that all decisions and determinations are legally defensible. This applies to all environmental data generated and processed in activities undertaken to meet, check, coerce compliance with environmental laws and regulations.

This applies to inspections, permits, environmental assessments, environmental impact statements, sampling, analysis parameters traditional presence and concentration of compounds chemical, physical, geological, meteorological, modeling or any other activity. These activities ...

**Mr. Public:** Excuse me, the stenographer is not going to be able to capture that... is not going to be able to catch the stenographer. Your



writing is too light.

**Waldemar Flores:** Oh well, anyway this is part of what is will translate, so I was reading pretty fast but wanted to get some determinations as such, this is what is going to happen ... to the EPA. These activities of generation and data processing environment must be legally defensible. In order to have legal defensibility, you have to generate and process environmental data which is scientifically valid, of known accuracy and appropriate precision, an acceptable level of comparability, completeness, representativeness and sensitivity, and have documented the generation and environmental data processing such as full, complete, full and absolute, using quality management tools. Those environmental data are then generated and processed fully totally, complete, and absolutely reliable. Then, and only then, that data generated from the environment itself, and processed, will be legally defensible any entity in the environmental field, local or federal, with or without quasi-judicial powers or judicial level in the justice system local or federal, is in the first instance, appellate or supreme. It is with such purpose of legal defensibility that there is what is known today as a quality system, formerly known as quality assurance program.

The quality system of the EPA was established in 1984 by the Order 5360.1, which has been updated and reaffirmed since that date. The order requires that all environmental programs conducted by or for or in representation of EPA have to ...

**Jose Font:** Waldemar, Excuse me, please you must go slower to ensure that we can capture it on the record.

**Waldemar Flores:** Oh, okay. Well, anyway, as I said, all that's going to be, we will go slower. Eh ... The order requires all environmental programs conducted by or for or on behalf of or in combination of the EPA, "by or on behalf", are supported by a mandatory quality control system formerly known as Quality Assurance Program, see Annex 1. Before proceeding it is vital to define the elements and concepts of quality system known as Quality Management Tools. In all three phases or parts of a project, like the one involving EPA Region 2 New York before this consideration for evaluation, review, comments and approval, there are certain processes that must be followed and certain questions that must be asked. In this particular case, the EPA Region 2 New York had to ask, require preparing a draft plan of quality assurance

much different than the crass and unprofessional job done up until now in this particular case for this project. EPA Region 2 New York requested a protocol, which is totally, completely, utterly and absolutely unacceptable. A draft plan of quality assurance is the cornerstone of an angular quality of a system, but is included in the first two phases or parts of a project, its technical and scientific content applies three phase three of such a project. The protocols, if any, are used in the preparation of a draft plan of quality assurance, never replaced. It was a monumental blunder and EPA Region 2 New York did not request and use a protocol for quality control. Obviously, the officers in Quality Assurance of Edison, New Jersey were not consulted this project and EPA Region 2 New York ignored the existence of a guide draft plans for modeling quality assurance. Steven C. Rivas admitted as much in a public meeting on Wednesday May 23, 2012 at the premises of the University of Puerto Rico's Arecibo Campus, to questions about this from Waldemar Natalio Flores. They EPA has a Guidance for Quality Assurance Project Plan for EPA Modeling QA/G-5M December 2002 Office of Environmental Information EPA District of Washington Columbia. This document provides the guidance for ensuring quality

assurance in project plans. A priority plan for quality assurance is relevant and vital in a project like this where it is necessary to do modeling or traditional sampling and analysis. First phase: planning, second phase: implementation. Any project plan has certain quality indicators around the issues of maintaining data quality, precision, accuracy, comparability, completeness, representativeness and sensitivity. In order to meet the required target data quality objectives the Environmental Protection Agency must implement the scientific method, which requires, public participation, not as was the case here with Energy Answers where the locals were wined and dined and made into dunces for their cause. This cannot be considered locally based research and data collection of the type required by a standardized quality control process. Tools quality management is standard operational procedures for quality assurance plans. There is also a third phase: audits, assessments, reviews, verification and validation. Here in this phase is where it is required that there are audits and management systems reviews, audits and evaluations of systems, technical systems, audits that include technical assessments monitoring, performance evaluations, quality audit data that goes for computers and systems modeling, verification and

validation of data quality, which in this case never made by anyone and quality assessment data that consists of five phases, including mathematics and statistics. I won't be able to define here today the 1 to 8 phases because I ran out of time, so with this is enough. This is part of what needs to be translated, and sent immediately to EPA to begin an investigation as I say into the crass and gross negligence, incompetence and corruption, of at least Steven C. Rivas, and Anna Maria Coulter and Viorica Petriman.

**Jose Font:** Thank you Waldemar.

**Carlos M. Garcia speaks from the Public:** Please Mr. Font the question of only having 7 minutes does not allow us to explain these issues properly. If we are given the time to explain and we can read the presentation of a milder form because we do not have that problem.

**Jose Font:** Yes, we can consider additional time at additional sessions. We will proceed with Atty. Aleyda Centeno and with that we will complete the first session of the day.

**Aleyda Centeno:** Aleyda Centeno Rodriguez. I was exposing when I ran out of time, that Section 3.3 of the Plan of the Separation of

materials, table 3.6 and Figure 3.4 presents the Energy Answers aspiration to establish two additional plants to burn an additional 2,940 tons – in addition to the to 2,100 tons of solid waste they plan to burn in Arecibo. They identify these operations as North Central for Arecibo with 2,100; Northeast at which they will burn 1,590 tons and Northwest for which will burn 1,350 tons. For a total of 5,040 tons of garbage planned to be burned by Energy Answers as operational goals of this agency, this corporate entity. If what Steven Rivas said the May 23, 2012 is right, we are talking about this permit you are considering, for which allegedly have cited all the affected population today, and I'm going to explain the "supposedly" – there are people missing here in this application for this permit. Steven Rivas said a permit – once it is granted – can be used to build more than one plant. There are people on the east and west sides of the island that would be affected by the 2 other incinerators this company plans to build here. If that is so, it has been determined in law, when a suit is settled and not all affected parties have been included in the suit, then the suit is invalid and the settlement is invalid. Here this essential lacking part is the absence of any analysis or interaction with the communities where these other incinerators are planned for

development by Energy Answers. If that is so, this permit application and the EPA's review of it lacks essential research and the EPA has been extremely short in its assessment because EPA assessment cannot be divided up to analyze only the impact of one Incineration plant would have in Arecibo, but would have to add all the proposals and planned plants and their consequences, and as we have seen there are three different proposals under section 3.3 of the plan of separation of materials. What they are proposing is grave. Because we are talking about an island 100 miles by 35, which is aiming to put technologies which are highly polluting all over the island. Where you are not recognizing the existing contaminants, as we report in our front, and the whole system suffers from the fundamental analysis that have to do to get to grant a permit. The EPA must responsibly perform a real analysis of this proposal. And if this proposal as it appears in section 3.3 includes other incinerators we must consider the effect that these incinerators will have on the health of Puerto Rico. Other issues that are here, is that this permit requested utilized completely incorrect population data. Yesterday the newspaper *El Nuevo Dia* reported that the census was wrong by 210,000 people. Energy Answers, in citing population data, they take

refuge in 2007 data. That means there are fewer than half a million people generating garbage than Energy Answers claims will be generating garbage in Puerto Rico. I want to point out that Patrick Mahoney owns a corporation called St. Croix Renaissance LLLP, which is located in the Virgin Islands, a shipping company. If this man wants to burn 5,040 tons of garbage day is because it aims, with this company, to import waste to us so our beloved island can become a big trash-burning oven, a reality that affecting the lives and quality of life for all Puerto Ricans. Finally, the statements of Mr. Mark Green confirm our claim that his company, Energy Answers, used their economic favors, such as offering food the morning of these hearings, and a party so those folks would be partying and kept far away from those of us here who are attempting to educate them about what this proposed project really means for us. Also used in the today an alternative method, which is to claim you are thanking for people who are away from here. Now I wonder, does that strategy to divide this group of native residents who is here, which opposes the incinerator is this strategy only Mr. Mark Green's or is it the work of more powerful lobby? Did you maliciously design this strategy so Puerto Ricans would not all be here, and soak in the



knowledge of their fellow islanders as to just how destructive this proposal will be to our way of life? If this is so, we say to Mr. Mark Green "shame on you", and we tell you-are terribly wrong because it will not only this incinerator have a terrible affect in Arecibo but also on you where you live. Good afternoon.

**Jose Font:** Thank you. This first session ended and we give the most sincere thanks for the presentations of all and their written papers. We want to inform that the registration for the session that starts at 6:00 pm on this day will begin at 4:30 pm, and ask you to remember you can submit written comments until August 31, 2012. Thank you very much to all and we conclude this session.

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**

**REGION 2**

**PUBLIC HEARING REGARDING PSD ENERGY ANSWERS PERMIT**

**ARECIBO, PUERTO RICO**

**DATE: AUGUST 25, 2012, 6-10 P.M.**

**PLACE: ARECIBO LIONS CLUB**

**ARECIBO, PUERTO RICO**

**Moderator: José Font, Interim Director CEPD, EPA**

**Transcript: Aledawi Figueroa**

**PUBLIC HEARING FOR PSD-ENERGY ANSWERS PERMIT, ARECIBO**

**ARECIBO LIONS CLUB**

**AUGUST 25, 2012. 6-10 P.M.**

Transcript: Aledawi Figueroa

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**José Font:** Good evening to everyone. We will begin the second session of the Energy Answers public hearing.

Good evening to everyone. My name is José Font, Acting Director for the Caribbean Environmental Protection Division of the United States Federal Protection Agency (EPA). Today I am joined by the following EPA officials: Mr. Ariel Iglesias, Deputy Director of the Division of Sustainability and Clean Air for Region 2; Mrs. Tere Rodriguez, Acting Deputy Director of our Caribbean Division; Engineer Jose Rivera, Interim Chief of our Multimedia Permit and Compliance Branch; Engineer Ramon Torres, Interim Chief of our Response and Remediation (Brownfields) Branch; Mrs. Brenda Reyes, Community Relations Coordinator; Engineer Evelyn Rivera, Coordinator of Community Outreach for the Energy Answers Project; Engineer Francisco Claudio and Mr. John Aponte from the Air Quality Program of the Multimedia Permit and Compliance Branch; and Mrs. Socorro Martinez from the Response and Remediation Branch.

We give you the most cordial welcome to this public hearing. We want to thank the administration of the Arecibo Lions Club for the use of this space in the Municipality of Arecibo, which again allows us to meet very close to the community.

The purpose of this public hearing is to receive comment from members of the public interested in the draft of the Prevention and Significant Deterioration (PSD) permit prepared by the EPA under the Federal Clean Air Act. This action was undertaken in

response to a permit application filed by the Energy Answers Company in seeking to establish a facility for the recovery of energy generated from solid waste in the Municipality of Arecibo, Puerto Rico.

On May 9, 2012, the EPA posted a public notice in *El Norte* newspaper, proposing a PSD permit for the facility proposed by Energy Answers. In that notice, the EPA solicited comment from members of the public interested in the proposed permit for the facility, established a public comment period of 45 days, provided information regarding relevant documents and data bases related to the permit application, invited the public to attend an information session on May 23, 2012 at the University of Puerto Rico theater, Arecibo campus and a public hearing on June 25 at the same venue. A second public notice containing the same information was published in *El Vocero* newspaper on May 13, 2012.

As published, the information session regarding the proposed permit took place on May 23, 2012 at the University of Puerto Rico, Arecibo campus. In that meeting, preliminary information was made available on the draft for the Prevention and Significant Deterioration (PSD) of air quality permit that the EPA is compiling under the Federal Clean Air Act, and questions from the public were addressed.

In addition, the EPA stressed that despite the public hearing scheduled to take place on June 25, 2012, the agency would accept written comment through Friday, June 29, 2012. As a result of the cancelation of the public hearing of June 25, 2012, the public

comment period was extended until August 27, 2012, according to the public notice published in *El Vocero* newspaper on June 23, 2012. It's worth noting that the EPA this week announced the extension of the public comment period until Aug. 31, 2012.

The EPA oversees the PSD program in Puerto Rico and thus is responsible for granting PSD permits for a new major stationary source of emissions or for significant modifications to existing major stationary sources. Let me clarify, and this is very important to keep in mind, that neither the EPA nor our PSD permit authorize or not authorize, nor recommend the location selected by any major source, industry or business. Every time that a new major source of emissions is established or that a significant change is proposed for an existing source, it is the source that has to apply for and obtain a PSD permit that complies with required regulations, such as:

- Limiting emissions based on the maximum attainable reduction level of emissions for each contaminant;
- An air quality analysis demonstrating that all the increases in emissions will not cause or constitute a violation of the PSD or other applicable regulations;
- An additional impact analysis to determine the direct or indirect effects of the proposed source on the area's industrial growth, air, vegetation and visibility;
- and
- Consideration of public input, including giving citizens an opportunity to participate in a public hearing.

As part of the application submitted to us for consideration, we received a series of documents from Energy Answers, the petitioning industry. The analysis of those documents was performed by personnel trained in Maximum Available Control Technology and Air Models. After evaluating the information made available by Energy Answers in its application, the EPA proposed the draft permit or preliminary permit for public consideration.

The conditions of the preliminary permit developed after our analysis of the application is based on the requirements set forth in Part 52.21 of Title 40 of the Code of Federal Regulations. These conditions include requirements for the owners or operators of a new major stationary source or significant modifications, such as the following:

- Meet the applicable emissions limits from the State Implementation Plan and the emissions standards set forth in Part 52.21 (j) (1) of Title 40 of the Code of Federal Regulations.
- Apply Maximum Available Control Technology for each contaminant subject to regulation set forth in Part 52.21 (j) (3) of Title 40 of the Code of Federal Regulations.
- Conduct the air quality analysis according to Part 52.21 of Title 40 of the Code of Federal Regulations, from (k) to (p) to show that the emissions will not exceed national environmental air quality standards.

The proposed emissions rates will be considered as meeting the requirements of Maximum Available Control Technology and should not cause or significantly contribute to a violation of the air quality standards.

After our evaluation of the application by Energy Answers, we have brought a draft of the permit for public consideration. The agency's final decision regarding the permit will not be made until after an objective consideration of all the opinions gathered during the public comment period for the purpose of safeguarding the environment, health and safety of everyone.

All comments or presentations brought forth today will be considered by the EPA and will remain in the administrative file for the facility, as required by applicable federal regulation. The EPA will not respond to the comments right now. It's worth noting that during this process we will only recognize those presentations related to the proposed PSD permit for Energy Answers. The EPA is aware that establishing a public policy regarding the management of solid waste on the island is the responsibility of the Government of Puerto Rico and its local agencies.

You can turn in your written statements to EPA personnel tonight, or you can send them to Mr. John Aponte in care of the Caribbean Division of the EPA. You can find a copy of the address on the table at the entrance of the hall. The EPA will evaluate all comments received and will respond through a document that will be prepared as part of the agency's final decision.



As stated on the public notice regarding this hearing, the EPA will conduct five sessions over three consecutive days. The sessions are divided as follows:; The first session is – or was – today, August 25, 2012, from 1 to 4 p.m.; the second session – the one we are having right now – is from 6 to 10 p.m.; the third session will be tomorrow Sunday, August 26, 2012 from 1 to 4 p.m. the fourth session will be tomorrow Sunday, August 26, 2012 from 6 to 10 p.m.; and the fifth and final session will be on Monday, August 27, 2012 from 1 to 4 p.m. All of the sessions are open to the public. Those persons wishing to express themselves orally could have registered in one of two ways. The first one was through pre-registration by communicating with Mr. John Aponte of our (Caribbean) Division. The second one was registering in person at the entrance of this venue, for any of the five sessions of the public hearing.

The pre-registration process was included in the public notice for this hearing. All those who registered in advance for the sessions of August 25 and/or August 26 and don't get a chance to speak will have priority to speak during the fifth session this coming Monday, August 27, 2012. In addition, time permitting, those persons who did not register and wish to participate will have an opportunity to do so on August 27, 2012.

We have established procedural rules so we can hear from each person interested in making a presentation in this hearing, and we need those rules to be observed at all times by the participants. The proceedings of this hearing will be documented for the file through a transcription prepared by a professional stenographer who is present. Also,

we have simultaneous English to Spanish translation, and vice versa, of what is presented during each session of this hearing. Those who are interested can pick up the ear phones from the cabin inside this hall, where they are located. It is necessary that all of those participating in this hearing sign in at the entrance of the hall and write your names on the list of attendees.

Those who will be making presentations should tell me if they will be submitting written comments today. For this session of the public hearing, we have eleven (11) registered speakers. They were notified either by email or when they signed in at the entrance.

This hearing is conducted according to the rules of procedures set forth in Part 124 of Title 40 of the Code of Federal Regulations. The order of the speakers will be as follows: Elected officials or their representatives will have the first opportunity, followed by federal, state and municipal officials, and then the rest of the speakers according to the order in which they registered. It is worth noting that we will be strict with the established time limits in order to guarantee the speakers an opportunity to express themselves and speakers will not be allowed for one speaker to give up his time to extend someone else's time. Because of the number of people interested in speaking and in order to give everyone a chance, the time of each presentation may not exceed 10 minutes. There will be a person designated to notify each speaker when there is one (1) minute left to conclude his or her presentation, and when the time for the presentation has expired. If your time is up, the microphone will be turned off to allow the next person to speak. We ask all participants to remain silent and be respectful to

the diversity of opinions during the proceedings so that we may hear from everyone. Please don't interrupt the proceedings or cause unnecessary distractions. In order to maintain order, I ask you that, if you want to take part in any sort of demonstration, you do so outside the hall while we continue our work.

For the record, when you are called to speak, you should clearly state your name and the name of the organization that you represent, if applicable. When you speak, please address the panel directly. If a speaker wants to turn in a written copy of the presentation, please let us know and give a copy to an EPA representative, making sure to write down your name, postal address and telephone number on the written presentation. I remind you that these hearings are being recorded for transcription.

Thank you very much for your cooperation, and let's proceed with the presentations. The presentations will take place from the table just in front of the panel and we will begin tonight with Mr. Pedro Cortes going first, and Mrs. Marta Quiñones Dominguez going next.

**Pedro A. Cortés:** Good evening. You let me know.

**José Font:** Sure, you may begin.

**Pedro A. Cortés:** OK. Good evening to everyone. My name is Pedro A. Cortés Rodríguez. I'm speaking for myself and came here to make my comments about the preliminary permit that was given by the Environmental Protection Agency regarding the prevention and significant deterioration of air quality, according to

clean air regulations. Based on the permit process of the agency, for any company to receive such an advanced determination, the project must have been evaluated at different levels by the agency, and since you have determined that the project has complied with all the parameters that the agency requires to assign this advanced determination, I understand that even going forward there are other evaluation processes, but at the same time the agency understands that the proponents of the project should not be suspected of having something that could affect the environment or that may cause some type of problem during the execution of the project. So it that had not happened by now, they would not have received the permit, as a draft, as it was issued. Based on the previous experience of the projects submitted by the company in other states and the operational experience that the company has, the agency has determined that because of that they deserve this opportunity to have a project in the form of a "draft." Under the PSD regulation, the company Energy Answers of Arecibo proposes to comply with the 28 criteria considered for a Major Stationary Force with a potential to emit one hundred tons per year. The facility must be in compliance with what is known as the BACT, o Best Available Control Technology that exists in the market and must pass a series of analysis and measurements of its emissions to be determined in compliance and control of the operations process of its day-to-day operations. Table One (1), which was included as part of the permit, includes all of the parameters that are involved in this monitoring system and the frequency with which they must be monitored. This is not a specific requirement for this company, it's a requirement for any company that has a similar process involving combustion or a chemical process. It's a process in which there must be compliance and any company

that has a chemical process or emits particulates or contaminants to the environment must undergo this process. So, it's a typical chemical composition that requires... that requires evaluation for this project and has to do with everything that is typical for a combustion project. According to the EPA it has maintained all of the parameters of emissions under the controls that the regulations require; the company then has to comply with all of them as part of its permit so that the operation can continue without any type of problem. (An) operation typically executed by any type of company today that produces any manufacturing process. As part of the process, Energy Answers will produce different types of contaminants that will be considered under the new regulations that may impact the operation of Energy Answers. Many of these new operations will be working with everything that is carbon dioxide, sulfur dioxide, small particles of 2.5 microns or less and everything that has to do with the emission of greenhouse gases. The data evaluation is shown on Table Two (2) with all the parameters that were evaluated and the limits to be enforced. As part of the BACT process all new technology that is part of a construction process, on a new facility like the one that Energy Answers proposes, the EPA must make a determination if it has issued a permit, and (ensure) that it complies with all of the parameters that must be met. The control technologies that will be applied to this process must be the most appropriate, the best available, and up until now, the company Energy Answers has demonstrated that it maintains these processes across the different operations that it has in the United States. All the emission of particles of 2.5 microns or less, right now, are not regulated, and we all know that. But the EPA has determined that 15.28 pounds per hour is an acceptable parameter, or an acceptable amount, of emission of these

contaminants to the environment. The model processes of these emissions show that the company Energy Answers has maintained levels lower than 11.21 pounds per hour, which is more than 20 percent below the limits that have been proposed or that will be proposed in the future when it goes to EPA for (enforcement). I repeat, those parameters are not in force, but when they are in force, what they are proposing to emit should be below the parameters to be considered by the EPA and which will be setting. In addition to these parameters, we are also talking about regulating the parameters or metals, metals that go out into the environment and that are typically required by combustion processes of municipal waste. Energy Answers has been required to verify these parameters with other metals that are not even part of regulations, such as cadmium, lead and mercury. For all those, if we look at Table Three (3) that we have as part of the permit process, it shows compliance with those parameters that the EPA requires. That is significant because the agency is dealing much more rigidly with the process that Energy Answers will be using, which is the process that any other similar industry or process could be using. In order to ensure that the greenhouse gases are within the appropriate parameters, the EPA has asked Energy Answers for a continuous monitoring of those, and that the CO<sub>2</sub> parameters are verified, both in biogenic and non-biogenic terms. Again, this is not part of what is typically required, but it is being complied with, so by presenting additional parameters we are saying that we are trying to ensure that these processes, that typically would not be observed under the processes that we mentioned, will be observed. So, you are being stricter and at the same time the company is demonstrating compliance with these parameters. If we observe the compliance of the parameters of the Significant Impact Level shown on

Table One (1), they show compliance with the impact on the air or in the contaminants in the air compared to the region. That is significant because when we talk about the possible or future development of the region of Arecibo, if the region of Arecibo doesn't have sufficient parameters to grow – and right now we are talking about limits established for each region – and when the company (that) begins operating in this area does not reach the limits, that allows for other companies to have growth and for other companies to be established.

In summary, and my time is almost up, so I will cut down on the rest of my written presentation, which has already been submitted to Mr. John Aponte and to Mr. Font, respectively. I simply want to tell you, the same way I have spoken up on other occasions about any other company or manufacturing process that is in compliance with the regulations that sets forth the environmental protection agency, should be sufficient for it to receive a production permit. So, I am totally in agreement that a permit be granted to Energy Answers. Good night.

**José Font:** Thank you, Mr. Cortés. The next speaker is Mrs. Martha Quiñones Domíngaz -- Domínguez, sorry— and after Mrs. Quiñones it will be Reverend Carmen J. Pagan's turn.

**Martha Quiñones:** Yes, good evening to all. Mi name is Martha Quiñones, I am an environmental economist and a planner residing in Arecibo and I have come to express my opinion about the incinerator project because of its harmful effects on health, the environment and the economy of the area. I have heard the presentations from this

morning, which were very clear and accurate in their analysis. It is very important that before we speak, we listen so we can understand all these processes.

I am requesting that all the necessary environmental and socioeconomic studies are done in order to take the right public policy decision and comply with the lawful responsibilities of safeguarding health, the environment and society in general, and above all conscientiously evaluate preventive and alternative policies such as recycling, reuse and compost that the EPA has recognized in various of its public policy documents. I also want to make sure that the criteria of public participation and environmental justice are complied with and I want to point out something that is important, that the comments be evaluated, but above all that no reprisals are taken against the people who come to speak here. We received various complaints from people about that during the previous project for an incinerator. They spoke up and suffered reprimands at their places of work, right? And as entrepreneurs that they are, they decided not to participate this time because they did not want to suffer the same consequences. In Puerto Rico, we must ensure that all these people that have the power, the economic power and the political power, do not trample the rights of the citizens, something that is very important and that is part of your duties and the duty of all government agencies, even though that seems not to exist in Puerto Rico.

I want to express through this means mi profound rejection of the permit for Energy Answers for the construction and operation of an incinerator in Arecibo, where solid waste is to be burned on a daily basis. I am opposed, more than anything else, because it increases air pollution, deteriorating the quality of the air and, in addition, because that provokes a string of consequences that affect health and that is not evaluated in any of



the documents that they have presented. The evaluations for this type of project have to be interdisciplinary, taking into account the cost of the project, the impact and the benefits. One of the most troubling impacts in Puerto Rico is the effects on health. We understand that the elimination of the landfill and its effects on (public) health are necessary, but according to what you admitted in May, this project will not eliminate the landfill, and to top it off you are considering establishing a facility that will further harm public health, without doing a study that measures the potential impact on health and, logically, without taking into account the most important people, those who live not just in Arecibo, but in all of Puerto Rico. Because, as you pointed out this morning, this project will affect all of us equally. I have not seen any cost analysis. The analysis focused only on the visible benefits for the promoters without considering the social, environmental and, above all, health costs to the people. These are costs that will burden the government, and hence the people who pay taxes, more harm to our health and our environment. Logically, we have to weight these costs and consider them. I forgot to ask, do we still have time to ask for additional time, like you did this afternoon?

**José Font:** The same procedures apply from this morning.

**Martha Quiñones:** Alright. We ask and demand that the concentration and dissemination of contaminants to be released into the air be evaluated. Estimate the effects that the concentrations of contaminants cause on people, including morbidity (rates) and mortality among the exposed population. Estimate in monetary terms the physical effects and the cost of illnesses. Already this morning some of the illnesses

that can be provoked were shown. You can put a value to (savings) of the health costs not incurred. Logically, we also need an evaluation of the effects associated with mortality (rates), or a forensic study about how much the human beings that we plan to expose to this and that we may kill due to exposure to contaminants emitted by this project are worth. That's what I want to talk about. Logically, the EPA says that air pollution is an effect that may cause many illnesses. But we don't see you being very efficient in asking them to measure those illnesses. This morning, Dr. Ibarra and Dr. Rivas asked for a gauge of all those illnesses before emitting more contaminants that threaten the health of the Puerto Rican people. There are diverse studies that can be done regarding the costs of illnesses, focusing on the prevalence of (certain) illnesses, an analysis of costs-efficiency, an analysis of costs-utility, an analysis of costs-benefits. Logically all of these analyses are in (the scope) of the EPA and are approved by the EPA, but you don't urge them to do them. The important question is, what would happen in Puerto Rico if public policies succeed, through recycling, reuse and compost, in reducing waste? That also is not addressed there. Logically, the incinerator would be left without (materials) to burn and the project would no longer be viable. But, who has to pay for all these consequences? The people because public policy was not evaluated correctly? Or are we just going to, in a reckless manner, not assume our civic responsibility and let others do things without benefit to the people? I want to point out that in Puerto Rico asthma – and I took this from the Puerto Rican Senate that, for whatever reason say one thing and then approve harmful projects – is one of the most serious health problems. It's one of the main topics of analysis that the Health Department is undertaking. I have not seen the Health Department say something

positive about the health of the people. The mortality and the morbidity rates from asthma are higher in Puerto Rico than in the United States. Studies have revealed that asthma is the second most prevalent health condition in Puerto Rico, as compared to other illnesses. It is also the principal cause of hospitalizations and the fifth-leading cause of visits to the doctor. The Health Department should take this into consideration, and all of the additional costs that this harmful project is going to generate. The costs of (health care) are going to increase every day. In Puerto Rico we know that we are not well-off economically, and a project such as this that will generate a couple of jobs will bring about a disaster to our public finances. So, it is important that we correctly evaluate all of the elements. Emitting more air pollution means bringing about more illness and more deaths to Puerto Rico. In 2005 it was noted that 30 percent of all asthma deaths could have been avoided... if we could have avoided air pollution. That remains on the memory of each one of us, on the mind of each one of us, the responsibility to safeguard the health of the Puerto Rican people. I know my time is almost up and I have not yet spoken about my written presentation, but I ask to have more opportunity to talk about what things should be evaluated in this project, things like, where are the hidden costs? How much will it cost each one of us Puerto Ricans this harmful project? And, how should we oppose it? Saying no to incineration and yes to alternatives like recycling and reuse, which generate more sustainable jobs and affect the community in a positive way. The alternative is a project that puts a financial burden on the people, that harms their health and gives an economic benefit to a few while leaving many of us the social costs. So, I urge you to correctly evaluate, with all the techniques that you have designed for these types of projects, to take into account the

people's health. You don't play around with the people's health, and that is very important. Thank you.

**José Font:** Thank you, Mrs. Quiñones, and it has been noted on record that you want additional time. The Reverend Carmen J. Pagán is next, followed by the time allotted to Mr. Rafael Fernández.

**Reverend Carmen J. Pagán:** Good evening to the EPA representatives and to the community of Areciba. My name is Reverend Carmen Julia Pagán Cabrera. I am a minister ordained by the Baptist churches of Puerto Rico. Through this presentation, I want to affirm my opposition to the establishment of an incinerator for the burning of waste in the Cambalache neighborhood of Arecibo. The reasons that compel me to oppose the incinerator are as follows:

The foremost reason is health. The indiscriminate burning of all kinds of materials, including toxic materials, because I don't see anywhere that they will be excluded from the process. The information provided by the company speaks in general about the sorting of materials, but does not mention liquids such as paint residue, oil and household chemicals that people use and constantly throw away in the garbage. How will these be extracted so they will not be burned? Where will these be disposed of?

The high contamination present in Arecibo is well known by all. The media, newspapers in particular, have reported that Arecibo needs millions in funds to get rid of the contamination. There's lead from the battery factory, there's the different clandestine

incinerators in several communities and other things that make the quality of the air unacceptable for the residents. Why add more contamination than that which already exists by (approving) this mega-project that has not proven to be safe in its emissions to the environment? Respiratory illnesses run high in our community. Allergies, asthma and lung cancer are some of the illnesses here. What health-related studies has this arrogant company Energy Answers conducted to prove that the health of the Arecibo community will not be affected? This is the great doubt we have, where is that study? We want to know where those results are.

The proximity of the place where they want to build the incinerator, El Cambalache neighborhood, is very close to the center of Arecibo. How is it possible to pretend to build such mega-project less than two miles from schools, daycare centers and downtown? This mega-project will affect the whole island because of the changes in wind direction that take place around us. The towns surrounding Arecibo should be consulted because they will be affected.

The county's economy: The practice of burning materials that could still be useful affects ongoing and future recycling projects in Arecibo and neighboring towns.

Incineration is a policy contrary to what the EPA has been promoting regarding the need to recycle and recoup useful materials. To incinerate is to give up the effort to transform a society of consumerism and waste into one that is green and seeks conservation.

Energy Answers mentions that its project is one of renewable energy. Nothing could be farther from the truth. I ask that any mention about this project falling in the category of renewable energy be eliminated from the documentation submitted. Let the company

prove that this is so. What is their definition of renewable energy? What is the EPA's definition? By playing with words they're trying to confuse the community. To me, it should say it's a company of new toxic waste. Don't say it's salvage (of materials), because they're not salvaging anything, really, but instead destroying much material that could be recouped. They will burn great quantities (of solid waste) to produce a minute amount of energy (80 megawatts), of which they themselves will use a portion for their operations. What will be done with the toxic ash that the incineration will produce? Where will they be deposited?

Agricultural activity: The breeding of animals will be affected by the constant burning of materials that eventually will accumulate on the soil and the water. A project like this threatens the life of the community, its economic future and its possibilities because it is very destructive. We should consider all of the economic activities that a project such as this will affect directly and indirectly. We must have a balance. To give to a company just because – because it has money or influence – a permit against a whole community that will see its health affected that will see its commerce affected, I think we need to think about that economic aspect very carefully because the economic future of Arecibo is at stake. The economic balance is negative. To establish a project like this one is a policy of plunder and insensitivity. It's like taking over a town and turning it into a great landfill. Arecibo does not need a waste incinerator.

Environmental reasons: We have mentioned many of them as part of the previous considerations. Health and economy are part of the environment. We worry about the

quality of the air we breathe. Can the EPA or Energy Answers guarantee air free of dioxide? How? Where are the controls? How will water be utilized? Will the restored Caño Tiburones wetland be affected? What studies have been done in our community to guarantee this?

With all due respect, we have doubts of how the EPA has handled the whole process because there are no answers, with data and empirical evidence based on studies in our community, to the questions we have.

Lastly, theological reasons: The God of life calls on us to preserve it. The threats to health, quality of life, the economy and the environment are an affront against the spiritual peace of our community of Arecibo. We worry about the most vulnerable: the children, the sick and the elderly. We don't understand why on the one hand incineration is regulated, and on the other it is allowed. This project is very insecure in its operation, and to allow it would bring more anxiety and insecurity to the families of Arecibo and its neighboring communities.

It's to defend the fullness of life and not half-heatedly that we are here. We all wish and deserve and we solicit the EPA not to approve any type of permit for the incineration of waste. The well-being of our community, the majority of which is opposed to this project, should weigh more than unscrupulous economic interests.

As pastor of the Baptist churches of Puerto Rico, I make this statement. – Reverend Carmen Julia Cabán Cabrera.

**José Font:** Thank you very much. Next is Mr. Rafael Fernández, followed by Mr. José Vázquez. Is Rafael Fernández in the audience? We go to Mr.. José Vázquez and then to Dr. Jahaira Serrano.

**José Vázquez:** A very good evening. My name is José Vázquez resident of Aibonito neighborhood, but grew up in Arecibo. My parents live in Arecibo, in my Arecibo, my beloved town that I love, birthplace of great musicians, of great heroes, of great athletes and of great natural beauty.

I saw the draft and I see it is focused too much on the economic impact. But regrettably there is little on the topic of health, very superficial. I read the part on human health, very scarce, without its due importance and admitting that there is an impact on health on our brothers from Arecibo. It looks like Energy Answers thinks (only) about today. When our children are born deformed or get sick from cancer like the children of Kettleman City, California. Kettleman City is between San Diego and San Francisco and there's an incinerator there. Energy Answers doesn't care much about that, no matter how many studies they commission. But I believe in God, I believe in the College of Surgeons, I believe in their president Dr. Ibarra, who is Mexican but Puerto Rican at heart. I, José Vázquez, am against this monstrous incinerator. I tell Energy Answers and I tell you that you will not play with the milk of my son, Yadiel José Vázquez Aguilar. You will not play with the health of the people of Arecibo. That is my statement. Thank you and good evening.



**José Font:** Thank you very mucho. .Now it's Dr. Jahaira Serrano's turn, followed by Mrs. Cristina Rivera.

**Jahaira Serrano:** Good evening. I am Dr. Jahaira Serrano Domínguez, pneumonologist certified by the American Board of Internal and Pulmonary Medicine, and I have been working in the Arecibo area during the last five to six years, at Cayetano Hospital. I am also a member of the College of Doctors and Surgeons. I came here to talk about the impact that this incinerator will have on health, on the breathing (process) of the people of Arecibo. As we know, the incinerator must and should comply with regulations dictated by the EPA to preserve the quality of the air. These emissions, according to those who support the incinerator, will be maintained within the required levels, and these are safe. However, there is scientific information showing that this is not sufficient guarantee for our safety. There is a high potential for increasing the incidence of respiratory illnesses with the emissions from this incinerator. We will see more details about this. As some people have already mentioned, asthma in Puerto Rico is a very serious condition. It's prevalence in Puerto Rico is higher than in the United States: 18 percent vs. 13 percent. In other words, 20 percent of the population of Puerto Rico is asthmatic and almost 30 percent of those are school-aged children. It is the third-leading cause of emergency room visits and hospitalizations, causing 100 deaths per year. And what does this have to do with an incinerator? As I explained, asthma can be exacerbated with the exposure to chemicals, smoke or contaminated air. This incinerator emits fumes that include: heavy metals such as lead, cadmium arsenic and mercury, halogenated hydrocarbons, particulate matter and

organic components such as dioxins and furans. And it is nitric oxide, sulfuric oxide and particulate matter that are associated, specifically, with respiratory problems. Let's focus on particulate matter.

When we talk about particulates, it's important to define their size and their aerodynamic potential. In other words, the smaller and lighter it is, the faster it will be transported.

Incinerators generally capture thick particles, the ones they classify as PM 10 or measuring 10 micrometers. Some are 2.5 (micrometers) and are considered fine particles. But there are some that are ultra fine particles with a diameter of 0.1 micrometers. These cannot be captured by control equipment and are not measured or regulated by the EPA. Nanoparticles have no safety standard compared with PM 10s. In fact, there is no observable safeguard nor standard set by the EPA. There is also no safeguard against respiratory symptoms.

A thick particle is approximate in size to pollen. These can lodge inside the nose or throat and are expelled. The fine particles, those of PM 2.5 to PM 0.1 are the size of a red-blood cell or bacteria. They lodge in the upper bronchial region and are slowly expelled, with a half-life of five years. Anything smaller than PM 0.1 finds its way to the alveolus cells, causing inflammation, oxidative stress in the epithelial tissue and rapid access to the bloodstream. Nanoparticles can become a catalytic agent, particularly lead, mercury and nitric and sulfuric particles. These go into the lungs and wreck havoc. They can go through the placenta and directly affect a fetus. These particles can become permanently lodged in the lung and can be compared to asbestos fibers in that they can only be observed with an electron microscope, can cause fibrosis and cancer after years of exposure. Nanoparticles have a direct effect in causing or aggravating

respiratory conditions such as asthma. They increase the incidence of respiratory illness in children and hospital admissions due exacerbation. They diminish pulmonary function in healthy persons who are constantly exposed to these emissions. The federal government began to regulate emissions of PM 10 in 1987 and of PM 2.5 in 1997 after several studies showed high mortality in the American population associated with lung and heart disease. Sixty-thousand people a year had to die before they took actions. Current regulations don't take into account the amount of particles in the air, but the weight of the particulate matter. But weight does not equate quantity when it comes to particulates in the environment and this is a dangerous way to measure air pollution. Nanoparticles are not being regulated and much less measured. The incinerator in Arecibo only captures PM10s.

Recently there was an article in the American Journal of Respiratory and Critical Care Medicine... that says there is a relation between exposure to contaminants emitted by traffic and an increase in the incidence and prevalence of asthma, exacerbation and deficient pulmonary function.

They state that the particulate matter from PM 2.5s to PM 10s is associated with an increase in mortality from heart disease. If these contaminants, to which we are exposed on a daily basis, can cause or aggravate heart and lung conditions, imagine all the damage that great amounts of emissions from the incinerators will cause in the short- and long-term.

It's important to spread the message that the health of the people of Puerto Rico, specifically Cambalache, is at risk. There is a potential for an increase in the incidence of respiratory problems, treatment costs, emergency room visits and hospitalizations.

And the ones most affected could be our children. We must explore other alternatives, such as recycling, and secure a better future for our children. I ask the EPA how it intends to prevent such harm to the health of our patients. What specific steps will it require to prevent the emission of these particles into the atmosphere and into the lungs of our patients? How are they going to monitor that these actions are being taken? How is this consistent with the Obama administration's recent initiative of calling on the EPA, Health and Human Services, Housing and Urban Development and the White House to reduce the prevalence of asthma among Puerto Ricans? Good night, and thank you.

**José Font:** Thank you. Next is Mrs. Cristina Rivera, followed by Mr. Eric Abreu Tañón.

**Cristina Rivera:** Good evening to all. My name is Cristina Rivera Román and I live in the Islote neighborhood of Arecibo. Tonight I am not here to speak for myself because on the 25<sup>th</sup> I gave my personal statement, no personal per se because I did it at the EPA office. Tonight I am here representing a group of neighbors, in fact, I am part of the group Mothers in Black. I will be reading the names of these persons, their addresses and their statements.

This statement that I will read now is signed by Mr. Waldemar Ramos of HC 01 Box 11045 Barrio Islote, telephone 939-275-1901. It is properly authorized according to the rules that you in the EPA set, that in order for one to represent someone else we had to have an authorization, and this complies with what you asked.

**José Font:** Sure, yes, go ahead.

**Cristina Rivera:** Yes, it says, Islote neighborhood community, Arecibo, statement project Energy Answers before the EPA, dated August 25, Lions Club of Arecibo. It says:

The scientific community has demonstrated beyond any doubt the negative effects on health caused by toxics released into the air by the processes of incinerators. It's a proven fact that the incidence of cancer is higher among populations that are close to areas where these incineration techniques are used. I am not willing, because of the risk to my health, to have close to my residence, the place where I have my home and my family, to expose them to the risk of a nefarious contamination of the environment that generates incurable diseases. It is abusive to force a community, against its will, to assume a high risk that in time will become fatal, when beforehand it is known that the incinerator will damage the health of its residents.

This statement was also signed by Mrs. María de la Fuente of Calle 2 Casa 208 Jarialitos, Arecibo, telephone 787- 319-7447.

The next one was signed by Mrs. Yarilis Centeno Rivera, of Highway 170, Kilometer 11.7, Campo Alegre neighborhood in Arecibo, telephone 787-664-6574, and also by Mrs. Ada Ramos of Islote neighborhood HC 01 11045, telephone 787-327-0104. It reads:

Knowing beforehand the risks associated with the waste incinerator, based on statements reviewed, conferences and forums that I have attended, I have come to the conclusion that I don't want the incinerator proposed by Energy Answers to be installed in Arecibo. The dangers are too many and not even the EPA seems capable to guarantee us an incineration of waste free of toxics or mechanical or operational failures in that operation. I do not trust the EPA because of the way they have worked in previous cases involving contamination, as was the case at Battery Recycling, on land near the Cambalache neighborhood. I am not willing to assume that imminent threat.

The next one is signed by Nataliz Zamalot Soto HC 01 Box 4393 Hatillo, Puerto Rico, telephone 939-245-6892, and by Ms. Ivanette S. Colón Cortés, Islote 2 Calle 10 Casa 234, Arecibo, Puerto Rico, telephone 787-361-8884. The statement says:

I am not in agreement with the construction of the incinerator proposed by Energy Answers. Over the years, they have only brought to Arecibo factories that pollute the environment. These decisions violate our right to a good health. Our community lags behind as a consequence of the bad decisions taken regarding projects that are brought here. The opinion of the people who live around here is not taken into account, and if once in a while they call for a meeting, it is only to notify us, because it is mandatory, that such procedure takes place. Then, the authority charged will not pay attention to the community's proposals. I want to denounce that this project threatens the health and survival of my family, not to mention all natural wildlife, vegetable and animal, within our

environment. I am opposed to burning in Arecibo the waste of other communities to the detriment of ours. This is an attack on our health, and thus on our lives.

The next was signed by Juan Luis Santos of HC 01, Box 11042, telephone 787-922-6272, and by Rosalina Sierra, HC 01 Box 11042, telephone 787-922-6273. It says:

I authorize Cristina Rivera to represent me at this hearing so she can read this statement. Through this means I state that I am not in agreement with the construction of the Energy Answers incinerator in Arecibo because of the following reasons: Incinerating waste in this town will bring more illnesses to our community, such as asthma, allergies and other respiratory illnesses, in addition to the development of certain types of cancer. Said incinerator will expose us to toxic dioxins in the air for long periods of time, something that will increase the frequency of my asthma attacks, since I suffer from such affliction.

The other one is signed by María Salas Fernández of HC 01 Box 11198 in Arecibo, and by Olga Iris Cruz Rojas of HC 01 Box 11059, in Arecibo Puerto Rico, telephone 787-672-0351. It says: According to reports about the effects of incineration on health, the installation of Energy Answers incinerator is poised to bring genocide to our community. Not only does it attempt against the health of those of us who live in Arecibo, its neighborhoods and surrounding towns, but it will also affect unborn children and nursing mothers. I understand that because Arecibo is a town that in the last few years has been led toward a deteriorating quality of life in its urban structures, once the pride of its progress, and a reduction in its population, it has been chosen for

extermination through the incineration of waste from all over the island at this incinerator. Are we, human beings, also waste material for those who are promoting the installation of the incinerator in Arecibo?

That is the end of the statements from these neighbors from different parts of Arecibo. I thank you for your attention tonight.

**José Font:** Thank you very much. It's now Mr. Eric Abreu's turn, followed by Mr. Waldemar Flores.

**José Font:** Thank you very much. It's now Mr. Eric Abreu's turn, followed by Mr. Waldemar Flores.

**Eric Abreu:** Good evening to everyone present. My name is Eric Abreu, a licensed engineer and licensed attorney in Puerto Rico. I would like to comment about this preliminary permit granted for the project proposed by Energy Answers for the prevention of substantial deterioration of air quality... regarding the extraordinary events in an incinerator operation, such as explosions and fire, that it is known have occurred in late-model incinerators in the United States and in other parts of the world. The models typically applied as part of the permit process tends to only evaluate emissions during normal operations and routinely fail to consider these extraordinary events that could lead to emissions increasing hundreds or thousands of times (higher) than the normal operations of an incinerator. Scientific evidence proves that the accumulation of



contaminants in incinerator emissions eventually contaminates the human food chain. In the case of the model presented by Energy Answers, it fails to consider how these contaminants migrate from the air to other portions of the environment, such as soil, vegetation and water during an extraordinary event. We say again, they also fails to evaluate what is the effect of an extraordinary event, such as the ones I mention, in relation to the maximum level of contaminants in the food. This shows that the evaluation that the EPA has made of the environmental impact of those emissions is incomplete and tends to dissimulate the environmental contamination and the inherent health risks by the facility that is proposed for Arecibo, instead of protecting the town of Arecibo, the people of Arecibo and the citizens of Puerto Rico. We would like to submit some information related to heavy metals and dioxins, trusting that you in the EPA will ensure that Energy Answers complies with the pertinent protection measures before you make a final decision and approve the final permit for the proposed project.

Let's begin with the heavy metals that have an important implication, particularly on the agricultural production processes. We know that contaminants have a direct effect on the body (through) toxic effects because they accumulate, like was stated here, and they lodge in the body's tissues, sometimes permanently, like the doctor said previously. This could pose a significant risk for human health, specifically when the concentrations increase above the concentrations that the body allows, which are extremely low. In addition to human beings, plants and animals are affected by the toxic levels of heavy metals. Fruits and vegetables are an important part of the diet of Puerto Ricans, as are cereals. It is known that systematic health problems can be developed by an excessive accumulation of heavy metals acquired through diet, as is the case with

cadmium, chrome, lead and others, by the human body. The principal source of contamination through heavy metals in vegetables is the method of cultivation, the soil, the air and the nutrients used in irrigation, which are absorbed by roots and leaves. This highlights that there is a significant risk in the cultivation of crops close to industrial areas. Why? Because heavy metals accumulate in the body, and let's see some concrete cases here. For instance, a study was made near an industrial incinerator in Italy and it was found that the soil was contaminated with lead, to a level of 600 percent higher than was present before the installation of the incinerator. A recent investigation shows that the soil around an incinerator in Scotland had high levels of chrome, cadmium and lead, and that the incinerator was responsible for the distribution of those heavy metals up to a distance of three miles from the incinerator. It was also found that the cadmium and lead in air emissions were related to the concentration in the soil. In the United States, waste incinerators such as the one proposed for Arecibo, which also had protection equipment against contamination, levels of lead and cadmium in trees were associated with the distance from the incinerators. In other words, the closer the incinerator was to the trees, the more lead and cadmium they had. The same was shown in New Jersey with another waste incinerator, where it was found that mercury concentrations were higher in plant life closer to the incinerator. As far as dioxins, we have some examples in which soil samples were taken near a medical waste incinerator in Spain and it was found that the highest levels in the samples were of samples that were closer to the incinerator. The levels of heavy metal contaminants found in the soil were two to seven times higher than what was typically found in the soil close to industries. In Japan it was also demonstrated, also in a waste incinerator, that there was

a high incidence of cancer deaths among the citizens that lived close to that incinerator and that the levels of heavy metals in the soil near the incinerator were excessively high in relation to the rest of the neighborhood. We also know that dioxins can accumulate in the milk of cows and ultimately pass on to us humans. There are studies, since 1990, of various decisions that European governments have taken, such as Ireland, Holland, Austria, Germany that have lowered the allowable levels of dioxins to 1.9 picograms per gram of milk. More recently, in 2011, milk became contaminated and it was discovered because the board of a market in a town in Iceland decided to test the milk. They tested it and found that the levels were above 1.9 picograms. It wasn't the government that ordered the analysis, it was a local board that commercialized milk. When they did the testing, it was dioxins that came from an incinerator that had been closed in 2010 and was more or less three and a half miles from (where the milk was produced). Thus, the generation of dioxins transcends time because the incinerator had been closed for one year. We know that there is milk and banana production in towns surrounding Arecibo. We know that the wind in this part of Puerto Rico, which is on the coast of the Atlantic, has a climate of high winds that are capable of distributing those dioxins and those ultra fine particles that the doctor mentioned, to various towns. We would practically have to challenge the concepts of science and logic to say that it would not reach the milk produced in Hatillo, for instance. So from there the milk goes out to several towns in Puerto Rico, so we are talking of something that can happen like it happened in Ireland, that we are going to be drinking contaminated milk and contaminated meat because the meat is distributed to all of Puerto Rico. None of the incidents I have mentioned here has to do with something out of the norm, they are the normal operations of an

incinerator, we are not talking about extraordinary event. If an extraordinary event occurs, such as a fire or an explosion or an outage, and they turn the incinerator back on, you can be sure that emissions will change and that is not considered in the preliminary permit. So we know that consuming food is the principal means of exposure to these contaminants in neighboring areas where agriculture takes place, and we understand that this aspect has not been well analyzed. What we want to say is that this preliminary permit raises serious doubts for us and we are opposed to it being approved.

**José Font:** Thank you, Mr. Abreu. The next speaker is Waldemar Flores. Err, Waldemar, forgive me, but I have someone who just arrived here and was pre-registered. The next turn belongs then to Mr. Rafael Fernández. After that it will be Glorianne García, followed by Waldemar. Please go ahead.

**Rafael Fernández:** Good evening to everyone. My name is Rafael A. Fernández Sosa. I am part of the Puerto Rico Recycling Partnership, which is an alliance between the EPA, local government, private industry and non-profit organizations of common citizens. Our mission is to promote the sustainable management of materials, better know as Zero Waste, through recycling, in Puerto Rico. Last semester I formed, along with another 39 young people from the school, a project sponsored by the USD to take compost education to the public schools. We had workshops and implemented a system of composting in 22 schools, reaching 4,000 students in the islands of Puerto Rico. I am working wholeheartedly to solve this problem, developing community, school

and entrepreneurial projects and collaborating with municipalities in the implementation of innovative strategies in the handling of materials. That being the case, I think I have something to contribute to this discussion.

First, I thank the EPA for extending the time to gather public comment (and) for hearing oral arguments. I think the topic merits such. The decision before the agency to accept or deny this permit that will define the future handling of waste in Puerto Rico will also define the future of the recycling and compost industries. I also want to thank the rest of the speakers for participating in the administrative process. It's important that we all be present. My presentation is not about the health risks regarding the proposed facility.

That is not my area of expertise. I will examine the proposed facility from a public policy standpoint of the best practices and experiences of leading jurisdictions in this matter. A comprehensive look shows that city after city, county after county, country after country that are opting overwhelmingly to implement Zero Waste and turning their backs on incineration. In fact, the State of Massachusetts, where the factory that developed the proposed technology is located, imposed a moratorium on this facilities in the mid-90s. It considered doing away with it two years ago, but did not do it, opting for a long-term master plan called The Road to Zero Waste. This strategy has become a consensus alternative for reasons that are easy to identify and quantify. It generates jobs, it's better on the environment and brings superior socioeconomic benefits and does not bring about any of the noxious effects of incineration. Building this plant, designed to process almost 50 percent of all the waste in the country, would have another serious repercussion that cannot be ignored. It would annihilate the incipient recycling and composting industry in the country and preempt its future development. It is an industry

that already employs more than one million people in the United States, a figure that is expected to double in the coming decade. Despite what the proponents of incineration say, incineration and these green industries are not compatible... If we submit the pool of waste in Puerto Rico to an analysis of the best adequate use, or the “highest and best” use that Zero Waste proposes, we find that more than 90 percent of the paper, cardboard, plastic, glass, aluminum and other metals, organic matter and construction leftovers, is recyclable, reusable and can be composted. This analysis is made in relation to “embodied energy,” ergo, how much energy en resources did that object consume to reach its current state and location? And what is its market value as a productive consumer item? These materials are more valuable as compost in agricultural production and industrial cycles than incinerated or in thrown in a landfill. According to the documents submitted, the incinerator would require more than 2,000 tons of trash per day to work, or as I stated, almost half the waste generated in the country. These reports also show that only 80 tons or 4 percent (of the waste) will be recycled. From the start, we see that 46 percent of our current recyclable and compost material would be made inaccessible. Let’s also remember that this is just one of the facilities of this type that “are being proposed” in the country. On the other hand, we cannot underestimate the economic impact of recycling 90 percent of our waste, compared to incinerating it. It is estimated that for every job created in the incineration of 10,000 tons of waste, four (4) jobs would be created in a compost factory or 10 in a recycling plant. Moreover, the investment required for an incinerator facility is overwhelmingly higher. A facility of 1,500 tons a day proposed in Maryland, which is smaller than this one, would require an initial investment of \$600 million, while a

recycling (plant) of similar capacity would cost less than \$20 (million). It's absurd to think it will be easy to reach Zero Waste. It is equally absurd to think we could solve all of our waste problems by burning it. We are fortunate, though, that we do not have to reinvent the wheel. Many other places have done that for us establishing models that we can duplicate. How? Employing public policy tools that require commitment; prohibiting that organic waste ends up in landfills; bills for bottle deposit (incentives); mandatory recycling; pay-as-you-throw systems; and others.

The Puerto Rico Recycling Partnership has proposed a sensible plan titled, Sustainable Material Management Strategy for Puerto Rico. That is a good place to start. I urge everyone to read it and the government to adopt it. We are here to help implement it. I also invite (everyone) to join our group. You can do this through our web page, [reciclamospr.org](http://reciclamospr.org). Our next annual meeting will take place in September. In closing, this project is in nobody's best interest, not for the country nor for mi future children or their children. Let's use this opportunity not only to be united in rejecting the incinerator, but also in implementing the solution that our precarious situation demands and which is within reach. It's always good to begin at home. Thank you very much.

**José Font:** Thank you. Next is Mrs. Gloriane García.

**Gloriane García González:** Good evening to everyone. I have come to express my opposition to the incinerator. My name is Gloriane García González. I live in the Victor Rojas 2 neighborhood here in Arecibo and I am a teacher. This caught my attention because I teach in the second grade and I tell my children and my students that they

have to protect the environment, safeguard their community and love their country. When I found out that they would begin an incineration project, I sought out information responsibly, so as to not speak without being informed, and I found out that the incinerator is not healthy, not only for me, but in the future for my children, my grandchildren, my nephews. What I want for them is that they are healthy, really healthy because, like the doctors and the different experts that have spoken on the topic have said, the nanoparticles affect everyone's health and invade the food chain. That means that we will become sick from what we eat and what we drink, and I am in total disagreement with that. I want my voice to be heard here. I represent my family and my neighborhood and I say, firmly, that I am not in agreement with the incinerator. That would be all.

**José Font:** Thank you. Is there anyone present here who has not spoken before? OK, because I have approximately two hours and twenty minutes left and I have a large amount of persons who have expressed interest in continuing their presentations. If there's no one else ... OK, we have time today so I will ask this? Is there anyone who has not spoken who would like to speak today?

(Inaudible voice)

**José Font:** We're going to take a 15 minute recess... I have some four persons who have expressed interest in speaking and we can divide the time. The recess is 15 minutes.



(Recess)

**José Font:** We resume the hearing. Please take your seats. We have three additional speakers tonight. We start with Mr. Iván Elías, followed by Dr. Gonzalez and closing off with Waldemar. I caution that if somebody new comes in tonight interested in speaking, we will rearrange the order and the allotted time to guarantee that those people have their turn. So, without further ado, we resume the hearing with Mr. Iván Elías. You will have 20 minutes each.

**Iván Elías:** Yes, good evening. My name is Iván Elías. I come tonight representing Citizens in Defense of the Environment of Arecibo. I have a written statement that I have been working on for some time, but I want to start by making a comment that I will address in full later. I have heard today everything that the speakers have said and I know EPA knows about all of that. That means that today's speakers have told EPA nothing that EPA does not already know. Nothing, absolutely nothing. So the question is why are we all here? Because supposedly citizens have a chance to state their opinion on this matter. I am concerned if the community is really having a chance to opine on this matter. Certainly, these are not the three minutes we were given the previous time. But I am thinking now about the Cercadillo community and the people who have been listening for two years to the people from Energy Answers who tell them that the company is going to take all the solid waste and turn it into energy. They've been saying for two years that the solid waste is turned into energy. They have two years telling the

people of Cercadillo that the incinerator will bring about the closing of the landfill. They have hired the people of Cercadillo near the landfill to distribute fliers, giving them jobs. They have two years coming and bringing them to the public hearing, in bus, they tell us, and even paying them to come. I ask myself if that is legal? Does what Energy Answers has been doing for the past two years guarantee that people can effectively participate in this hearing? Obviously, I am effectively participating under other circumstances, but the people of Cercadillo, one of the communities of Arecibo that is affected by the incinerator is not participating effectively. They have been buying time on the radio, on the principal stations of Arecibo for two years. The stations that people are listening to are saying the same thing, that we will solve your waste problems with the incinerator and produce energy. They take the waste and turn it to energy. I was in a forum on radio with (Mr.) Toro and he said that. They have two years telling people on radio, on television on the mass media that the incinerator turns waste into energy and that they will close the landfill and that people are going to have jobs. I know that is not true and the EPA knows it, too. You yourself said at a meeting last may and today they have reminded you of it, that the landfill in Arecibo has no plans to close. So, right now, today, the EPA evaluation does not include the closing of the landfill, and that is not a condition of the permit. If, on the contrary, one thinks with a little bit of intelligence, one should say, "wait, the incinerator will generate 500 tons of solid residue that has to be put somewhere;" toxic ashes that they have to put somewhere and that they are going to try to pass them like the ashes in Guayama, from the company that produces electricity from coal in Guayama, and that the EPA considers those ashes as not toxic. They want to do the very same thing with the ashes from the incinerator. Where are

they going to put them? They are not going to take them to Fajardo. They're not going to take them to Ponce. They are going to put them in Arecibo; that is the logic. So, I ask myself, the people of Cercadillo, have they had a real opportunity for the EPA to provide them with the conditions to participate in an intelligent manner in this process? I believe not, because the EPA has not audited the statements that Energy Answers has been making in the news media and in the communities. It is Energy Answers who has delivered the message. It was not the EPA. If the EPA tells me that the incinerator will convert waste into energy, the official who says that is lying. An EPA official who tells me that is lying and misleading the people. Here, I do not come to question Energy Answers. You see, I came to question the EPA. I was a permit engineer for ARPE (Regulations and Permits Administration) and I know what the regulatory function is and the regulating agency has to place on equal footing the parties that favor a project and those that are opposed to it. That is the regulatory function. Why? Because the law says this is a solicited application, it is not a right that is acquired immediately through the act of applying. When there is an adversarial process, there are two adversaries, and the EPA in this case has not guaranteed that one of the parties – a fundamental part of the permit process – the public, can have an informed and intelligent participation, particularly the people of Cercadillo, who have been led to believe that the incinerator will solve the contamination caused by the landfill there. I think that is illegal. That could even call into question the validity of this public hearing because public participation has not been guaranteed for all of the affected persons. That is the first point. The affected persons, who are they? The EPA has not stated publicly, either, has not published who are the people who will be affected by this incinerator. I repeat, and I am not interested

in Energy Answers opinion, (because) Energy Answers is trying to sell their project. What interests me is the EPA's function. And the EPA has not said, "Look, Puerto Rican living in Mayaguez, you will be affected by this incinerator." And in what proportion? That we will discuss... but you have the right to come here. They have called for a public hearing, but do the people of Mayaguez really think this has something to do with them? The people of San Juan don't think this has to do with them. Why? If the documents from Energy Answers that the EPA apparently has appropriated say that the project (radius) is up to 10 kilometers, 10 kilometers reaches out to Hatillo, 10 kilometers reaches out to Islote, where I live. Ten kilometers extends to the southern part of Arecibo... What I know is being evaluated is how the people who live inside those 10 kilometers are being affected and they have not really been given the space as other people who will be affected by this incinerator to be present here and participate. I repeat, from that point of view, I think the validity of this hearing is questionable. The people of Cercadillo have a right to participate with a true knowledge of what the incinerator implies, not in a misguided way with a misleading discourse in which they are told, "I will give you a job, you will have jobs. Look, I'm going to hire you to distribute publicity for this incinerator." I repeat I am here to question the EPA and not Energy Answers.

Obviously, Energy Answers makes the pitch because it is their project and they are the ones with the investment. Look, even though we are also investing in this and will be affected, ladies and gentlemen of the EPA, we express through this (forum) our most profound rejection to the permit for Energy Answers to construct and operate an incinerator in Arecibo, in which it intends to burn more than 2,100 tons of solid waste on

a daily basis. We oppose to the permit being granted because for the residents of the Arecibo region the proposed incinerator would bring about an increase in air pollution and a deterioration in the quality of the air that we will have to breathe – a product of tons of contaminants such as dioxins, furans, mercury, lead, cadmium, nitrous oxide and carbon monoxide, etc.

It would bring about deterioration in the health of thousands of people in the Arecibo region that suffer from diverse illnesses and whose condition would be significantly worsened by the smokestack emissions and the accumulated ashes. They would threaten the health and the potential growth and healthy development for tens of thousands of boys and girls, residents of our region, who would have to grow from womb to adulthood while the incinerator releases 1,500 tons a day of contaminants.

It would bring about the contamination of the environment where species and habitats of great ecological value for Puerto Ricans are located. These include the Puerto Rican parrot, the Caño Tiburones wetlands and the more than 200 species nested there, the forest of Rio Abajo where the Puerto Rican boa lives and where a project to preserve the Puerto Rican parrot is ongoing. The Cambalache Forest, and the Coastal Littoral where the marine turtle (tinglar, carey, white peje ) nests.

It would deliver a mortal blow to the dairy industry of Puerto Rico, aggravating threats to food safety polluting with dioxins and other contaminants that would turn milk toxic. The region of Hatillo, where the largest amount of milk consumed in the country is produced (is) considered one of the regions in the world of greatest productivity in the milk industry. It would threaten alternate solid waste handling strategies, such as reduction, reuse, recycling and compost. At the same time, municipalities would be forced to feed

their waste to the incinerator, guaranteeing certain amount of waste or paying for (the disposal) anyway. A note aside, there's a contract signed by the Solid Waste Authority last April with Energy Answers, where the authority commits to persuade – force – the municipalities to take their waste to the incinerator. So, the obligation has already been contracted. The statements they made before to the effect that this would not be “take waste or pay” is there after all. They used another way to get there, through the contract with the Solid Waste Authority. Instead of recouping energy, it would lead to the extraordinary loss of energy and resources. The EPA knows this, because the materials to be burned there would require much more energy than what can be produced at the incinerator to be replaced through the manufacture of new merchandise. (It's) a plant that in reality wastes energy and resources, something that the EPA knows.

It would bring about the contamination of one of the potable water sources of the Puerto Rican people, the Northern Coast super aqueduct, which is located three kilometers from the incinerator. And because the permit process has been one in which the EPA has not protected the right of the people to participate intelligently in the evaluation of the proposal... (It) has not complied with statutory responsibilities that the law imposes on it (through) the National Environmental Policy Act and the applicable rules in the PSD process. The previous statement regarding the lack of compliance of the EPA with its statutory responsibility is clearly justified by the following points:

The EPA has acted with bias in the evaluation of this application, directing the applicant to modify the documents it submitted so that the EPA could justify the issuing of the permit. And we make another pause. If you look at the permit file, you will find indications that EPA officials tell the Energy Answers consultants – the people from

Arcadis – where to find the information that they need, how to fill out the application... in a manner that can be efficiently evaluated, to the point that they make corrections when Arcadis submits wind information incorrectly. In other words, the EPA has to tell Arcadis, “Look, what is customary is not to put down information of where the wind is going to, but where it is coming from.” The EPA even had to give Arcadis that (information) during the preparation of the research. If you analyze that file, you will clearly realize that instead of being a regulator, what Mr. Steve Rivas and his personnel did was advice the incinerator company so it would meet the minimum requisites to be able to issue it a permit. The EPA turned an adversarial rights process into a process where it took the place of the applicant, becoming for all practical purposes in the applicant while being judge and jury in the permit process. The EPA did not protect the rights of those of us who are opposed to the incinerator, even after we demanded from Mrs. Liza Jackson protection for the rights of the opponents of the incinerator. Regrettably, she decided to delegate a response to our demands to an EPA Region 2 official, Mr. Iglesias, who is present here .... coworker of Mr. Steve Rivas, when in practice it is Region 2 that is being questioned. This permit runs contrary to the objective that is pursued through the evaluation (process), and then the purpose of the clean air law would grant a permit for contaminants of the air, water and soil of the people of Arecibo and other residents and workers of our region. The EPA accepted without validation – and this is important – information provided by Energy Answers and its consultants.... The EPA never judged those documents; they took them as good but did not evaluate them, did not question them and adopted them as if they were their documents. That’s why we are saying that it assumed the role of the applicant, that’s

why Mr. Rivas in May said that “you need two incinerators, not one, but two.” That’s what Mr. Rivas told us and that’s why I looked at him and told him, “Look, you are in love with the incinerator.” That’s why Mr. Rivas is incapable, I repeat, incapable, of evaluating this application.

**José Font:** Thank you, Mr. Elías. The next turn belongs to Dr. González, then we’ll close with Waldemar. If by then no one else comes and wants to talk. We continue.

**José Font:** Thank you, Mr. Elías. The next turn belongs to Dr. González, and then we close with Waldemar, if by then no one else comes and wants to talk. We continue.

**Ángel González Carrasquillo:** Good evening and thank you for allowing me this additional turn. I wanted to mention from the start the bias that Mr. Steve Rivas showed in the May meeting, which leads us to believe that he already made a determination that Puerto Rico needs one or two incinerators and what he did then was to effect the process to achieve that. And we understand that no, that should not be allowed. In fact, one of the statements made us take notice of the state of New Jersey, that in fact is part of Region 2 and that has six incinerators. We asked ourselves if he had something to do with the approval of those six incinerators.

I wanted to mention two or three things that I forgot in previous presentations. We had the opportunity to look at the Arcadis studies in connection with the possible consequences on health of this machine that burns waste and obviously Arcadis determines that despite there being people at risk, there is no additional risk within that



circumference of 10 kilometers. We asked ourselves, and we would like to ask the EPA to please investigate, if at any moment Arcadis has issued any unfavorable report for those that hire them. Obviously, if they're paying for a determination, we suppose they will not make an unfavorable determination. So we would like to suggest to the EPA that they give us that information.

We want to point out some things related to the effects on those who work at incinerators. Like Ivan Elias said, part of the information from Energy Answers to the people of Arecibo is that we are in a situation of great unemployment in this area, and they have promised jobs for the people. We simply wanted to mention some studies that we have had access to so they are clear in that accepting a job at an incinerator will place them at high risk, three and a half times higher, for instance, of dying of lung cancer, one and a half times higher of dying of cancer of the esophagus, almost three times higher of dying of stomach cancer, an increased risk of mortality from ischemic cardiopathy, heart disease and hyperlipidemia, which is an increase of fat in the bloodstream, which in turn puts them at risk for other related diseases.

We also wanted to mention the studies that have been made regarding the impact on health of the people who live near incinerators, and we only want to mention some of the data we have on that. The people who live near incinerators, according to studies made, have a 44 percent increase in cases of sarcoma in soft tissues; a 27percent increase in non-Hodgkins lymphomas; from six to seven times (higher) mortality from lung cancer; an increase in incidence of cancer of the larynx; a 37 percent increase in mortality due to liver cancer; two times more probabilities of (their) children dying from cancer. That all relates to people living around incinerators.

Another point I wanted to call to the attention of the officials is something that I don't know if maybe has been mentioned, the possibility of a fire. The sparking facility of Cimas, in 2007, had a fire that lasted for two days, required the resources of firefighters from 36 counties and sustained loses then estimated at \$18 million. Two years after that fire – and note if this reveals something about the attention given to the workers in those installations – in 2009, OSHA cited Cobanta, the company that was operating that incinerator, for not providing adequate protection equipment to the workers of the incinerator. They made very significant findings – and look at this which, in truth, is incredible. OSHA found that at the Cimas plant, the “poster incinerator” for Energy Answers, they had electrical equipment with duct tape and cardboard. Also, they were storing oxygen cylinders immediately next to acetone cylinders. I wanted to mention that because on many occasions the Cimas plant has been mentioned, but the matter of this fire in 2007 has been forgotten. And I ask myself if the EPA or the pertinent organization has to take into consideration the possibility that if they place an incinerator in Cambalache they might have to deal with that situation, and if Puerto Rico is prepared to deal with a fire of that magnitude. Finally, I wanted... the general manager of that plant was Mark Green? Maybe Mr. Green can give us more information about that if he's interested in speaking again.

On the EPA web (site) there is a very interesting page about the National Primary Drinking Water Regulations. It lists the allowable limits, compatible with public health, of various water contaminants... we were looking particularly at the dioxins level, particularly the most toxic dioxin, with is 2378 TCDD and we saw that the public health goal for that contaminant was zero. OK? Zero. And the maximum recommended (level)

for dioxins in drinking water is 30 parts per quadrillion – that’s an amount of that toxic substance that one cannot imagine – so I think this gives us a little bit of an idea of how we should pay attention, or look closely and with much attention at the possibility – and it is stated on the same table – that dioxins, the main source of this contaminant, are the emissions of the incineration of domestic waste.

Finally, then, I will finish by talking basically about what I understand that maybe should be an important point that we should consider. It’s what’s called the principle of precaution, and we finish by affirming that this principle of precaution, which has gained much acceptance by the scientific community in the last decades, must prevail in this process. When there is uncertainty about the effect on health and the environment that might be the product of a process such as incineration, we must act with caution, with care, with prudence before allowing the installation of this machine. After all, we are talking about the potential effect on the health of human beings that will be the victims of that decision by your agency. The 24<sup>th</sup> report of the Royal Commission on Environmental Pollution that addresses chemical agents in products, safeguarding the environment and public health, points out that history is filled with the unexpected toxic impacts resulting from the use of chemical compounds made by man. Even though some knowledge has been acquired, we find errors, such as the development of a significant number of endocrine-disrupting chemicals in the 80s and 90s. I translate, and this is my translation: It could not be foreseen that the low-level concentration of antifouling agents, nonylphenol (solvents), fire retardants and (cobalt) tallates – that are often mentioned today – utilized in plastics such as baby bottles, would affect hormonal receptors and metabolism in animals and can even produce decreased testicular

function, atrophy and even malignant testicular (tumors) in humans. Take note that these examples mention compounds that are considered well-known, in contrast to the ultra fine particles and nanoparticles emitted in vast quantities by the incinerators, regardless of emission control technologies, and I'm the one adding that. In addition, we know about harmful nanoparticles, in concentrations below the established standards, but we know very little about their possible effects on the environment and their probability of causing unintended damages. I continue citing the work of Dr. Howard, an expert in nanotechnology, who in turn cites Cursley, and I quote: "In light of all the uncertainty and limitations, the investigators, according to the current level of evidence from the association between air pollution and health, the precaution principle could provide an excellent guide to implement clean air strategies." The European Union Treaty, Article 174(2), amended in Nice in 2004, recognizes that scientific evidence might be inconclusive and that priority should be given to public health. I quote again, "A focus on precaution must be a priority, as opposed to taking action only when there is proof or suspicion of demonstrable harm. The principle of precaution must be applied when the possibility of damages to health or the environment has been identified and the preliminary scientific evaluation is inconclusive in determining the level of risk. The protection of public health must be a priority." Based on these references and complying with our duty as an institution that must help and protect the health of our fellow citizens, the College of Surgeons and its environmental public health committee asks the EPA to deny the permit to contaminate the air, the PSD permit, with an incinerator in Arecibo to the company Energy Answers. Moreover, we ask that the relation between the EPA and the multimillion company Energy Answers be carefully

examined to make sure that no ethical statutes of the agency and the federal government have been breached.

Thank you.

**José Font:** Thank you, Dr. González. Next turn belongs to Waldemar Flores.

**Waldemar N. Flores Flores:** Waldemar Natalio Flores Flores. I thought I couldn't speak anymore. Well, we'll change the topic to the draft of the preliminary permit, we're talking about chapter 7, requirements of operation, labor practices and parameters for smokestacks in section B, system for handling ashes, point 5 on page 13 says: at least six months before the anticipated start of operations, the permit holder will submit a plan of study of the characterization of the airborne ash and residual ash to the Environmental Quality Board for consideration and approval. The second part would say that the permit holder will not send any ash or byproduct to the incinerator for disposal or use that brings it benefits without the previous approval of the Environmental Quality Board. From the more than 40 pages of comments regarding this draft that I have, let me begin: The board is not qualified because it does not possess a quality system (QS) or a quality assurance division (QAD). Worse still and more important, a characterization of the "bottom and fly ash" is being ordered. Characterization means knowing what they have and how much they have. It is not a process of (analysis) of toxicity. The Toxicity Characteristic Leaching Procedure (TCLP) was designed to analyze samples of non-hazardous household waste in municipal landfills. Household waste is what each of us throws into the trash in our homes, which under the trash

collection system is sent to a sanitary landfill. This waste, however, exposed to the conditions of temperature, pressure, humidity and others releases (substances) and these contaminants affect the quality of our groundwater, storm water and underground water at different depths, and I'm not including vapor emissions. This test pretends to simulate what household waste experiences over a period of 30 years in a municipal landfill, in the course of daily life, including the movement of heavy compacting mechanized systems. With the changes to the TCLP, this procedure is only a license, a permit, a blank check to pollute for the benefit of the polluters, and I am citing people that I know who have worked on how this procedure was established in the United States, and we can contact them. The EPA, as any local, state or federal government agency responds to and is a victim of the political and economic pressure of lobbyists and Big Business, something that varies a little but not a lot with each new local or federal administration. As a means of measurement, its totally, completely, duly and absurdly discredited as far as its scientific value and legal standing, and even the name is a farce. Toxicity Characteristic, what toxicity? Toxicity according to the Toxic Substances Control Act (TSCA), are mutagenic, reprotoxic and carcinogens. Look, not all the compounds here are that or are even suspected of being...

(Somebody from the public speaks)

**José Font:** Thank you, Dr. González. Next turn belongs to Waldemar Flores.

(Somebody from the public speaks)

**Waldemar Flores:** Not so loud? OK. Whoever can surf the internet will find that there are more than 100,000 publications about the limitations of TCLP and more than 100,000 publications of what's wrong with TCLP. These publications are free of cost and have been made public or more accessible to the public thanks to the interest of the authors in letting people know how useless this is for the purpose of characterization, according to the Resource Conservation and Recovery Act, or RCRA, which is just one of the federal laws on environmental affairs. The ashes from the Arecibo incinerator of Energy Answers are not domestic waste. On P5, which is the second part that was there, on page 13, it is also indicated that whoever has a provisional permit, Energy Answers, cannot dispose of any ashes or aggregate from its furnace or use them for its benefit without receiving previous approval from the board. As far as beneficial use, what is the evidence? The studies that are made must comply with all the requisites of a system of quality, which I have not been able to define yet, and all of its management tools for total quality, complete true and absolute. Where are the studies? What (Mr.) Rafael A. Toro Ramírez, said in this place on August 12 of last year that there were studies... of what? I asked him for information. The same applies to the proposals for the incineration of fuel, auto shredded residue (ASR), fuel derived from tires (TDF) and Processed Urban Wood Waste (PUWW). And the other studies that they say they will utilize for fly ash, that they say they will encapsulate, which will make cement, well, I would like to see those studies that talk about the compatibility of ashes with cement, given there are natural changes in cement as time goes by...

The board is not qualified to effect an evaluation or a final determination of anything else about the use of ASR, TDF, PUWW or any other study. The board is a high-risk entity for the EPA and doesn't possess a Quality System (QS), nor a Quality Assurance Division (QSA) that is lawful and really independent from political, economical and any other type of pressure, which abound and are embedded in all of the administrations of the Free Associated State of Puerto Rico, the government of Puerto Rico or the Colony of Puerto Rico, however you want to call it.

The decisions and determinations regarding Quality Assurance, Quality Control that are the responsibility of that Division to effect with certainty of quality have never been done because such division does not exist. The area directors and the board and, of course, the elected leader in turn – and remember that the board is part of the Governor's Office – are the ones who have determined what is approved and what is not by the board with the participation of special interests and the developers. The EPA since 2006 has been demanding that the JCA establish a division of Quality Assurance and a Quality System to a much larger degree than (now), where federal funds are only disbursed when the EPA Region 2 in New York believes that the JCA has done the job. However, the pressure from the EPA has increased in recent months, but the EPA Region 2 in New York has a history of non-compliance with Quality Assurance and Quality Control when it comes to Puerto Rico and New York that dates back decades. Remember that from Tuesday, February 18, 1986 to Friday, July 7, 2000 I was quality assurance officer in the Environmental Quality Board and this situation has gotten worse as years have gone by. EPA Region 2 New York has distinguished itself by not consulting or following the recommendations of Edison, New Jersey for decades. In Edison, New Jersey is



where all of the Quality Assurance officers for EPA Region 2 are located. In New York, in the Caribbean

Environmental Protection Division (CEPD) not a single of the EPA's quality assurance officers is assigned. All of them are in Eddison, N.J. and they consult them when they have no other option, and I have been witness to that. The JCA must have a Quality System, see annex 1, page 2 first paragraph and second to fourth paragraph. The JCA since Friday, November 12, 1993 establishes on Rule 9 of the Public Environmental Policy, and again on Wednesday, September 22, 2004 through the new Rule 416 of Politica Publica Ambiental for the accreditation of institutions and the certification of individuals who generate and process environmental data, which applies to all the activities of generating and processing environmental data, inspections, permits, environmental evaluations, environmental impact statements, sampling and analysis, parameters for chemical or biological compounds or any other activity of generation and processing of environmental data. The ashes from that incineration plant, just like those of the incineration plant proposed for Barceloneta and the ashes from the coal plant in Guayama must be disposed of as hazardous waste, or at least as special waste. They cannot be disposed of in just any place and no legally defensible evidence has been presented – and the lawyers here can speak to this better than me – with scientific validity or quality system to the Board or the EPA that includes the process of data quality objectives as part of its quality system and as part of what is evidence and scientific validity to the EPA.

And they also have not presented... benefit studies. The EPA has been crass and grossly negligent – the EPA Region 2, New York – in not complying with its legal duty

and mission of protecting the environment and human health. That is for this presentation as such, and if you give me more time I can talk to you about other things, or have someone else talk here because there are more errors still, and I could talk about the definitions with calm, which I did not talk about this morning. I mean, if I still have time. Or is there someone else who will speak?

**José Font:** Yes, Waldemar still has nine minutes according to what we agreed previously. Following Waldemar, then, we'll consult with the audience on the course of action.

**Waldemar Flores:** Well, if he wants two minutes while I look for what I will speak about in the minutes I have left, then let him speak for two minutes. Is there a problem with that? Because I thought I would take more time, so I didn't know how much time I had left or I would have read what I have in the (briefcase).

**José Font:** Well, in that case, Waldemar, you choose, either you finish the nine minutes or you finish before that and if you have any time left you can use it.

**Waldemar Flores:** Or I leave him the two minutes and I keep the seven?

**José Font:** No, we cannot cede speaking turns.

**Waldemar Flores:** No? Then, if you allow me one second so I can look over there...

OK.

**José Font:** Osvaldo, are you interested in making an additional argument?

**Waldemar Flores:** Well, in relation to what I said this morning, let's take it with calm.

The mission of the United States of America Environmental Protection Agency, or USAEPA, or EPA to abbreviate, is to protect the environment and human health. Even though there are different points of view or definitions of what the environment is, there is no doubt about what human health is or should be.

The mission of the EPA is not to promote industries, technologies or economic development, it's to protect the environment and human health, if I may say it again.

**José Font:** Sorry Waldemar, if you could please slow down so that the person can (write) it for the record.

**Waldemar Flores:** Ah, very well. To be able to carry out that mission, the EPA has to be totally, completely, duly and absolutely sure that all of its decisions and determinations are legally defensible. This applies to all the environmental data that are generated and processed in activities performed to find out, verify and effect compliance with environmental laws and regulations. This applies to permits, inspections, environmental evaluations, environmental impact statements, sampling and analysis of traditional parameters, the presence and concentration of chemical compounds, physical

properties, geological, meteorological models and any other activity. These activities of generation and processing of environmental data must be legally defensible. To be able to defend them legally, it is necessary to generate and process environmental data that are scientifically valid, precise and knowingly accurate and appropriate, of an acceptable level of comparability, wholesomeness, representativity and sensitivity, and have documented the generation and processing of that environmental data in a manner which is whole, complete, reliable and absolute, utilizing quality management tools, or QMT. Hence, that environmental data generated and processes are totally, completely, duly and absolutely reliable. Only then that environmental data generated and processed, will be legally defensible in any entity with authority in the environmental field, local or federal, with or without judicial power or inside the judicial system at the local or federal level, be it at the initial, appellate or supreme instance.

For the purpose of legal defensibility is that today exists what we know as Quality System, or QS, previously known as Quality Assurance

Program, or QAP. The EPA in 1984 established the quality system through order 5360.1, which has later been reauthorized. The order requires that all environmental programs effected by or for or in representation of or in cooperation or on behalf of the EPA are backed by a system of quality, see annex 1, page 2, first to fourth paragraph.

Before continuing, it is vital to define elements and concepts of the quality system know as "Quality Management Tools, or QMT, In the three phases or parts or a project, like the one the EPA Region 2 New York had for consideration, evaluation, revision, comment and approval, in that particular case Region 2 had to solicit and demand a Quality Assurance Plan, QAP, previously abbreviated as QAPP, for the model crass

and completely badly crafted in that particular case for that project. EPA Region 2 New York solicited a protocol, something that is totally, completely and absolutely unacceptable. A QAPP is the cornerstone of a quality system. Even though it is included in the first two parts or phases of a project, its scientific and technical content applies to the three parts or phases of a project. The protocol, which is what the EPA asked for and allowed gained approval to that mess of a case.

Energy Answers, if by chance used that in the preparation of a quality assurance project plan, never substituted it. It has been a crass and enormous mistake on the part of EPA Region 2 New York to solicit and accept the preparation of a protocol.

Obviously, the quality assurance officers in Edison, N.J. were not consulted for this project and EPA Region 2 New York ignored – ignores – the existence of a guide for quality assurance project plan models, as Mr. Steven C. Rivas has to admit at the public meeting on Wednesday, May 23 2012, at 8:21 p.m., at the installations of the University of Puerto Rico, Arecibo campus, during questions made by yours truly, Waldemar Natalio Flores Flores.

The guide for QAPP that should have been used is the Guidance for Quality Assurance Project Plan for Modeling, EPA QA/G-5M, issued December 2002 by the EPA office in Washington, D.C., USA. Before defining, it is a priority to visualize how the quality assurance project plan is relevant and vital in a project such as the model plan or the traditional sampling and analysis.

Phase One: Planning. Phase Two: Implementation. Here, the quality assurance project plan includes indicators for data quality, which are: precision, accuracy, compatibility,

completeness, representatively and sensitivity. It also includes data quality objectives as part of the process fro data quality objectives. This consists of seven phases...

(Pause)

OK, I'll see how far I get, they are ringing the bell.

It is the scientific method and it requires the participation of everyone who could be affected or will be affected. It's not little public gatherings to allow an engineer or a comedian to come in... to talk propaganda about how good this is for Puerto Rico. That quality assurance project plan includes operational procedures for conventional or standard patterns. It also includes quality management tools for the third phase o fhete project, so that the quality assurance plan encompasses the whole project, and the third phase consists of audits, evaluations, revisions, verification and validation...

(Pause)

OK, let the next one come. We'll continue later.

**José Font:** Thank you, Waldemar. Is there anyone else in the audience that has not presented an argument and would like to do it now? If we don't have anyone who wants to make an additional statement, then we will use the time remaining going to Dr. Osvaldo Rosario for 10 minutes, followed by Iván Elías for five minutes. Thank you.

**Osvaldo Rosario:** Thank you for this third opportunity. I don't think I will take the 10 minutes, but one point that, although not directly tied to what I was talking earlier, is related. I don't know of any company that is pursuing a permit openly in that application process that will say, "I will not comply with the established parameters set by the

agencies.” All of them, all of them are obviously going to say, “I will comply completely and the technology I will use will allow me to comply completely.” That’s how it is. It’s logical, and that’s how it is. It’s not surprising here with Energy Answers. However, once they get their permit and once they begin operations, we will see something different. At least my life experience tells me that they will not comply like they say they will comply. Incinerators, for instance, in the United States, continually receive fines. It’s rate to have an incinerator that does not have these multiple fines for... violating the parameters of emissions in their operations.

In Puerto Rico, even though they don’t have large waste incinerators, we see the same as in other operations. For instance, Cemex. If we go to the files of the Authority for Electrical Energy, the Authority for Aqueducts what we will fine is a long list of continuous fines. What does that tell me? That the regulatory agencies, state and federal, are not capable, do not have the mechanisms to ensure the continuous, compliant operation of those plants. That is reality. They don’t have the clout to make it so. One of the few exceptions I know of is the Food and Drug Administration because their fines are substantial, hundreds and hundreds of millions of dollars which are capable of shutting down a plant. But not so with the EPA, not so with the agencies in Puerto Rico. Basically, the EPA fines and the fines of agencies such as the Environmental Quality Board become no more than operational costs for the companies. It is cheaper for them to pay the fines in relation to the profits they are deriving from the shortcuts they are taking in their operations. There is the example of an incinerator, where 30 percent of the operations costs go to emissions control. When they are trying to maximize their profits, where do you think they will start taking

shortcuts? What they will be saving is much more than the fines they will get. However, in a monster such as the one proposed for Cambalache, the consequences of non-compliance are horrendous, they're very serious and it should not be permitted that they take that attitude, that they become lax, like in many other places. That is why they should not be allowed to set up. Again, because life experience tells me that the agencies, not necessarily because of their personnel's fault – the personnel may have the best intentions – but because of the gaps in the laws that prevent them from being effective and enforce compliance like they are supposed to do. That's why we cannot allow that plant to set up here in Arecibo. Thank you.

**José Font:** Thank you, Dr. Rosario. Now we turn to Mr. Iván Elías. Five minutes.

**Iván Elías:** Yes, five minutes. I was talking about the lack of compliance with their ministerial duties on the part of the EPA. That lack of compliance includes various additional things. One I will discuss tomorrow and that is the modeling plan. I understand that Mr. Rivas has a bias, which is that he allows Energy Answers' consultants to not turn in information that is fundamental. He allows the use of data of models tested somewhere else, knowing that things are totally different in Puerto Rico. And he allows the use of data that is garbage in the modeling plan. What the garbage data is I will explain tomorrow. In the case of the EPA, the EPA fails in its responsibility that is part of the environmental public policy law, which is the obligation of the agencies of the federal government of the United States to prepare an environmental impact statement when a federal matter is involve. The EPA apparently believes it does not



have to prepare such. Let's assume that is valid. But if the EPA doesn't have to do it, that does not exempt others from doing it, such as the Fish and Wildlife Service, the Army Corps of Engineers, the federal Health Department or the National Oceanic and Atmospheric Administration, nor the government of Puerto Rico, or all the other agencies that are specialists in the issues associated with this permit, like the Department of Energy. The impact on health is not a matter for EPA, but for the specialists at the Health Department. That department gives money to the government of Puerto Rico for the operation of the Puerto Rican Health Department. Those funds will be impacted by the illnesses that will be generated, by the health problems that the incinerator will cause. The construction of the incinerator involves federal government funds that the government of Puerto Rico will facilitate to the operators of the incinerator.

Furthermore, what I said earlier about Rio Abajo Forest, where the program to restore the population of the Puerto Rican parrot is taking place... there are federal funds and Fish and Wildlife Services is working with the government of Puerto Rico. Hence, those are funds that the federal government is already giving to the government of Puerto Rico for a series of programs that will be affected by the incinerator. That makes it a federal matter. So, the environmental impact statement is an obligation of for the several diverse agencies, such as Fish and Wild Life Services, NOAA, the Corps of Engineers that oversee the Caño de Tiburones wetlands, for the Health Department. The EPA has an obligation to demand this as part of the environmental public policy law, but in this case they have neither asked for it, nor has any agency prepared it. And that is part of the EPA's duties. I insist – to wrap it up – that the federal Justice

Department has to step in. This afternoon even accusations of corruption were made and I am making accusations of dereliction in the compliance of ministerial duties. And I am also making a statement that the EPA must demand an environmental impact statement from the agencies that participate in this permit process as advisors to the EPA. I insist that the Department of Justice must be consulted. And that's the argument I wanted to make. Thank you.

**José Font:** Thank you. It is 9 p.m. Does anybody want to make some other argument? Please, could you identify yourself for the record?

**Aleyda Centeno Rodríguez:** Good evening, again. Aleyda Centeno Rodríguez. As I had ...

**José Font:** We will give you five minutes, same as with Mr. Elías.

**Aleyda Centeno Rodríguez:** Thank you. Like I was saying this afternoon, the plan for the separation of materials on section 3.3, and I don't recall the numbers of the tables, proposes the construction of more than one incinerator in Puerto Rico, having one in the North-Central region, one in the Northwest and one in the Northeast, for a total of 5,040 daily tons of waste. If that happens, the argument that Mr. Ivan Elías made about requiring a guide, then I will amend my statement from this afternoon to add that the EPA is obligated to solicit such guide, including from those other proposed incinerators in section 3.3, for the materials separation plan that Energy Answers submitted to the

EPA in June 2012. The EPA has to do that to make a complete evaluation of the Energy Answers proposal. On the other hand, in terms of public policy, President Obama recently had a series of activities related to particular matter and the hope that the EPA and other agencies set forth regulations to reduce the amount of emissions in the United States. On the same date, more or less, on May 21, 2012 to be specific, the European Parliament called for a vote on incinerators. The vote was 463 vs. 64 against the incinerator, with 63 (members) abstaining. Why did the European Parliament determine that? They did it because they made an evaluation of the cost-benefits related to incinerators and determined that the resources they incinerate should be part of a circular economy, and because the European community aspires to have a circular economy. When we have spoken here about different entities of government that have opted for recycling, we have forgotten to include the European Parliament, along with all the nations of Europe that since May 21 decided not to assign a single cent to the construction of incinerators and their goal is to eliminate them from Europe by 2020. That presents a problem for us in Puerto Rico. The United States signed the Basel Convention, which defines as a hazardous waste any part of an vehicle with a motor that has been contaminated with lead, which I referenced this afternoon during my presentation. We already have in Arecibo a wasteland of vehicles that we don't know where they came from on the banks along Highway # 10. And we have the intent of Energy Answers to burn vehicle parts and we don't know if those parts are parts that are defined as hazardous waste by the Basel Convention that cannot be burned in Europe or the United States and that we in Puerto Rico will ultimately assume the responsibility for that burning. And we understand that it is the duty of the EPA to

investigate the origin of those materials from motor vehicles that Energy Answers says it will be burning in Arecibo. Good night. Thank you.

**José Font:** Thank you. It's 9:05 p.m., is there any other person who wishes to make a presentation or speak tonight? If not, we will be concluding... I'm sorry Waldemar.

**Waldemar Natalio Flores Flores:** I will continue, if you give the time.

**José Font:** Go ahead. Give me a moment, Waldemar, before you begin, let me gauge the interest of the public here.

(Unidentified voice): I had proposed speaking tomorrow, but if you have time...

**José Font:** How much time?

(Unidentified voice): I don't think it will be that much... It will give Waldemar more time to speak, if you allow me, of course.

**José Font:** Yes, sure, take your seat. We have 10 minutes, Waldemar, and with that we close for the day.

**Marta Quiñones:** Good evening. Marta Quiñones, for the record. Before, I had been saying that there needs to be a cost analysis of everything that has to do with health so we can correctly evaluate this project, given that we need to prevent, like the doctor

said, rather than fix. In other words, first we have to evaluate, how much is this going to cost? How much harm is it going to cause? And at some point I asked, how much is a human life worth that is very little compared to an incinerator? And that is important to look at. The cost analyses are criteria for making decisions, and the question here is, how can you decide if you don't have a complete picture? How can the EPA decide if it doesn't really know what it faces? And that is part of a problem that we continuously have in Puerto Rico. Logically, health is very important, but we cannot play with that and especially not for the profit of a few while we continue to mistreat and impoverish the people. But to pretend to determine the convenience of a project by listing and putting value to the costs and benefits in monetary terms should be a simple exercise. The analysis must consist of a logic based in a principle of obtaining the most and the best average cost of everything we will face, including the cost of mental problems. Many times in our analysis of health we forget mental problems, the emotional damage that we cause other people directly or indirectly. And I bring this up because many of the people who are here are parents and many of those parents always face that problem that has to do with the health of their children, particularly the problems of asthma. We have to recognize what the social responsibility of this company is when it comes to meeting the high requisites that are being imposed upon it to protect society as a whole. If that is according to the document they have presented and that Waldemar very well has pointed out that it is very deficient, I don't think they are very responsible, I don't believe they will assume responsibility for the health of the people of Puerto Rico and much less, I imagine, will they designate a part of their earnings to subsidize the government of Puerto Rico for all of the health problems they will be causing, and not

just in Arecibo but in all of Puerto Rico, and that is very important to begin to keep in mind.

The second thing that is also very important is that these projects always set up in places where the poor are the most affected and not in the places where the rich are the most affected. That is called environmental injustice as defined by the United States EPA, and that is important to gauge. There is a study done in Puerto Rico that states that in Puerto Rico there is no place of environmental injustice, of course, the rich and powerful did it. If those of us over here, where the poor are, do the study they're going to tell you that the people on the side of the landfill are poor. But also where you put the incinerators there is poor people. That's because you are abusing the people of Arecibo since many years ago. A peer back there asked me, what did we do in 2000 to oppose this project? Well, we fought emphatically and there was a political situation in which the politicians at the time understood the people's situation and they resolved to fight against incineration. And it was clear and it was established that whoever won would be against incineration. But it looks like money is more important more than the people's health. This is important because people forget that those affected are all constituents of Puerto Rico. Pollution does not discriminate according to the political party, pollution affects us all equally and many times we close our eyes to the projects that each one's party wants and we forget that all of us pay the consequences. Some of us are weaker and others are stronger genetically. Those who are weaker will suffer the consequences more than those who are stronger, but all will be affected. If we put a price to everything Dr. Gonzalez just mentioned, which are the possible consequences of the effects on health of that incinerator's emissions, then the people would definitely say that we don't

want that project. We are threatening the people, we are threatening future generations. Where is that project's sustainability if we're borrowing from future generations and are already affecting them? When children start being born with deformities, how much are they going to be worth? Yesterday, Roselyn Sanchez said she had her daughter and that is the best thing she has had her whole life, and now she is fighting against cancer because she doesn't want her daughter to become sick. No parent wants a child with cancer, no parent wants a child with asthma, and that's important to evaluate. They are small details that are part of this problem. Air pollution affects us all. Medical expenses for treatment associated with the disease, who's going to pay our medical expenses? The cost of the time we lose going to treatment? Every time that a father or a mother has to miss work to tend to their children, they get penalized at work. Who's going to pay them for that time lost? And also every time a man or a woman get sick and can't go to work, that is also money lost. The loss of wages for those days you couldn't work are important to take into account. (It's) the cost associated with prevention or the costs of (treatment). How much does a patient pay for asthma? Treatment is \$200; people with money have \$200, but people who don't have money struggle to pay for their children's care. That is important to deal with.

The loss of utility associated with the symptoms, the loss of people as human capital at work and their power to be heard appropriately is an important part of the things we need to see. We are condemning the people of Arecibo to be poorer every day, to be less useful, to have workers who will get sick more often... and we are condemning them to unemployment because no one is going to want to hire you because you are someone who will be absent a lot compared to other people. And even though the law

provides that you cannot be discriminated because of that, your boss if they send you to get an analysis and your medical record says you're asthmatic, they will begin to reject you, or when you say that your children are asthmatic. We all know what people on this side say, the economists, that when we have a person who will be absent a lot, it will cost the businesses personnel, so we will have to reject them even though the law says something else. And that is part of the things that we need to evaluate.

Part of this is also seeing to all those symptoms of chronic illness, so why are we not studying morbidity rates? What is the problem there? It's something that decreases our well being and we should have a society that is doing well so that it is happy and can work and can prosper economically. A society that is not well, that is sick or that cannot prosper is a society condemned to eternal poverty, and that is happening with Arecibo.

Arecibo became the wastebasket of Puerto Rico, where all of the bad projects come.

(Mimics) And I want to do this... Tomorrow, I can do this other thing, right?

I remember when the plant in Cambalache was being discussed and a legislator from that time, Norma Carranza, said, "if this plant comes here to contaminate, I will pick up a hammer and tear it down." We are still waiting for her to pick up the hammer because it is contaminating. And if we add to those contaminants, then we will have to reevaluate our position about the things that we are doing, the permanent damage we are causing all Puerto Rican constituents. It's easy to leave Puerto Rico, but those of us who want to stay on this island, those of us who want to stay in Arecibo, those who want to create a better future for Puerto Rico want to be heard and we say no to all these polluting projects and yes to projects that safeguard each one of us, for the safety and health of the people.



Maybe there is something to think about during this hurricane and rain season. What are we going to do in times of tropical storms with the ashes flying all over Puerto Rico? These are small details that are not contemplated, they haven't even been thought of as costs we all have to pay. The costs have to be measured in their entirety to be able to measure the benefits. Thank you.

**José Font:** Thank you. The last speaker tonight is Waldemar Flores. Once his presentation concludes, we will wrap up the work for tonight.

**Waldemar Flores Flores:** Remember that what I am reading are components of a quality system that are included as quality management tools in a quality assurance project plan that should have been required by EPA Region 2-New York and what was requested was a protocol.

Third phase: Audits, evaluations, revisions, verifications and validation. Audits: That includes audits and revisions, or MCAR. Technical systems evaluations and audits, or TSEA. That includes four types of activities: technical system audits, or TSA, monitoring evaluations, or SE, performance evaluations, or PE, audit data quality, or ADQ, which is related to computer systems and models, data quality verification and validation, or DQVV, which had to be done for everything that took place in Cambalache, everything that was done at the National Weather Service, which is notorious for its absence, and data quality analysis, or DQA, which is made up of five phases, which are pure mathematics and statistics. As for definitions, a quality system is a structured and duly documented system that describes the policies, objectives, principles, organizational

authority, responsibilities, trial response and implementation plan for an organization to ensure the quality of its work, processes, products, goods or services. The quality system provides the framework for planning, implementation and evaluation of the work performed by the organization and for ensuring accuracy and quality control required at any given moment. Which quality system they used should have been required of everyone who participated in this project. Assurance of quality, an integrated system of management activities that involves planning, quality control, evaluation of quality, reports and quality improvement to ensure that a product or service – for instance, environmental data complying with defined patterns of quality and a predetermined level of reliability – or an integrated system of management activities that involves planning, implementation, evaluation, reports and quality improvement to ensure that a process, good or service is the type or has the quality needed and expected by the client.

Quality control: The sum of the technical activities that measures the attributes and performance of a process, good or service against defined patterns to verify that they meet the requirements established by the client, includes operation techniques and activities that are utilized to meet with the requisites of quality or the system of activity and verification to ensure that the measuring systems remain within the reestablished limits, providing protection against conditions outside of control and ensuring that the results provide an acceptable quality.

Quality improvement: A management program to improve the quality of operations. These management programs generally include a formal mechanism to solicit recommendations from workers by means of evaluations or implementation.

Quality management: The aspect of every management system in the organization, which determines and implements quality control. Quality management includes strategic planning, resource allocation, systematic activities such as planning, implementation and evaluation regarding the quality system.

Managerial quality plan – which the implementation of the Environmental Quality Board Plan should have but does not : A formal document that describes the policy, objectives, principles and organizational authority, responsibilities, trial response, implementation protocols of an agency, organization or laboratory to ensure the quality of its products and the value to their users. A formal document that describes the quality system in terms of the organizational structure, the functional responsibilities or management, responsible staff, quality lines and interphase required for those who plan, impose and evaluate all activities effected.

The cornerstone of any quality system is the Quality Assurance Project Plan: A formal technical document that details the quality assurance and quality control and other technical procedures to ensure the quality of environmental data for each activity involving the compilation of environmental data and which is approved prior to collecting the data. And then come the objectives of quality data, and then come the meetings with the communities that are in favor and that are opposed. A formal document that describes in accurate detail the assurance of quality and quality control and other technical activities that must be implemented to ensure that the results of the work to be performed will satisfy the performance criteria that were preselected.

Data quality objectives: Quantitative and qualitative statements of the objective process of data quality that clarify the technical objectives and the quality of the study, define the

type of data and specify the tolerable limits of decision-making mistakes, potential utilized for regulation to establish quality and quantity of data necessary to support decisions. And, as part of this is the process of data quality objectives – and remember that for the EPA this means applying the scientific method – a quality management tool based on the scientific method developed by the EPA to facilitate the planning of the activity to collect environmental data, including environmental meteorological data, of course, and modeling. This process allows planners to focus their planning efforts by specifying the uses for this data.

The decision, the criteria for decisions, level of action and the reasons for tolerable decisional errors for those who make decisions can make them legally valid. The products from the process of quality data objectives are the objectives of data quality, or to put it simply, tools for strategic and systematic planning based on the scientific method that identified the type, quantity and quality of the data necessary to satisfy a specific use. The data quality objectives are quantitative and qualitative expressions of the data quality objective. Indicators of data quality... those I will not read anymore.

Evaluation of quality: The last part, scientific statistical evaluation of a conglomerate of data to evaluate the validity and the performance of the data collection design, statistical testing and to establish if a conglomerate of data is adequate for its intended use... or the scientific and statistical evaluation of data to determine if the data obtained from environmental operation are the type, quality and quantity of data to support the proposed use, and this includes five phases: review the data quality objectives and design of the sample –in this case, of the model –, data review, selection of the statistical sample, review the conclusion of the statistical sample, develop conclusions based on

final data. And you will get more information in writing. Those who want to see it will have a lot to read. You can do it any time. Thank you.

Closing remarks

**José Font:** With this last speaker we conclude this second session and we give you our most sincere thanks for your statements.

The public hearing continues tomorrow, Sunday, August 26, with the first session being from 1 to 4 p.m. and the second session from 6 to 10 p.m. The registration for tomorrow's 1 p.m. session begins at 12 p.m. We remind you that you can submit written comments through August 31, 2012.

Good night, and thank you for coming today.

(Session ends)

Transcribed by:

Aledawi Figueroa

Smile Again Learning Center, Corp.

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**ENVIRONMENTAL PROTECTION AGENCY**

**REGION 2**

**PUBLIC HEARING FOR ENERGY ANSWERS PSD PERMISSION**

**ARECIBO, PUERTO RICO**

**DATE: AUGUST 26, 2012, 1:00-4:00PM**

**LOCATION: LIONS CLUB OF ARECIBO**

**ARECIBO, PUERTO RICO**

**Moderator: Jose Font, Acting Director CEPD, EPA**

***Transcription: Aledawi Figueroa***

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**(1:07pm)**

**Jose Font:** Good afternoon everyone. My name is Jose Font, Acting Director of the Caribbean Environmental Protection Division of the Environmental Protection Agency (EPA). With me are the following EPA personnel: Mr. Ariel Iglesias, Deputy Director of the Sustainability and Clean Air Division EPA Region 2; Mrs. Tere Rodriguez, Acting Deputy Director of our Caribbean Division; Jose Rivera, engineer and Acting Chief of the Multimedia and Compliance Permissions Sub-Division; Ramon Torres, engineer and Acting Chief of the Response and Remediation Sub-Division; Mrs. Brenda Reyes, Coordinator of Community Relations; Evelyn Rivera, engineer and Community Outreach Coordinator for the Energy Answers project; Mr. John Aponte from the Air Program under Multimedia and Compliance Permissions Sub-Division; and Mrs. Socorro Martinez from the Environmental Response and Remediation Sub-Division.

Welcome to this public hearing. We thank the Arecibo Lions Club for providing this space in the Municipality of Arecibo, allowing us to meet once again closer to the community.

The purpose of this public hearing is to receive comments from members of the public who are concerned about the draft permit to prevent significant deterioration of air quality (PSD, for its acronym in English), which was prepared by the EPA under the federal Clean Air Act. This action was taken in response to a permit application filed by the Energy Answers Company for the establishment of a facility for energy recovery from solid waste in the Municipality of Arecibo, Puerto Rico. On May 9, 2012, the EPA issued a public notice in El Norte newspaper, proposing to issue a PSD permit for the

proposed facility by Energy Answers. In that notice, the EPA requested comments from the concerned public on the proposed facility permit, established a comment period of 45 calendar days, provided information about the repositories of information and relevant documents to the permit application, and invited the public to attend an information session on May 23, 2012 at the Theatre of the University of Puerto Rico at Arecibo, and a public hearing on June 25 at the same location. A second public notice containing the same information was published in El Vocero newspaper on May 13, 2012.

As published, the briefing on the proposed permit was held on May 23, 2012 at the University of Puerto Rico at Arecibo. The meeting provided preliminary information on the draft of the permit for prevention of significant deterioration of air quality that the EPA is developing under the federal Clean Air Act, and answered questions from the audience. In addition, the EPA emphasized that although the public hearing being held on June 25, 2012, the agency would accept written submissions until Friday June 29, 2012. Following the cancellation of the public hearing of June 25, 2012, the EPA extended the comment period until August 27, 2012, according to the notice published in El Vocero newspaper on July 23, 2012. It should be noted that this week the EPA announced the extension of the comment period until August 31, 2012.

After our evaluation of the Energy Answers request, we offered a draft permit for public consideration. The final agency decision on it will not be considered until all opinions objectively collected during the comment period, with a view to safeguarding the environment, health and safety of all. Your comments and submissions will be listened

to and recorded in the administrative record during this public hearing. All comments or proposals to be presented today will be considered by the EPA and shall be included in the administrative record of the facility, as established by the applicable federal regulations. The EPA will not respond the comments at this time. Note that in this meeting we will only entertain comments related to the proposed PSD permit for Energy Answers. The EPA understands that the establishment of a public policy on the management of solid waste on the island is the responsibility of the Government of Puerto Rico and its local agencies.

Participants in today's hearing and others who are interested in making a comment about the proposed permit can submit their written presentations to the EPA staff in the afternoon, or they can send those presentations to Mr. John Aponte to the Caribbean Division address. You may obtain a copy of the address on the table at the entrance of the hall. The EPA will evaluate all comments received, and will answer them in a document that will be prepared as part of the Agency's final decision. As announced in the public notice about this meeting, the EPA will hold five sessions on 3 consecutive days. The sessions are distributed as follows: the first session yesterday, August 25, 2012, from 1:00 pm to 4:00 pm and the second session last night, from 6:00 pm to 10:00 pm, the third session on Sunday, 26 August 2012, from 1:00 pm to 4:00 pm, the fourth session will be this afternoon Sunday, August 26, 2012, from 6:00 pm to 10:00 pm. The fifth and final session will be on Monday, August 27, 2012, from 1:00pm to 4:00pm. All sessions will be open to the public. Those wishing to express themselves verbally had two ways to register; the first by previous registration contacting Mr. John

Aponte from our Division; and the second, registering in person at the entry on any of the 5 public hearing sessions, two of which have been executed.

The pre-registration procedure was included in the public notice of this view. All those who previously registered for August 25 and/or 26 sessions and who didn't have the opportunity to speak will have a preferred turn in the fifth session this coming Monday, August 27, 2012. Also, if time permits, those without registration who wish to participate will have an opportunity to do so on August 27, 2012. In order to be able to listen to each of the concerned persons speaking in the hearing, we have established rules of procedure, and they need to be observed at all times by the participants. The procedures in this public hearing will be documented for the record through a transcript prepared by a professional stenographer who'll be present. We also have simultaneous translation from English to Spanish or vice versa of what is presented in each of the sessions during the hearings. Those interested can pick up the headphones in the back - or in the lounge here in front of the head table. It is necessary that all participants of this hearing are registered to enter the room and are noted on the list of attendees. Those who will speak should tell me if they are going to submit written comments today. For this session of the public hearing we have fifteen (15) people registered, of whom four (4) are in the lounge already.

This hearing is conducted under the protection of rules of procedure established in Part 124 of Title 40 of Code of Federal Regulations. The order of the speakers shall be as follows: The first opportunity will be given to elected officials or their designee, followed by federal, state and municipal, and other speakers in the order in which they were registered. Note that to ensure that all speakers can be heard, we will be strict with the

time limits, and we will not allow the speakers to take someone else's turn in order to extend their exposure time. Due to the number of people interested in speaking, and to allow everyone to speak, presentations should not exceed 10 minutes. There will be a designated person to notify each witness when they have one (1) minute left to conclude their presentation, and to indicate that their time is up. If a speech exceeds the set time, the microphone will turn off to make way for the next speaker. We ask all participants for silence and respect for diversity of opinions during proceedings and to listen to all the speakers. Please do not interrupt the work or cause unnecessary distractions. To maintain order, I ask that any protest take place outside the lounge while work continues.

For record purposes, when called to speak, you shall clearly state your name and the entity you represent, if applicable. When presenting your paper, please go directly to the panel. If a speaker wishes to submit a written copy of its presentation, please indicate this and send a copy to an EPA representative, making sure to include your name, mailing address and phone in your written presentation. I remind you that these presentations are being recorded for transcription purposes. Thank you very much to all for your feedback, and we will proceed with the presentations.

(Pause...)

**Jose Font:** The first speaker listed is Eliza Llenza. In the absence of Eliza Llenza we proceed with Ivan Rodriguez.

**Ivan Elias Rodriguez:** Am I the first? I apologize.

**Jose Font:** After Mr. Ivan Elias Rodriguez is Dr. Benigno Caban.

**Ivan Elias Rodriguez:** Can you allow Mr. Benigno Caban to go first?

**Jose Font:** He is not ready.

**Ivan Elias Rodriguez:** Oh

**Jose Font:** Are you not ready?

**Ivan Elias Rodriguez:** I need to turn the computer on.

**Jose Font:** Don't rush, take your time.

**Ivan Elias Rodriguez:** Good morning. For the record, my name is Ivan Elias, and I'm with the organization, Citizens in Defense of the Environment. Yesterday we had the opportunity to express some of the points we want to talk about concerning the EPA's irresponsibility in terms of fulfilling their ministerial duty. And one of the points to note is that modeling done by the EPA, -- not Energy Answers, the models accepted and presented by EPA, which are the very same ones that Energy Answers provides -- this model does not explain how the pollutants will disperse from the incinerator. The agency builds this model on a false premise -- and yesterday Javier Biaggi in part explained why this is, and I want to add an additional comment on this issue. The data on which this model is built is garbage, as I said yesterday. They do not predict the impact of where you are going to dispose these pollutants and we will explain it briefly. We want to start with the modeling approach. This...the "Aermod" model used by the EPA, simplifies atmospheric and soil characteristics such as terrain, erroneously converting a system that is fundamentally a complex system into a simple system. And the importance of that difference is fundamental. Complex systems have a vital feature - emergent conditions, emergent features. They include many variables, variables which make the system complex, which in turn produce new conditions. In the weather event that may explain the formation of microclimates in forest areas, near forest areas, near

the valleys, etc. At different altitudes, changes can also occur in the concentrations of contaminants. Including the gradients of these pollutants, how they move these pollutants? These are complex aspects of the conditions, which affect the concentration and gradients of the pollutants based on factors such as the climate near the area to be impacted. All of these factors act on the pollutants so that they cannot be measured according to a simple "Aermod" model. "Aermod" is a model that simplifies these complex characteristics, instead of evaluating them. This means that the model, for lack of good data, will cause an error, a mistake that we have not seen in any of the documents we evaluated in the file that has been noted. How significant is the model error? We are convinced that this error is significant. And in this case what we mean when we say that it is significant is that the contaminant concentrations, which the model says are low, may be high, may be significant in terms of production diseases and health damage, injury to health, people, especially children, the elderly, and sick people, who suffer from certain diseases. That is the mistake that I have not seen accounted for, I repeat, and when trying to simplify the complex system - which is the climate system – into a simplified model that is basically saying "we use average and standard deviations of these averages" - that's all they do and we assume constant speed, constant concentrations, etc., actually that's not reality. It hides the reality. What happens and I insist on this, is that the EPA wants to approve this incinerator, at least Mr. Rivas wants to approve this incinerator, and does not care if the data is wrong, or if the model produces errors or not because any number generated by the model serves to simplify and justify the incinerator from his point of view. Actually as I say, when you model with a model that does not help, the results are rubbish. No matter how good the

model is, if you enter garbage data, the result is rubbish too. And that's what happens in this particular case. And now I come to the issue of the wind data that was used. Cambalache was mentioned several times yesterday in reference to the wind data. Actually these wind data were taken by a contractor of the Power Authority to justify the location of the Cambalache plant. The plant was not built in 1992, it was built in 1996. But the permitting process in which we participated was about 1994 or 1995, when the Cambalache plant was not yet built. But the Power Authority hired a company to provide him data for a year that would justify the location of the plant. The EPA never validated this data. Even we have questioned this data - this data does not reflect Arecibo's meteorological behavior. I repeat, these data does not reflect Arecibo's meteorological behavior. We have done research and we know that with this data the EPA cannot predict how the pollutants will be deposited in the area of Arecibo. It uses one year of data and does not take into consideration the variability in the data from one year to the next, and the next, and the next. If you analyze the five years of data recorded by the weather service in San Juan the first thing that comes to light is the extraordinary variability from one year to another and from one day to another, from one period to another period, from one direction to another direction, the different speeds. I've evaluated this information and found differences of 1 to 80, I repeat from 1 to 80, in the variability of the data. Cambalache data that was submitted states that the main wind direction is north, to the coast. When you look at data from 44,000 hours of San Juan, – that data is closer to the behavior of Arecibo weather - and we who live in Arecibo can attest to that. I have lived near the coast in Arecibo for 18 years – almost 19 years. I know the weather patterns because I live it every day - I know that in most cases San



Juan's weather patterns are more similar. I do not dare to say that they are exactly alike, there are differences – but that's why the data used from Cambalache do not work – because San Juan's are better in all cases, but even they also have differences. If you take the example mentioned yesterday by Waldemar Flores talking about the quality of the data and the lack of validity of these data, he mentioned the lull (the percent of calm weather, with no wind.) There was a period of calm, a lull in the San Juan data during 2005, and in the data from 2005 to 2009 there was a completely different value. In the case of Cambalache data, the lull data from 92 and 93, said it was a percent less than 1% of calm, lull hours. In the case of San Juan data – I repeat it looks more like the Arecibo meteorological behavior – the calm percent of 44,000 hours of data were 20%, an extraordinary difference. I would like to request a second turn later, if possible, to continue with this explanation.

**Jose Font:** Sure. We are going to listen to all enrollees and if there is time left in the session we will gladly accommodate you, as we did yesterday. Next turn goes to Dr. Benigno Caban. I'm told that Dr. Benigno Caban is not here. Ok. Is Elisa Llenza here this afternoon? Adalberto Ramirez? Jeannette Gonzalez-Soto? Joe Maccarelli? Dr. Hiram Ruiz? Orlando Negron? Maggie Colon? Who just registered? Dr. Juan Vera Mendez? Jose Roman? Ismenia Gonzalez?

**Ismenia Gonzalez Colon:** Good afternoon, my name is Ismenia Gonzalez Colon, resident of Vigia Neighborhood. What brings me here this afternoon is to notify the EPA that Energy Answers has not done the same with my community as they have with other communities. They have not gone to talk to the community and explain them which are the negative aspects of this plant to my community that is so close to

Cambalache. Under my name, if I may, I have some general letters from my community, giving me permission to tell their names and read these papers.

**Jose Font:** Go ahead.

**Ismenia Gonzalez Colon:** I'm going to speak for Georgina Tejada, Samuel Feliciano Gonzalez, Yashira Correa, Keniel Gonzalez, Ana Torres, Arnaldo Correa Colon, Nelson Bernard Colón Ramos, Irma Abreu, Yenicia Rivera, Telma Maria Gonzalez, Zaida E. Colon, Beatriz Colon Ramos, Eloina Correa Gonzalez, Basilio Colon Ramos, Maria Serrano, Zoraida Rivera, Awilda Colon Ramos, Yanis Gomez Colon, Dalya Torres, Kedrianis Acaba, Raul Ramos Feliciano, Juana Molina Torres, Keisha Gonzalez Olmo, Roberto Rodriguez, Neyda Diaz Serrano, Carmen Sanchez Garcia, Rosario Marie Feliciano Gonzalez, Carlos Rivera Turner, Sandra Maldonado, Samuel Feliciano Ramos, Luz M. Bosque, Alex Torres, Renand Mendez, Noe Pellot, Jose A. Reyes, Maria Perez y Felix Rosario. It reads as follows: Knowing in advance the risks caused by the garbage incinerator, and assisted by studied reports, conferences and forums, we don't want the installation of the proposed Energy Answers incinerator in Arecibo. Too many dangers, not even the EPA appears capable of guaranteeing that we will be free of garbage burning toxins or mechanical failures or operating the project. I do not trust the EPA; my neighbors do not trust the EPA, especially due to how they have handled previous cases such as Battery Recycling, on land near Cambalache sector. The scientific community has proven beyond doubt the adverse health effects caused by toxins thrown by the incineration process. It is a proven fact that the incinerator cancer is higher in people who are close to areas where garbage-burning incinerators are used. We are not willing, because of health risks, to it have near my residence,

where I have my home, my family, to be exposed to the risks of a malignant environmental pollution that generates incurable diseases. It's abusive and unfair that a community be forced, against its will, to assume high levels of contamination, especially since it is known that the incinerator will hurt our residents. From this I want to add that Energy Answers, along with the EPA is the Holocaust. It is sacrifice, pure carnage, a disaster, a massacre, a casualty and catastrophe, a cataclysm, a calamity, misfortune, and chaos. You are all of these things, both of you. This is what we think of Energy Answers and EPA. Thank you.

**Jose Font:** Thank you. Next to speak is to Mr. Orlando Negron. After Mr. Orlando Negron, we will hear from Mrs. Cristina Galan.

**Orlando Negrón:** Good afternoon everybody, my name is Orlando Negrón. Thanks for the opportunity to offer this public hearing regarding the request for permission to pollute the air of Arecibo. So that we are clear. I appear at these hearings as Chairman of the Sierra Club of Puerto Rico, the community-based environmental organization founded in 1892. It is one of the oldest environmental organizations and very influential in the United States and Puerto Rico. During its more than 120 year history the Sierra Club has participated in activities such as today's hearing; which were decisive in improving environmental quality, true to our mission to promote best practices to conserve our natural resources and promote our natural landscapes forever and for all. This mission has inspired more than 1,600 partners and volunteers in Puerto Rico, and about 700,000 in the United States. We also reach over 20,000 people who have connected to our activities in Puerto Rico, by e-mail from our database. We proudly say we have no money, but we have the people, we have many people. Sierra Club does not receive corporate donations or public funds. It draws on contributions and fees from people. Since the founding of our chapter in Puerto Rico we adopted, by resolution, two environmental campaigns; the designation of Northeast Ecological Corridor as a nature reserve, and the implementation of zero waste vision for solid waste management in Puerto Rico. After 20 years of community activism we celebrate the designation by law of the Northeast Ecological Corridor as a nature reserve. It was achieved by the activism and commitment of people. Despite the political and economic issues, people prevailed. The legislation was passed in both legislative bodies and the governor had no choice, he had no choice after tons of calls to the capitol, and last July the Northeast Ecological Corridor nature reserve passed into law. At the same time the east was

involved in the struggle for the corridor, over the past two years, the Sierra Club has joined with communities and community organizations to reject for the third time the installation of an incinerator at Arecibo. Since that time Mrs. Fela in San Juan Puerto Rico has rejected proposals for incineration. Today we are again facing this threat. Not just another incinerator in Arecibo, but our neighbors in Barceloneta and Humacao face the same situation of threat. But Arecibo, which is the reason of these hearings, proposes to burn 2,100 tons of recyclable material every day 24 hours. This is a real environmental threat to the region and the country; and a clear disrespect for the quality of life that friends of Arecibo have a right to. I do not consider it necessary to dwell on the obvious. This mega incinerator, speakers before me, very professionally and passionately, have clearly demonstrated the damage and the negative effects it will have on the population of Arecibo, where the incinerator will be located. This mega incinerator, with its furnace and chimney, pollutes the environment and pollution not only makes people sick, but kills people. What I do want to emphasize, which has already been expressed here, is the ones who will be most hurt are the poor in neighboring communities. There are sectors of the population that in case of contamination or other threats have the resources to move out and leave. But poor communities do not have that ability. They are condemned to suffer the consequences, no alternative, no means to mitigate its problems. There are proven and clear environmental effects that will be experienced directly from Hatillo to Barceloneta neighbors and from Lago Dos Bocas to Arecibo. In fact, the basis for justifying, or seeking, to justify this mega incinerator, is that it's called a recovery plant and power generation. In terms of recovery, it does not recover anything, what it does is to burn

and produce ash, so there's no recovery here, they are burning recyclables. Since its design is incorrect, they are not recovering any material; on the contrary, they are burning material and producing a toxic ash to create additional problems. In terms of power generation, this is crazy to call this a power generation project, when it is clearly an environmental injustice. Arecibo will be mandated, or will be mandated if the people accept it, to receive a disproportionate share of recyclable material to burn in Arecibo with the excuse that they will generate 70 mega watts of energy. This amount will be added to the energy system in Puerto Rico, and diluted across the energy bills of all Puerto Ricans, such that the town of Arecibo will not receive a penny of profit from that generation. It will not receive a penny discount on its bill, but it will receive all the pollution load, everything negative that has been expressed here is going to go to the town of Arecibo and neighboring municipalities. However, they are trying to get us to see this project as an energy creation project, a power plant. This incinerator produces such a low level of energy that in order for it to replace our current Cambalache plant they would have to install three mega incinerators to burn enough to provide energy to Arecibo and close that plant, which is unacceptable and a completely nonsensical solution to our energy needs. So from its design this project should have been rejected, should have been rejected because it does not recover material and does not produce energy.

That's why we believe that when the EPA makes its assessment, following its ministerial duty, this threat is not going to happen. The EPA will refuse permission for the installation of this mega incinerator, that's what people expect, these are our hopes. The EPA's friends have a great opportunity, which is crucial to clarify and clear suspicion of what their mission is: to promote industries and protect the health of people. But what is even clearer in this process is that it is based on false premises. And all media constantly claims the known falsehood that in Puerto Rico 11,000 tons of solid waste is produced daily, and needs to be deposited at a disposal site. That way they artificially negate the useful life of landfills; accelerate their closure and left incineration as the only option. These claims are based on information from more than 10 years ago, it is clear - as expressed in previous presentations by previous deponents - all the material is being used to justify this project is useless; including this information in the daily production of 11,000 tons of waste for recycling potential. We no longer produce this level of waste here because we have had 0 waste projects. We have a system, promoted supposedly by EPA that promotes reducing, reusing and recycling and refusing to consume toxic materials that cannot be recycled repaired and composted. It is useless, for the sole purpose of promoting the incinerator. Today in Puerto Rico, the reality is that it has reduced deposits of toxic substances and non-recyclables into landfills by 50%, thus extending the life of the landfills, which now fill up more slowly. Ten years ago "solid" waste included was prepared metals, debris, organic material, tire, battery, or oil, and other toxic materials deposited in dumps. Today these materials are not deposited into our landfills. These items represent around 50% of waste originally deposited in landfills. So we had a great achievement in the reduction of solid waste and we still

have more work to do in this area. But that threat we voiced at the beginning of the century, we had to take action on it and Puerto Rico reacted. And it is an achievement that the people have to know that we have accomplished together. Now we talk of recycling. Mr. Steve Rivas said as one of his many unwise expressions to justify two incinerators in Puerto Rico – that Puerto Rico only recycles 10%. This recycling rate was disseminated in all the media as a mantra as part of a scheme to present incineration as the only alternative, justifying it by saying that Puerto Ricans do not recycle. Well, let me inform you that four years ago the executive director for the Solid Waste Authority, who shared the principal position at that time with Mr. Carl Soderberg in an activity of the Institute of Public Policy, November 13, a week after of the 2008 elections, announced that the recycling rate was 20% four years ago. I want to conclude this paragraph. Today these recycling rates we estimated are around 25%, and they are rapidly increasing considering Guaynabo efforts, with the Hugo Neu Company, Bayamon aggressive campaign, the newly established Centro de Dorado, same ADS efforts during that during the year distributed hundreds of trucks to all municipalities. We are very close to achieving a recycling goal of 35% with the efforts of the central government, state, the industry, trade and the people. I would like to request an additional turn to complete this presentation.

**Jose Font:** Thank you. Next we will hear from Mrs. Cristina Galan. After Mrs. Cristina Galan is Dr. Benigno Caban.



**Cristina Galan:** Good afternoon. I'm Cristina Galan, Arecibo resident; I have two children, a 5 year old girl and an 11 year old boy. First of all I want to thank you for giving us the opportunity to speak. I am here today because I live 3.5 miles from where the company plans to build the incinerator, so the quality of the air that I and my children are going to be breathing for the next 25-30 years concerns me greatly when considering the plant. I understand that Energy Answers plans to make a garbage incineration plant with a capacity of 2,100 tons per day, and plans to burn everything that is not recyclable or compostable, a detail which I believe is important. Starting from the premise that matter is not created or destroyed, we agree that everything incinerated will be in the form of ash, or worse as air particulate. After removing all recyclable material, the non-recyclable waste that will remain is: wrappers, Styrofoam, disposable diaper with waste and human excrement, some cutlery, disposable plates or containers of food, toys or other non-recyclable plastics, household batteries, ink cartridges printers are currently not separated from household waste, and finally a number of other things that after incinerated will be highly toxic and dangerous to health. Incineration, then, is not a solution to our garbage problem but creates a host of other problems. For this reason I ask the EPA to reconsider its position and to not grant permission for this plant. I hope that the EPA will assume its role in the protection of the environment and the health of my family. Thank you very much.

**Jose Font:** Thank you. Dr. Benigno Caban and then it is Dr. Juan Vera Mendez's turn.

**Benigno Caban:** Good afternoon, everyone. Thank you very much to the administration of the EPA for giving us this time, and for giving us more time to present our papers.

First I want to present a summary of the presentation of environmental pollution by the Arecibo incinerator, sent to the EPA by Dr. Elba C. Toro Diaz. She spoke at the last meeting and presented this paper to the EPA. It is already on the record, and she sent me this short summary which I will read now. Then I'll make my own comments.

Honorable citizens of Arecibo, Puerto Rico, and distinguished representatives of the EPA regulatory agency. I stand before you on behalf of Dr. Elba C. Diaz-Toro, Researcher for the Comprehensive Cancer Center of the University of Puerto Rico, Professor of the School of Dental Medicine, and Director of the Puerto Rico Coalition for Cancer Control. I want to mention that Dr. Diaz, is a native of Arecibo, a bright graduate of San Felipe High School who studied with my daughter, and also did his PhD at MD Anderson, Oral Pathologist. It's an honor ... eh ... Cancer prevention is a priority for Puerto Rico, currently cancer ranks as the second leading cause of death in our population preceded by heart disease, which also in turn, according to scientific evidence , will be exacerbated by this initiative to impose on the people of Puerto Rico this generator of illness and death. The large number of studies concerning the adverse health effects caused directly or indirectly by incinerators, as sought to be established in Cambalache relate to the increased incidence and mortality from cancer in the population near these facilities. And this brings up the point of how people will be affected? Not just the population of Cambalache, not just Arecibo or the surrounding towns will be affected by pollutants that cause cancer, but within a hundred-mile radius of the incinerator facilities being proposed here, we can expect to double the incidence

of cancer in this population. So that includes all of Puerto Rico, not only with the one here, but with the other two or three corresponding plants in the northeast and northwest. Some highlights are summarized below: The forms of pollution that are associated with cancer, based on scientific evidence, can be caused by: Natural Sources, Sources Related to Agriculture, Resource Related to Military Practices, Resources Related to medical practices, sources related to modern life and Sources Related to Industry and Manufacturing. In this case, the sources of contamination are related both to modern life and industry. There are mechanisms, based on evidence, known to affect the environment for the proliferation of cancer: role and production of hormones, inflammation, DNA damage, genetic deletion or genetic overexposure. All these mechanisms are affected, directly or indirectly by the proposed incinerator pollution. Populations living about 100 miles around incinerators: suffer up to two times more than the general population of soft tissue sarcoma, non-Hodgkin's lymphoma, lymphoma cancer, laryngeal cancer, lung, and stomach, colon, rectal and liver. Incinerators release 70% of what you burn in: ultrafine particles or nano particles, toxic metals such as lead, nickel, beryllium, chromium, cadmium, arsenic and mercury, and more than 200 organic chemicals such as dioxin and all incinerators release chlorinated materials, regardless if gasification technology or another. Mercury and dioxin are bio-accumulative. A 26-40% of a burnt waste remains as residue with a high content of heavy metals. The washing liquid waste also has a lot of heavy metals and pollutants will also groundwater, soil and ecosystems like forests.

Recommendations: It is not only a health problem but a social justice issue that includes environmental justice. In this case the population to be affected has not been properly

estimated in order to establish the lack of environmental justice. Importantly, these contaminants are transferred generationally, I want to emphasize this, generationally, therefore it is necessary to do a baseline study of health needs of the people closest to the incinerator to establish a health database. Invite the School of Public Health, University of Puerto Rico to conduct such studies. We need a public policy agenda to protect the health of Puerto Ricans, especially to prevent diseases such as cancer. We need to emphasize the protection of children who are most vulnerable to these pollutants that cause cancer, especially if you have a multi-generational effect. Establish monitoring and supervision of quality of our environment. I reiterate to support the entire community initiative aimed at improving the conditions of the environment that we know will greatly reduce the incidence in some, if not all cancers in Puerto Rico. Do not support, under any circumstances, the establishment of the proposed incinerator in Cambalache because observations and vast evidence presented. This should originate at the EPA.

I am a citizen of Arecibo, also a member of the large "No Incinerator" group. I am seventy-three, and this morning I was doing the math and I have over thirty years in this fight. Something clicked while trying to stop the Cambalache electricity plant, and then I came to that hearing. We arrived at the hearing with extra time, and I read the complete Environmental Impact Report. At the end of these hearings I asked the director of the EPA at that time and the director of electricity on the record about the possibility that the incinerator was equipped to switch to natural gas when it was available. How would we get the natural gas? My question for the EPA is simple, how in your duty as administrators, you are going to defend the rights of the unborn children and mothers?

Currently, the School of Public Health, it was in the newspaper, is doing a study on this specific area of the map, pollution and premature births among women in this area.

Dioxins dissolves in fat, the fat that is in the person, animal, fish, and is absorbed through the feet and into our cows, our livestock, who are sensitive to it and absorb it into their systems. Dr. Paul Collin, said here a year or so ago that especially cows were extremely ultra-sensitive, I do not know if it was ten or fifteen twenty times more sensitive to absorb ultra-dioxin when it falls on the ground and is absorbed through the legs and feet of these animals. That's why the large contamination of meat and milk, and the danger that leads to our present and future generations. And the dioxin dissolved in the fat, once it enters our body, according to what I've read, because I'm not expert on this, but I have over twenty-odd years reading about it, has no outlet, it accumulates just as mercury accumulates in our systems. It has a way out from mother to fetus through the umbilical cord and through her breast milk to the child. That's why fetuses, children are highly sensitive, because the developing fetus, the little fat it has is in the spinal cord, is in the brain and effects brain development and causes retardation and other problems. Maybe that's why we have seen a surge in autism in recent years. The body is joined by the spinal cord, the midline and here is where toxins focus. Many abnormalities due to pollution can be seen along this biological axis. In my role as a dentist one of the things that have been reported is what we call the cleft palate and cleft lip, which is the disjoinder of the two ends of the lip and palate in the midline of the body. This, as well as spina bifida, is a defect which is related to dioxins because dioxins it affects the spinal cord. Another thing that has been noticed and mentioned is what is called hypospadias. I have a grandson who had surgery at the age of three

because of this. Hypospadias is a defect in the child's penis that does not grow right; it grows veered and needs surgery to correct the defect. Energy Answers is asking the EPA I think there are one thirty-eight, thirty-something exemptions to not regulate or control emissions from start-ups and shut-downs. What I've read in a British report of the British Society of Environmental Medicine, delivered personally to Judith Enck, the EPA director region 2, says that each shut-down or start-up produces the maximum pollution allowed for the entire year for that plant. So, are we going to exempt them from thirty-eight to forty times the maximum amount allowed for the year? That's rather worrying. President Clinton, when he visited Vietnam, had to lower his head, it was all he could do after his presidency, when presented with the defects and people in Vietnam due to dioxin. These not only affected people in Vietnam, affected the Puerto Ricans and U.S. citizens who were – if you allow me a moment I will finish - military there. The history of the EPA dioxin are well-connected, there is a book that I read and have it called Dying from Dioxin from 20 years ago, and explains more than forty-five or fifty environmental impacts worldwide for defects in all these controls, worldwide from all companies contamination. And finally, uh ... well, I think that concludes what I wanted to say. Thank you very much.

**Jose Font:** Thank you, Doctor Caban. The next turn goes to Dr. Juan Vera Mendez. After Dr. Juan Vera Mendez we will hear from Mr. Jose F. Candelaria.

**Dr. Juan Vera Mendez:** Good afternoon to the very distinguished representatives of the U.S. Environmental Protection Agency, EPA, representatives of various communities

and organizations present, and my friends. Let me begin my presentation by quoting one of the greatest human beings, "Albert Einstein" who once said "The world is a dangerous place, not because of those who do evil, but by those who do nothing to prevent it". I am a chairman of Cumbre Social de Puerto Rico, which is a nonprofit organization that brings together civilians, government, and the private sector in a dialogue to articulate and implement proposals, and dedicated to developing and deepening initiatives to improve and transform Puerto Rican society. It gathers the most diverse sectors of Puerto Rican society - unions and professional organizations, representatives of academia, culture, intellectuals, artists, workers, religious groups, environmentalists, mayors, among others. Before the project to build an incinerator in Cambalache neighborhood in the city of Arecibo, we are here to demonstrate our aggressive and passionate opposition to this permit, which could enable construction of this project. The data support that it will produce about 600 tons per day of toxic ash containing cadmium, mercury, lead and dioxins that should go to landfills. The operation of this incinerator will release dioxins, including Agent Orange, which cannot be filtered with existing technology. It has been scientifically confirmed that they lead to various conditions that affect health including: cancer, diabetes and other endocrine disorders such as thyroid-related illnesses. By no means is it morally acceptable to grant a use permit to the proponents of this incinerator, who will profit from the misfortune of a large population of human beings, and living beings who will be impacted by the contamination this plant will send into the atmosphere. You can live for two months without food and two weeks without water, but you can only live a few minutes without air and if that air is polluted is impossible to live under those conditions. By incinerating

materials that can be reused, recycled, or composted, the incinerator destroys the potential to save energy and to place these materials in better use. Recycling saves three to five times the energy it generates the same plant and invested large amounts of money on expensive technology competing for funding and resources that could be spent on zero waste programs that generate 10 jobs for each one that this incineration plant produces. In Puerto Rico about 4.5 liters of waste per person are released per day. This equals about 6,000 tons of trash daily. The double of what is generated in European countries and more than what is generated in the United States. And what we recycle unfortunately in our country is less than 10% of waste. One question to ask is how? How does Energy Answers will demonstrate beyond any reasonable doubt and provide clear, strong and convincing proof that this technology will avoid and control all pollution? How will the 600 tons of ash generated daily be handled once you start the process of garbage? That's one of the questions to be asked right now. One of the alternatives that we should consider would be to create green jobs through a serious effort to reduce waste, recycle, compost. What we hear as the government's agenda is the proposal to build three incinerators that will require a significant amount of solid waste to be operational. This would undermine the sustainable initiatives of solid waste management, and worse, open the door to the import of waste materials from elsewhere. The government of Puerto Rico is proposing to develop new incinerators through public-private initiative, namely the famous APP, and these are guaranteed a minimum income if they do not reach sufficient revenues to cover its operating costs; consequently increasing the burden on taxpayers. It is important to mention that it takes an average of up to 10 years to build an incineration plant. It is estimated that it will cost



500 million dollars to pay the government for the next 30 years. By the way, we should ask why an incinerator has not been built in North American since 1995. That is a question we ask ourselves. Meanwhile the industrialized countries of the world, governments and peoples living forces, try to establish policies, initiatives, environmental and protection projects, environmental advocates. Today we gather, we speak, and we demand an end to the hostility and contempt for our land and its limited natural resources, our assets here. We hope that the seven priorities set by the EPA Administrator Ms. Liza V. Jackson, are an obvious and forceful reality in our Arecibo community as she said in her priorities:

1. Actions are taken into consideration to climate change
2. Improve the air quality
3. Ensure the safety of chemicals
4. Cleaning of our communities
5. Protect U.S. waters
6. Expand conservation on environmentalism and work for environmental justice
7. Develop strong partnerships with states, cities, towns and communities.

I wish to conclude this paper by recalling the words of a powerful Indian prophecy recovered from our ancestors who inhabited this area before Europeans arrived and with them much misfortune and suffering to our people. It goes like this: "Only after the last tree is cut, only after the last river is poisoned, only after the last fish is caught, only then will you know that money cannot be eaten." Thank you for the opportunity to share this with you. Good afternoon.

**Jose Font:** Thank you Dr. Vera. Next we will hear from Mr. Jose C. Candelaria and then from Mrs. Maggie Colon.

**Jose C. Candelaria:** Good afternoon, my name is Dr. Jose F. Candelaria. I was born, raised and live in Arecibo; I am a resident of Arecibo, and additionally Professor of the University of Puerto Rico here at Arecibo. I come with a few points I want to bring based on my concern for the plant proposed by Energy Answers. But I know that I come to the right place because my concern is with the environment and I'm talking and expressing my points at least, to the Environmental Protection Agency. So I understand that I brought my points to the right place. They are of concern because when I looked at the map where you plan to put this plant I realize that work is underway, preparing to build the plant. And I understand that this is where it's going to be and if you are working there, it is because you already started working on the plant. I have five points that I want to bring. These are points that can be considered as data or facts. As a professor of mathematics and statistics I do not want to talk in percentages, because everything depends on how you compare percentages – they can be manipulated to say whatever you want. So what I will bring are five points that are intertwined with each other, and not in priority order. But I will begin with the proposed tonnage to be processed by the plant. I am very concerned that ... what is discarded here in Arecibo not enough to keep the plant operational they proposed. So in terms of numbers we are talking about loss. I do not know how they can say that they will see gains towards the town of Arecibo or to Puerto Rico. Still only looking at money, no profit will be realized, there is loss unless they change the numbers or bring trash from elsewhere. Why? Because if it only will be

burn what they say they it's going to be burn, I do not understand it's going to be enough. Point number two is cancer. In Puerto Rico, if you look at the numbers, the incidence of cancer of the entire country is high compared to other parts of the planet, and the United States. And if inside those numbers we look at the numbers of cancer incidence in Arecibo are high compared to those in Puerto Rico. So we are planning to put an incinerator in an area that already has a high incidence of cancer. Burn is associated with cancer, right? Because of the products that are discarded and further burning trash. I am worried about that and I understand that the EPA is taking it into consideration. I am also concerned that there are already two factories or plants or work areas near the plant. I'm talking about the battery recycling plant and the power plant in Cambalache. I understand that when tie with the high incidence of cancer in Arecibo, putting a third plant that will produce toxic wastes and dioxins into the environment would be like saying in English "adding insult to injury". We are throwing salt into the wounds, we are adding more to this town, and this area is already receiving the disadvantages of these plants. I understand that the media prints what you write; all the companies presenting a project are going to present it in the best light. I am a math teacher. I present my classes as the best and my students do not necessarily agree with me. I understand that when there were problems with the battery plant and lead problems, simply because they paid the fines they had to pay the work continued. I disagree that adding another plant to this space would be appropriate. The fact that I teach makes me think of my students, who will be the ones that carry Puerto Rico forward. Within a radius of four miles - I think the impact radius is 100 miles but let's take a look at the four-mile radius. Within a radius of four miles are at least three large

universities, universities that impact all of Puerto Rico. I'm talking about the University of Puerto Rico, Interamerican University of Arecibo and Catholic of Arecibo. These students spend much of his academic career in the town of Arecibo. So we're talking about not only impact the people of this town, but it will impact the rest of the country completely. Not to mention that there are schools around. Very close to the plant is Luquetti Antonio School, which is a tremendous school, we provide high quality students, engaged students and teachers well. And I understand that is going to impact. My fifth point is on the EPA. I understand the EPA as Environmental Protection Agency that the EPA is going to watch for our environment and will build on the experience of other countries that have gone through incineration. And I am worried that we are not taking into account the experience of other countries. And I'm not saying that other countries are better than us. I am saying that we must learn what is on the table, of the investigations, studies, and experiences that other countries have already produced. Europe has had enough experience with incinerators and equivalent agencies, the Environmental Protection Agency of the United States, are working in the United States to prevent having more incinerators close to existing plants. I understand and I am confident that based on these points, there are more which I cannot develop because there is no time. But these are five points that I wanted to bring and I understand they are points that EPA should consider and I will be very thankful when the agency denied the permit to operate the Energy Answers Company. Thank you.

**Jose Font:** Thank you, Dr. Candelaria. Now is Mrs. Maggie Colon's turn, and then Mrs. Alba Cardona.

**Maggie Colon:** Good afternoon. Good afternoon to all present.

**Jose Font:** Good afternoon.

**Maggie Colon:** And to the EPA members. I am Mrs. Maggie Colon; I live in the most polluted area around Puerto Rico. I live in the Islote neighborhood of Arecibo. I oppose the construction of the incinerator in our neighborhood, because Cambalache falls in that neighborhood. Because as everyone knows, in 1999 the same incinerator was proposed and the people refused it. Proponents also realized that it was in a wetland and when there is flooding the water reaches Road 681, which is the road next to us. We know this and I live this because I was born and raised here in this neighborhood. We have a treatment wastewater plant in the center of the community and a composting plant where it is mixed with the growing human solid waste and everyone who lives there is sick. Well we are No. 1 in cancer. When a resident visits a doctor with fatigue, asthma, cancer and other illnesses, the doctor asks where you live. When answered in the Islote neighborhood, do you know what the doctor recommends? "Move out, Move out". I cannot move, my children cannot move, because we were there before all these plants and we need to have a better quality of life. I was born and grew up at Las Claras farm that also belongs to us. Where Las Claras is, is where the acceleration track is, and you know what an acceleration track is right? Last night there was a race. You know all that smoke when cars start accelerating and burning tires and burning tires? The whole area, the whole area, the whole area is black. Everything, and you have to

close the windows and cover yourself because if not you know you're going to get the cold, asthma, you have to get away. And we only have one road which is the entrance and exit. Islote has one road which is 681. Beside the deafening noise, let me tell you that the noise reaches Hatillo. The pollution in this area is out of control. To continue with this abuse we have the Plants from the Power Authority, which as everyone knows, are not maintained. All that pollution, the sulfur-strip by the chimney because the incinerator has a chimney, I do not know why it has a chimney, I'd like someone to tell me why the incinerator has a chimney, just tell me, - because in Cambalache, you stand there and the smoke comes out, that sulfur stink, that's horrible.. Residents of El Cerro del Vigia are suffering the consequences of all this abuse, like any island, as all Arecibo and the entire area from the same town of Arecibo. But the project that got the ball rolling is the recycling of batteries, with your permission, the permission granted by you, now everything in Arecibo is contaminated with lead. The odor of that battery recycling plant is stifling. And we know that people that are contaminated with lead only live twenty years, and no matter the age. Children deserve to have a better quality of life, at least to get as many years as myself, and I'm over sixty, right? I feel happy. But how about them? They deserve a better quality of life. They know they are sentenced to death, according to the meeting that took place in Barceloneta. So, people of the battery recycling plant, that's not recycling, come on. Let's stop things. The people killer plant, there at Las Claras, an open farm where cane was planted, I ran that. I used to go there to get cane, because that's our area. Children, it was said to them at the meeting that if you want to keep working, keep working, but they know that if they are contaminated with lead they only have 20 years to live. Sad right? I do not know what they are going

to do, right? You are the people who are supposed to protect us and protect us and the environment in which we live. You know more than that, like I say, I did it in my house because I write well, sometimes writing gives you courage. We know that Cano Tiburoñes area is contaminated by the nearby landfill. We know that. That was our watering whole, there we were, there we swam and watched the stones below, now cannot see them because of the pollution. We know it is the landfill, because we know it. You know that is contaminated with lead that people are going fishing and fishing. Right now there are about 100 people fishing. Do you know why? Do you know what the folks who run the battery plant did there? They built a canal to drain off the water and the water falls right into the Cano Sharks Reserve. I know that because I was told by employees. So now they come with another plant – an incineration plant. So, there is the lead plant, we have the compost, we have the Cambalache plant. That is, two, three, four, five major polluters - we have everything in that area and I think it's unfair. So, my final question. What has the EPA done to stop this abuse? I am not willing to be exposed to other contaminants in my backyard. Do not be blind. Help recycle. No to the "muffle". Here at Arecibo we say that the Energy Answers Company has a "muffler" and you know what that is. No to the crematorium. That's enough. And as we all say: The Devil incinerates and God recycles. Thank you very much.

**Jose Font:** Thank you Mrs. Colon. Next is Mrs. Cardona. Alba Cardona. Is Alba Cardona here? The next turn goes to Mr. to Mrs. I'm sorry...sorry again Mr. Carlos Garcia will be the next speaker.

**Carlos Garcia:** Very good afternoon, this evening I do not have a written paper. I will email it to you later. First of all I want to add to what I said yesterday ... the show ... the security forces that were brought here yesterday - I think I counted six police cars and about 20 officers including two Homeland Security agents, I think it was totally unnecessary and to me the obvious intent is to intimidate. That was completely unnecessary and completely inappropriate. While in the June hearings there was an incident, it was nothing, but the reaction and the anger of the people against the outrage and abuses of the EPA was palpable to you, wasn't it? an outrage and an abuse of the EPA. Thankfully to that EPA rethought things and now are doing what they should have done at that time. Having said this, I want to take the opportunity to tell others. The town of Arecibo is a noble town that welcomes all people who come here to help. I am an example of this, I am a native of Humacao, Arecibo and have lived here for 20 years, and I have very good relationships with many people here that I consider my brothers. Attorney Toro himself can attest that the people of Arecibo welcomed him when he came to play basketball with Arecibo. But what the people of Arecibo are not going to tolerate is anyone coming to abuse the people of Arecibo. People who come to contribute and help the people of Arecibo are going to be received with open arms, but he who comes as a tyrant to abuse the people, we are going to fight tooth and nail. I take this opportunity to tell Energy Answers and I hope that Mr. Toro will take the message to Mr. Mahoney that he still has a chance - and I'm sure the people of Arecibo could also agreed - that if Mr. Mahoney presents an alternative project in the town of Arecibo that will uphold his responsibility to truly recover waste resources...If Mr. Mahoney finances that project for the people of the town of Arecibo, we the Arecibo



people would welcome it. I was looking on the Renova website, a company in which Mr. Mahoney is also interested, which is also involved in the issue of solar panels. We say to Mr. Mahoney that if he is willing to finance a solar panel intense labor assembly plant for the town of Arecibo, I'm sure the people of Arecibo are going to welcome it. That if he is really willing to contribute to the welfare of this people and to get rid of the intention of coming to run over this town and to get rid of this harmful incineration project. Bring good things to this town and then we can change our opinion, because the town of Arecibo now sees it as an ogre, but he still has the opportunity to change that. So we encourage you, please Mr. Toro, to bring that information to Mr. Mahoney and to become friend of Arecibo people, to come and contribute to the town of Arecibo and not abuse us. Then we can respect him and we can respect you. But while you insist on running over the town of Arecibo, Arecibo's people will defend against being trampled. Thank you.

**Jose Font:** Thank you Mr. Garcia. Next comes Mrs. Mirna Conty. Then Mrs. Nydia Gonzalez. Is Nydia Gonzalez here with us? Thank you. After Mrs. Gonzalez, it is Mrs. Lucy Serrano's turn. Lucy Serrano goes after Nydia Gonzalez.

**Melva Quinones Martinez:** Good afternoon, I'm here representing Ms. Gonzalez... I'm Mrs. Melva Quinones Martinez, resident of Arecibo. So what I'll do is I'll read a few letters that are here. We agree with all the other papers that have been presented. But I will read, perhaps one of the cards that have been signed by residents of us here in Arecibo, if I may. It goes like this, these are the cards. According to reports on the effects of incineration in relation to health, the location of the Energy Answers

incinerator is intended to produce genocide on our people. Not only with respect to the health of those who live in Arecibo, their neighborhoods and villages, but also unborn children and nursing mothers.

I believe that because Arecibo is a town that in the last years has seen a decline in their lifestyle, in their urban structures and a reduction of its population, we have been selected to be inundated with the burning trash of the whole island, in the named incinerator. Are we , the people, also disposable to those who come to Arecibo installing the incinerator? That's a question right? And many of our residents have signed this letter. Here we have another letter that reads as follows ... and this letter is signed by the people below.

I do not agree with the construction of the proposed incinerator by Energy Answers. Over the years, factories have only brought environmental pollutants to Arecibo. These decisions violate our rights to choose to enjoy good health.

Our town is behind because of bad decisions made in relation to projects that are located here by the parties mentioned, without taking into consideration the opinion of the people who reside here. Then the concerning authority will disregard the proposals of the people.

I want to report that this project threatens the health and survival of my family (not forgetting of all natural life: plants and animals developed in our environment).

I am opposed to burning other town's trash in Arecibo, in detriment of the inhabitants of ours. This is an attack on our health, and therefore against our lives. And this is signed,  
Sincerely Ms. Nilda H. Serrano.

And letters like this, in the same vein, have been signed by 11 other people. So I submit these letters to you.

**Jose Font:** Thank you. Next is Mrs. Lucy Serrano, followed by Teresa Sanchez.

**Lucy Serrano de Matos:** Good afternoon.

**Jose Font:** Good afternoon.

**Lucy Serrano de Matos:** Can you hear me? I get close to the microphone. (Baby crying) Well I'll take my grandson out for a minute. My name is Lucy Serrano de Matos. And my grandson here with me is Anibal Roberto Colon. Ok. I'm here mainly because I completely disagree with a life incinerator in Arecibo. And I correctly spoke of life, because it will lead to many deaths, cancer and many diseased families, not only in Arecibo, but all over Puerto Rico. We must remember that although we think we are a continent, but we are a tiny island. In this island what you do in the west affects the east and what is done in the north affects those in the south and vice versa... This means that this is not a problem for us alone, this is a problem for all of Puerto Rico. All of Puerto Rico should be here. And not only two or three people who we have here. I'm a grandmother I am rather worried about the health of my grandchildren. I raised three daughters and gave my life for them and they are good people and good human beings. I intend to do the same for my grandchildren. I help my daughters with my grandchildren, as I'm doing now that my daughter is at work. I am left with my

grandson, to care for him last night and today also because she is a doctor. This child who now has so much life and is so restless, is bursting with health, it will not be the same with an incinerator throwing above us all these particles every day, day after day, hour after hour, minute after minute. That is not possible in Arecibo, which has always been the ghost town of the island, which has not been helped, that is not helped with any government. There are no good roads, no good schools and we have a town that is about to disappear. Then out of nowhere, comes a project that leaves a lot of money to two or three, and because of two or three, they are willing to kill the whole Puerto Rico. Because is not only Arecibo that is going to die, not only Arecibo who's affected, not only Arecibo who's going to suffer the penalties of an incinerator which is killing us slowly. In the past we had Central Cambalache. And every good Arecibo resident and surrounding towns knows that that central didn't causing as much damage as this is going to cause because they only burned cane. Even animals will be burned here; grass will be burn, all trash and garbage, only garbage will be burned. Here we ... I'll have to take my grandson because.... I apologize for this. Well, but I was saying ... we've had Cambalache here, we have had Cambalache, Cambalache was nothing, Cambalache soiled the clothes, the windows and we had to...and when we washed our head we could not go outside because it would damaged the hair. But here our hair or clothes or house floors are not harmed. Here health is deteriorating. We are going to have this country full of people with cancer from one thing or another. Why, you want to know? You know that factories - lots of things that cause us cancer in our beloved Puerto Rico - Why would we add another one? Why don't we learn? In Arecibo a year or two years ago, we were recycling and we felt important. Because we had the trash, we had to

classify it, we had to wash it, we had three trash cans in our house to sort the trash and we felt important because we understood that we were helping the entire world. As everyone does in the world. Why do we need to simplify things and stop recycling? Because nobody would care about Arecibo, if it weren't about the money. For many years we have been drifting alone here. Well, as I said earlier, it is a ghost town, and now out of nowhere, we say, "We believe it is better to take the town or out of where it is, increase your economy" for all the attributes you want. That is the wonderful choice for Arecibo. And before what were we? Ask yourselves what we were before? Nothing ... No one paid any attention, no one was looking. There have been many studies, I do not know the studies - because I told you I'm a grandmother and I come on behalf of my grandchildren's lives and the lives of all grandchildren of grandmothers in Puerto Rico; representing all Puerto Rican mothers. I am an ordinary citizen. I support the Mothers in Black because they are doing a very good job. Look, leave the comfort of your home and come here. As I said before, I would have fought like a wildcat will defend each of my daughters. I have three; I have this grandson who's the youngest one and a few others. But for them I will not be able to fight like a wildcat as I did with my daughters. I will continue this fight until I am in my grave. Because here in Arecibo...if Arecibo it is not good for one thing ...it is not good for another. Arecibo has to be respected and given the quality of town it is. Before it was not good for anything, now we do not want that incinerator in Arecibo in any way. Thank you very much for giving me for the opportunity.

**Jose Font:** Thank you. Next is for Mrs. Teresa Sanchez.

**Teresa Sanchez:** Good afternoon everyone. I am Mrs. Teresa Sanchez. I am the spokesperson for Mothers in Black. I think the time is limited and I will have to finish my presentation at the end of the hearings. But I will give only the introduction because I made my presentation in two parts - an introduction of complaint, and the second part denouncing the project itself. One of the points that I want to raise is that I want to explain who the Mothers in Black are so it appears on the record - we are a group of citizens, men, women, students and children, and every Wednesday in front of the mayor we repudiate this project. Our goal is to educate the community; we gave them bulletins every Wednesday. In addition to that we decided as a group to do a survey of ordinary citizens who go through Diego, by Diego Avenue. For those who are not of this country, Diego Avenue is the main street. We did a survey, and here in this poll I have 800 signatures of citizens who randomly have said they do not want this project in Arecibo. I believe that when we are doing a survey our people, it should be respected. In addition to these, in the past hearings, that were canceled, I delivered 100 letters and now Cristina here has delivered about 100 more letters. I mean, we're talking about a poll. I, we as Black Mothers decided - ... I could pick, honestly, 10,000 signatures - but I really wanted to do a survey of citizenship. There are all students, ordinary people, and everyday citizens: workers, doctors, dentists that we speak with and every Wednesday for a year and nine months, they have said they repudiate this project. Ok and I want to continue.

First of all I want to thank all citizens who appeared at these hearings. Community leaders, environmentalists, clergy, students, doctors, lawyers, attorneys, engineers,

housewives, retired persons, in order to all the whole community. I'll speak slowly because as I worked in the public schools I know what a translation means, so Mr. Mark Green understands what I'm talking about. I'll speak slowly so the partner can translate. Because this is very important, I want to raise in this introduction. All of these responsible citizens have appeared voluntarily. None of these people have received a stipend for attending these hearings. I encourage you to applaud yourself for your efforts and commitments of our country.

*(Applaussees)*

I wish to inform the EPA, because our country right now has no objective regulatory agency that is able to work objectively with the projects that we want to impose the politicians. I believe that we must have a Puerto Rican environmental regulatory agency that is unaffected by political shifts.

I publicly denounce these practices. I'm going to speak now, to make two types of complaint, to the EPA first and then to Energy Answers:

The first complaint I address to the EPA concerns the document that explains the permit. I think it is discriminatory in two aspects: the document language is too technical for people who are not scientific and non-science experts. And number two is the English language. Most of our population is not fluent in English, our vernacular is Spanish. And I believe that these documents, on a thirty-year project that's going to affect health, should be in Spanish. Besides that language is very technical. I, as a science teacher, can understand, and many of the doctors. But the people who I talk to

there every Wednesday, a housewife who comes along, do not have enough education and would never understand the project to be honest. I think you have to work for it.

The other thing is that I understand from personal experience, I worked in the U.S. as a science teacher for 22 years and I understand from experience that when the United States is providing this type of proposal workshops prior to the public hearings in communities, the goal is that citizens have the information regarding the project. This is something very necessary, and I think that is discriminatory against people. Our population, inclusive, does not know what this process consists of.. Many people are unaware of these processes and what is happening here. Ok. The third complaint that I address to the EPA is that the attitude of Mr. Rivas on June 25<sup>th</sup>, was disrespectful and biased in favor of the company, which creates doubt about the evaluation process of the granting of the permit. His position should be to listen, though I thank him for his work today, I recognize (I am a teacher and I like to encourage and motivate) and truly acknowledge that the process is taking place as it should be - His position, Rivas' position should be, and your position also (to the panel) consist in hearing our arguments and proposing alternatives. We are a very polite and aware people, and understand that the solution to the waste management should not be archaic techniques such as burning and burying garbage. The cutting-edge solution, sustainable and green for the 21st century is zero garbage (is to recycle, reuse, reduce and compost). Europe is doing it, Argentina is doing it, the United States is doing it. I understand that here in Puerto Rico, we are a people of great resources, and we can do this. But to do that you need will of the people, legislators, of all our communities.



Number three: We denounce the location in which this project is to be carried out - one of the complaints that I address to the EPA is that this project will be carried out in one of the most successful agricultural areas of our country. And we're talking specifically of livestock. So, we have here one of the few remaining industries in our country, which is livestock, and that must be respected. That is the heritage of our nation of Puerto Rico, and have to care for the present and for the future of our nation. And I do not want to drink milk from the United States precisely because I worked in Wisconsin in a farmer state, I worked there for 22 years and I do not want milk from Wisconsin. I want the milk from Hatillo farmers because they are my people, my culture and are our employees, and we have to support the industry and we cannot implement projects here that what are going to do is the deteriorate our country, our environment and everything.

To Energy Answers, my complaints are:

1. Repudiation as an Arecibo citizen concerning the landfill, and humble people being manipulated by selling dreams that you will not be able to fulfill. They are good Puerto Ricans who do not have the information that we have. The landfill will not be deleted, we will have a landfill that is more harmful to the population, which is a toxic ash landfill. That's my first complaint to Energy Answers.

2. In the Saturday August 25 hearings, yesterday, a manipulation strategy became apparent when the company publicly agreed that they threw a party for the people. Not only do they throw parties, they pay transportation to appear at these hearings. How strange that the bus here did not come full of people dressed in yellow as I the past they have given all their so-called "supporters" yellow T-shirts. That is very rare. I do not know what the strategy for this afternoon, tomorrow, but that has happened in all the

processes so far. I think they changed the strategy because they realized they have been reported publicly. This is unacceptable to our community. This practice is known in our country, Mr. Mark Green, as corruption. I understand it was a strategy for limiting these citizens to appear, to avoid hearing concrete scientific arguments on what incineration means.

The third criticism that I address to Energy Answers: Shame on you for taking our Puerto Rican professionals and borrowing them and preying on their lack of jobs to manipulate the everyday citizenry to believe in this archaic and abusive technology. When they know that the incineration and burial are archaic techniques. Finally, the last comment that I have for Energy Answers is: The purchase of public radio and television media, it seems to me that it's to expose your project. But there has been no equity exposure for us opponents. Do you know why? Because we have no money. We have no money and do not have that opportunity. And when this happens I think, I dare say that democracy is impotent. They go on the WKAQ radio programs. And when I try to call to present our opposition, they will not let me. I boycott Ruben Sanchez. We are all Puerto Ricans and we have the right to differ with each other and still be Puerto Ricans BUT - when Velez Arocho went there to expose the incinerator project, I went there and they would not let me in, I left messages for Ruben Sanchez, and was not called back. I think democracy is lame here and that there is no equity for the Puerto Rican people who understand what this project is about. And in the evening I will present the reasons why I oppose this project - this was only the introduction. Good afternoon.

**Jose Font:** Thank you. Well now all the people that were scheduled to speak have done so, except for those who were not present in the afternoon. So we will break for ten minutes and make good use of the remaining time.

**(Recess) (3:07pm)**

**Jose Font:** We continue with the hearings. The next turn belongs to Mr. Ivan Elias Rodriguez who will begin.

**Ivan Elias Rodriguez:** Dr. Caban was going to say something first.

**Jose Font:** Caban first?

**Ivan Elias Rodriguez:** Yes, please.

**Jose Font:** Dr. Caban, are your comments brief? Ok.

**Dr. Benigno Caban:** Yes thank you very much. Benigno Caban again. First I want to say that I have never belonged to any party, nor identified with any. Precisely because when one is involved in these things that I do, I believe from a personal standpoint and professional. I did want to mention that these pollution problems, especially dioxin, are proven to cause spontaneous abortions. That is documented. And the other, it is my concern, that the EPA took more than 25 years - to "release" recently, a few months

ago - the effects of the dioxin in the human body and its health effects. That was as stated, you know it. This ... this presentation made recently of the EPA, however, did not talk about cancer, lung conditions and other areas. They did not speak on cancer. At that time they had more than 200 environmental organizations from the US asking that they release this study and there were 60 or so US legislators asking about this release. Why did it take so long to publicize it? So the EPA really knows about all these things, all these effects. Thank you very much.

**Jose Font:** Thank you. Ivan. Ivan you have 15 minutes.

**Ivan Elias Rodriguez:** Yes, good afternoon. Ivan Elias again representing Citizens in Defense of the Environment. In the problem of modeling, if you look at document number 12 on the record, Table 6.1 page - I think the page - 25 of the document called "Model Fire Source Significant Impact Label Evaluation Normal Operation". There is evidence of problems with the model, one of the problems with the model. When the model indicates the location where the highest concentration of various pollutants exists, it references different pollutants whose molecular mass is different. It is not the same to throw a feather as to throw a stone the movement, the energy involved in moving a feather than to move a stone is different - it is called "momentum" in physics. Therefore different compounds that are released at the same time will not end up in the same place. But in the table we see that the coordinates of the different compounds reach the same place, the maximum concentration of these compounds is in the same place, the coordinates of both the North and the East. For example, 100% of CO, where the concentration is highest is in meters 742658.29. In the north and 2042987.81 on the

east. That is 110, in 100% less load, less mass, is what we are saying, and the coordinates are the same, that's for CO. But if we look at the 80% coordinates remain the same. These same coordinates in the case, for example, in the case of PM 10 for 100% of the average coordinates are 24 hours for 100% 742402.13 2042601.0 and those seen in the same coordinates the PM2.5 different mass, which says 742452.13 20425260. We're talking about - in this table you can review it - and you will find similar coordinates for compounds with different mass coming out at once and fall in the same place. That's impossible, that's impossible, physics says that's impossible. But that's the problem with the model, because the model takes averages and averages makes mistakes. When using averages mistakes are made. When simplifications are made mistakes are made. And those mistakes are not taken into account anywhere in the document. I wanted to talk too - apart from this table, - back to the modeling process. We say they will burn 2,100 tons of garbage daily. Garbage is originally classified as non-toxic, but absolutely everything that comes out at the point of departure is toxic. The remaining ash is toxic, and as such, what comes out the starting point of the fire, then, is toxic. All 100% of what comes out of the incinerator is toxic. The emission is a fluid, is a mixture of compounds - the fluid leaving the incinerator, the chimney of the incinerator, leaving toxic, 100% toxic. Because there is no steam, there is no separate water or oxygen, all of that is a mixture. That's why I say it is a fluid with particulate toxic. And what does the incinerator do? The incinerator only employs incineration logic, which says to disperse toxic materials. Engineers tend to say "solution is dilution", which means the solution to pollution is to dilute such pollution. And that is what the incinerator is intended to do, dilute pollutants coming out, I repeat, toxic pollutants - the starting

point, if you measure the definitions and techniques that is completely toxic - dilute these toxic air pollutants, starting from the premise that you can disperse enough - so that when concentrations fall where people live, affecting, vegetation, water, soil, etc., the toxin concentration will not be harmful. And that's the other problem we have in the data. The information is presented in a misleading manner. Not that you to cheat, The process cheats. We are not ascribing malice, but the effect is to deceive us. Dioxins for example, dioxins, are minimal, around a nano gram, repeat around a nano gram - some say a little less, some say it's a little more, some say it cannot be established - to cause cancer, per kilogram of living people, which causes cancer, so if we take doses of dioxins emitted leaving the incinerator are billions, I repeat, thousands of millions, - because I calculated it and I think I used half of dioxins, it is actually twice, gave me 26.000 million, 26.000 million doses that produce cancer - that must be diluted. What is the impact area? The impact area, - I repeat I have not seen in any of the documents a definition, clear description of what is the area of impact of these pollutants will be spread across to completely dilute them - watch - 2,100 tons will be burned. To this burning process we must add I think they are 300 or 400 tons of material that is used to control the type of emission, characteristics, acidity, right? But, in addition, to burn we need to put oxygen and where will the oxygen come from? From the air. Therefore, the mass in the process is much more; it is a considerably higher amount considerably greater than 2,100 tons. Therefore, what comes out must be equal. What comes out must equal what goes in. An amount remains in the ashes; another amount goes to the chimney, as toxic fluid, goes up the chimney as toxic fluid. Where does the dioxin go? Where do the other pollutants go? What dose will we have in each area of our territory?

The 100 miles that Dr. Elba Diaz said in the paper read by Dr. Caban, which says that studies have determined an impact radius of 100 miles. Where to go? You at no time - the EPA, I'm not talking about Energy Answers, I'm talking about the EPA. The EPA never told us where the impact area is, how much will go where, how much of each pollutant will reach each site with the potential to sicken and threaten the health of many people. That information is not there. What is the answer? Let them tell us, "You will see dioxins increase by 20% of the quiet time, assuming the weather behavior is compared with that of San Juan" – not with Cambalache data, I repeat, Cambalache data is useless, "if you take weather behavior similar to San Juan 20% of the time in quiet, 50% of the time directional within 45%, the wind blowing west, from the south, from the south, southwest to the northwest So, where is it the rest of the time? How far will dioxins and pollutants travel? How many doses? How many doses will arrive at the University of Puerto Rico at Arecibo? Where there are around 5,000 people every day. How many doses will reach to American University where there are also around 5,000 people every day? How many doses will arrive at Cayetano Coll and Toste Hospital that is at 3.1 km? The University of Puerto Rico is nearly 4 kilometers, less than three miles. How many doses will reach the super aqueduct 3 kilometers away from the plant? In addition, the incinerator, I repeat, does not take into consideration the topography of our environment. They justify using a modeling of something they did in Alaska. A completely different area than Puerto Rico. Like Javier Biaggi said yesterday, that model has never been approved in Puerto Rico, or a place like Puerto Rico. It is impossible for me to say that this model works well here that worked in Alaska. It is impossible, do not believe that, anyone. I want to see the evidence. There is no proof,

but I am sure that when the wind incinerator toxic fluid comes out of the chimney and the wind is blowing southward, or near the south, the winds are going to run through the basin of Rio Grande of Arecibo, and are going to go deposit in Rio Grande of Arecibo. Therefore, the threat to drinking water of Puerto Rico is not only in the pond where the making of super aqueduct. And I'm sure when this happens, you will get what specialists in this type of model call "the fumigation process." The fumigation process when given, you get the concentration in the fumigation process to any of our communities or any of the nearby places like people of Rio Arriba where elevation comes at a point about 500 meters lifting, reaching toward Utuado we have a 500 meters elevation, when the chimney is 100 meters in elevation approximately. The fumigation process assumes the contaminants will rise, but on the contrary, they will go down and they will stay concentrated. And they will stay concentrated in those communities that are close, 4 miles, 5 miles, and 6 miles. Again, the impact area is not defined, you have not told us how high the levels are of the doses which we have to face, because you cannot predict them, because they are using garbage data, data that does not predict. You can say, "Look this is our prediction", but they are incorrect. If Mr. Rivas says "this prediction is correct; he is lying and that's the problem with this process. EPA agents, not Energy Answers, EPA agents have the responsibility to defend our rights, not only the rights of the proponent, are our rights, and people who are threatened by this incinerator. Thank you.

**Jose Font:** Thank you. I'm being told that Mr. Jose Roman is present. Please use your 10 minutes. After Jose Roman comes Mrs. Teresa Sanchez.



**Jose Roman:** Good afternoon. Jose Roman, I'm a retired worker, technical retired workers. About forty years ago I started as a factory worker in the facilities of the International Paper in Cambalache as operator in Central Cambalache cauldrons and worked as a Feeder Operator and Pump Operator. I fed the machine all the bagasse paper that it needed to make pulp. I cooked the bagasse and helped convert it into pulp for corrugated paper. That process, these years of manufacturing experience are what got me interested in technology, learning about and working in industrial processes. And then that made me study, study technology. I graduated with a degree in Instrumentation Engineering Technology for industrial processes and industrial process control, I and have worked nearly 25 years as an instrument technician in various factories and also service companies. These years of experience and training in instrumentation has caused me to develop a social conscience. And during that time the EPA was in its infancy, wasn't it? There was no regulatory agency like those that exist today. Back then I saw both the successes and disappointments in one's profession, a worker skilled in instrumentation technology. But that awareness of being a responsible worker, a worker who likes technology, like the work you do takes responsibility. ... And because of that responsibility I took, my supervisors and managers often took notice. And then, as now, some technology I learned was old, and I had to learn to be quicker, more efficient, and more effective. This taught me that to be more responsible I had to talk to more people. Because when I did not agree with one of the processes, sometimes I was told, "Your team can't touch that, my team is working on it." And "You can't work on it now. You need to call your boss." And then I would get a call at 3 in the

morning and they would say, "Work on it now, the team isn't using it so now's the time." This resulted in a lot of pressure towards me, and I also learned to handle all these pressures.

And yesterday with the presentation of Mr. Waldemar Flores, and the Engineer Carlos Garcia and Dr. Rosario, as they made their presentations, all these thoughts flowed through my mind. It flowed through my mind my memories of when they told me: "no, that's not cost effective," "I cannot be delayed because of production", "so I reduced staff time, the dead time." and the whole process was scheduled maintenance, all that equipment. Yesterday I went back to give it a "replay" to everything that I lived, all these, as I hit - because whenever I interjected that the team could not run because he was not, for me it was not in the parameters to run it, not rushed, and because of that I know that many lives were saved at the expense of myself but many lives were saved or avoided-I know many companies where I worked avoided many problems. And by the way I am. But then we see that all such information was provided But to me with all my years of experience, something disappoints me about EPA. And I've seen how the EPA tolerates environmental injustice, and I don't know why, because I believe that you, the EPA workers are professional workers, also committed. But then I wonder where is this pressure to come from to allow environmental emissions which cannot occur. Then those tolerances, the EPA then have legal tolerances so the companies can cast their emissions at the cost of I shoot two hours today, I shoot two hours tomorrow, I spent two hours shooting, but it continues to pollute.

And most disappointing, honestly - and I say this with my heart in the hands - Is when the EPA allows people in New York to go about their normal lives two or three days

after what happened to the Twin Towers. And people developed respiratory illnesses, but the state will not provide health services, so people who couldn't afford to pay and have to turn to Cuba, Canada, to receive such support services. Many are cured; others are not cured. And then security laws were increased so that they are not allowed then leave the United States to go to Cuba to get those services. The Burton Act is increased. That to me is very disappointing. That's what engages me and makes me see - those are the reasons I do oppose the incineration project. Because I know firsthand as an advocate what this proposed project means for my country. And I object strenuously to any incineration project happens in any corner of Puerto Rico.

**Jose Font:** Thank you very much Mr. Roman. Ms. Teresa Sanchez will take the next turn and then finish with extra time for Mr. Orlando Negron.

**Teresa Sanchez:** Good afternoon.

**Jose Font:** Ten minutes Ms. Sanchez.

**Teresa Sanchez:** Yes, good afternoon my name is Teresa Sanchez, again I am the spokesman for Mothers in Black, and I'm a science teacher. And now I will give, as I said previously, my paper had two parts, that was an introduction and now I will do a presentation of why I oppose the project. And I want to point out something I forgot earlier, is that really from the time that we started the Mothers in Black movement, Energy Answers seems to have acted with little professional ethics. Because on the

internet they insulted me, denigrated me and I think that is unprofessional or unethical. But you know what? I am the kind of person that, when pushed, works more effectively, because I care more, The pressure that they put on me via the Internet gave me the motivation to keep working to do the right thing.

I object strongly to this project because it threatens the health, environment, economy, aquifers, flora, fauna, agriculture and the quality of life of our people. Around that proposed project's area there are eleven nursery schools, 12 public schools, four private schools, 3 technical schools, one university, three hospitals and two nursing homes for the elderly. I think in this situation ... how is it possible that you will approve this project? So many people will be affected.

These residents will be exposed to toxic emissions of dioxins. In case somebody here does not know what a dioxin is, I'm going to define it. Dioxin is a group of chemicals, persistent environmental contaminants. They are a group of chemicals that remain in the environment and people buy them, specifically because these chemicals are set in the fatty tissues of organisms, and are stored for long periods. That's a dioxin. It means that we will be exposed to these PCBs to be accommodated in the organisms for long periods. These residents will be exposed to these fumes. This project is bad for our present and future generations, because scientific studies have shown that toxic emissions from incinerators produce this harmful damage. And now I will mention harmful damage:

1) Health. CDDs dioxin fumes produce the following adverse health effects: Chloracne, skin rashes, discoloration of the skin, impaired glucose metabolism, liver damage and changes in hormone levels. The British Society for Ecological Medicine has investigated

the health effects of incinerators and have found the following issues: immune system problems, cancer, birth defects in children, heart disease, neurological diseases; like Parkinson's, Alzheimer's and brain, and identified mothers with 20 chemicals in the umbilical cord, which adversely affects breast milk. According to the World Health Organization, exposure to TCDD is carcinogenic to humans. That's the harmful effects of dioxins only. I focused on dioxins because we have to be aware of what these chemicals are.

2) Environment. In the environment dioxins can be airborne for long distances, which imply that affect neighboring towns around Arecibo. This would adversely affect one of the successful industries in our area, such as livestock. Most dioxins do not evaporate with sunlight and tend to bind with sediments of water bodies. That's why I defend both our water bodies. What would be harmful to our area aquifers specifically the Rio Grande of Arecibo. According to scientific studies the world wars of the future will not be about oil, they will be about water. And we on the north coast have one of the Caribbean's best aquifers. And I think we have to defend this natural wealth that we have in this country. According to the EPA, only 00,003 micrograms / liter of water are allowed in water bodies. I understand that the proposal of the company Energy Answers it is to burn 2,100 tons of garbage daily. 25% of which is converted into ashes. Of this 25% of ashes, 10% becomes fugitive ashes which go into the air. As stated above, it is high risk to aquifers in our area and the Super-pipe that provides water to the metropolitan area. I believe that projects with the high cost to health and the environment, and where there are no regulations for hazardous waste from the state authorities, must be approved by the EPA. We reside, according to the EPA, in one of

the areas most susceptible to respiratory problems throughout the U.S. How, then, is it possible to propose a project that will increase the chances of respiratory problems of our population? And unfortunately we Puerto Ricans are a community, scientists say, who have a high incidence of asthma. If approved this disastrous project would be a form of genocide for our population. According to the agency's Puerto Rican Affairs in Washington, last year, they suggested sustainable clean energy to Puerto Rico. Therefore, I believe that the philosophy of state authorities in solid waste management should be the Zero Waste philosophy. Zero waste is to recycle, reuse, reduce and composting. This philosophy has been successful in San Francisco, Argentina and Europe. I believe that we Puerto Ricans have the human resources to implement this philosophy in our country.

Thus, I ask the following questions:

Where toxic ashes will be placed?

What regulations will be imposed to Energy Answers to conserve our aquifers?

What regulations will you as a protective agency implement for the conservation of our aquifers?

What regulations will you implement to protect the livestock industry, the livestock?

Finally we have the public awareness that we have to leave a better country and planet for future generations. We have been given the planet to care for and respect.

Therefore, we do not want the incinerator in Arecibo, Puerto Rico or on our planet, because this incinerator would increase global warming. And that is all I have to say.

**Jose Font:** Thank you very much. Then we go to the last speaker of this public hearing session, Mr. Orlando Negron.

**Orlando Negron:** Yes, good afternoon everyone and thank you. I want to emphasize farming industry. Livestock in Puerto Rico is the best farming industry of the country. And it is concentrated in the areas of Arecibo and Hatillo. The next two industries combined do not generate the amount of money that livestock generates in Puerto Rico. And this incinerator obviously threatens the country's economic development and health by interacting with milk. In addition to asthma, which was also mentioned by Teresa Sanchez, and to put it in perspective, in Puerto Rico 2.5 times more people die from asthma than in the United States. And that asthma, the incidence of asthma is a chronic disease that is not curable, is concentrated in the area of Barceloneta and Arecibo, after Catano region, which is a matter of priority. Here's an asthma program, in which the EPA participates with the Department of Health. It is strange not to have an opinion of the Department of Health, the Secretary of Health on the damage that can cause this incinerator in the nation's health. We have not seen the Secretary of Health, who seems very quiet. We had talked about recycling levels in the country, where we eliminate the paradigm that in Puerto Rico only 10% is recycled and we produce 5.5 pounds of solid waste daily. For that we rely on a presentation that was with the previous EPA CEO Mr. Carl Soderberg and Executive Director of the Solid Waste Authority Mr. Javier

Quintana, where Mr. Javier Quintana clearly states that waste generation per person per day is 3.91 and not 5.51. This also shows that recycling rates are currently 19% and not 10%, which was the level ten years ago. These figures have been manipulated, and are exaggerated, because it is necessary to give the banks a lot of material to prove that the project is viable, but the project is not viable because it obviously is not material, as we have calculated. But what happens when we take the reduction we talked about earlier - that the metals are not, that's not going to landfill debris, organic material does not go to landfill? Well, if we start from the original amount of 11,000 tons of solid waste we generate, or supposedly generate daily, and take 50%, we have eliminated 5,500 tons. Thus, there are 5,500 tons of waste with recycling potential. If we include them and apply the 25% recycling rate we have today -- which I suspect is greater than the rate of recycling of Massachusetts, where all the incinerators Cemex, and Covanta and Energy Answers are. We have achieved greater levels of recycling than that state without an incinerator, thanks to the efforts of zero waste that come from doing 10 years working in Puerto Rico, the diversion and recycling system. If we apply the 25% to those 5,500 tons remaining, we are left to deposit in landfills 4.125 tons. This represents a 63% reduction on the amounts that have been used to justify this incinerator, showing it does not have the amount. This is great news for Puerto Rico, indicating, that efforts to reduce, reuse, recycle and compost have been successful. But going back, now let's see it from another angle. Incorrect data from Dynamic Literary, in Puerto Rico said that we used 5.51 right? If I pick today's population, 700,000 and 3 million applied the generation of solid waste per person, which is what is enacted by the Solid Waste Authority is 3.91 gives us 7.234 tons that we produce -using that method



daily generation. Which has a 25% recycling rate, leaving us with 5.425 - a 50% reduction for both methods; and this for waste generation. In the past ten years we have achieved at 50% reduction in Puerto Rico.. Reduction in landfill deposits is the crisis that everyone anticipated at beginning of the decade and warned that we had to do something, and we did. And we must celebrate and eliminate the paradigm we have that Puerto Rico is the largest producer of solid waste and that Puerto Rican recycling has not been managed properly and we have been a failure; quite the opposite. Puerto Rico is in a good situation, has had an incredible achievement over the past 10 years and for the next five years we are already in a good position. If the governor had made an effort in his term, we would be at 35%; if he would have set the "border bill" in Puerto Rico and other efforts. In 2000 they were only, in this dynamic itinerary here, in 2000 they were four composting plants, today there are 12. On the same ADS page there are 12 compost plants in Puerto Rico, also as a line of success, handling the vegetative material. And there are many stories, as we have seen during the day. There is an unbelievable recycling effort started by Bayamon. And what does this mean? The current population is 294,000 inhabitants – x 3.91 lbs per person figure – that translates to our basic region only being able to produce 431 tons per day and they need 2,100. Obviously this is unfeasible, no bank will finance this. And the risk is that outside garbage will be imported, may increase the mix of tires, but even worse, the plant can anticipate further closures, and "shut-downs" because they have to turn the machine off for lack of material, more times what we have proposed is unacceptable. –With this scarcity of materials, they are obviously not going to get financing and therefore have to exaggerate that figure as sometimes shops do with inventories – they exaggerate

inventories to present a better economic position. In this case information has been manipulated to justify large amounts of inventory to justify the project to the banks, not the people. So that's the biggest risk we have, and the impact of the 7 diesel trucks planned to come through the area regularly. I ask why the EPA did not establish a unit to handle mobile sources with a modeling program - which is precisely called "mobile", which may have been used. But I worry because this is a condition that is stated as a problem in New York, that the city is carrying their trash away, and the emission of the trucks are known to cause cancer. So there are a thousand reasons why it should be rejected, we're sure that's what will happen, because I have not heard a single hint of information that can convince me that this is an alternative for Puerto Rico socially, economically and environmentally. It clearly demonstrates that we are against the project. Today was interesting, and we will continue to participate to achieve this in what is necessary. Thanks.

**Jose Font:** Thank you very much Mr. Negrón. With last speaker we terminate this third session. We give the most sincere thanks for their presentation. Just to let you know, the registration for the 6:00pm session will begin at 5:30pm. We remind you that you can submit written comments until August 31, 2012. And thus we conclude this session. Thank you very much.

**Unidentified person:** Is today at 6:00?

**Jose Font:** Six, at six o'clock.

*(Procedures are finished)* **(3:57pm)**

*Transcription by:*

*Aledawi Figueroa Smile Again Learning Center, Corp. 787-872-5151 / 787-225-6332*

**Environmental Protection Agency**

**Region 2**

**Public hearing regarding PSD permit for Energy Answers  
Arecibo, Puerto Rico**

**Date: August 26, 2012, 6:00 p.m. - 10 p.m.**

**Place: Lions Club of Arecibo  
Arecibo, Puerto Rico**

**Moderator: José Font, Interim Director CEPD, EPA**

**Transcribed by Aledawi Figueroa**

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**José Font:** We are starting with the fourth session of hearings.

Good afternoon to all present. My name is José Font, Acting Director of the Division for Environmental Protection of the Caribbean of the Environmental Protection Agency (EPA).

With me today is the following EPA staff: Mr. Ariel Iglesias, Deputy Director of the Division of Sustainability and Clean Air of EPA Region 2, Ms. Tere Rodríguez, Acting Deputy Director of our Caribbean Division, Mr. José Rivera, Acting Chief of the Sub-Division of Multimedia Permits and Compliance, Ms. Brenda Reyes, Coordinator of Community Relations; Engineer Evelyn Rivera, Community Outreach Coordinator for Energy Answers, Mr. John Aponte, from the (Clean) Air Program under the Sub-Division of Multimedia Permits and Compliance and Ms. Socorro Martínez, from the Sub-Division of Environmental Response and Remedies.

We give you all a warm welcome to this public hearing. We also would like to thank the management at the Arecibo Lion's Club for providing this space in the Municipality of Arecibo and so allow us to meet once again closer to the community.

The purpose of this public hearing is to receive comments from the public concerning the draft of the permit to prevent significant deterioration of air quality (PSD, for its acronym in English), which was prepared by the EPA under the federal Clean Air Act. This action was taken in response to a permit application filed by the company Energy Answers for the establishment of a facility for energy recovery from solid waste in the Municipality of Arecibo, Puerto Rico.

On May 9, 2012, the EPA issued a public notice in the newspaper *El Norte*, proposing to issue a PSD permit for the facility proposed by Energy Answers. In that notice, EPA requested public comment on the proposed permit, established a comment period of 45 calendar days, provided information about the repositories of information and documents relevant to the permit application, and invited the public to attend an information session on May 23, 2012 at the Theatre of the University of Puerto Rico at Arecibo, and a public hearing on June 25 at the same location. A second public notice containing the same information was published in the newspaper *El Vocero* on May 13, 2012.

As published, the briefing on the proposed permit was held on May 23, 2012 at the University of Puerto Rico at Arecibo. The meeting provided information about the preliminary draft permit of the prevention of significant deterioration of air quality, which EPA is developing under the federal Clean Air Act, and answered questions from the audience. In addition, EPA emphasized that although the public hearing was held on June 25, 2012, the agency will accept written submissions until Friday June 29, 2012. Following the cancellation of the public hearing of June 25, 2012, the EPA extended the comment period until August 27, 2012, according

to the notice published in the newspaper *El Vocero* July 23, 2012. It should be noted that this week the EPA announced the extension of the comment period until August 31, 2012.

After our evaluation of the application of Energy Answers, we have put before the public a draft permit for their consideration.

The final agency decision on it will not be considered until all opinions have been objectively collected during the comment period. This is in order to safeguard the environment; health and safety of all are properly considered. Your comments and submissions will be heard and included in the administrative record for this public hearing. All comments or proposals to be presented today will be considered by the EPA and shall be included in the administrative record of the facility, as established by the applicable federal regulations. The EPA will not respond to the comments at this time. Note that this activity will address only matters related to the PSD permit for Energy Answers. The EPA believes that the establishment of a public policy on the management of solid waste on the island is the responsibility of the Government of Puerto Rico and its local agencies.

You can submit your opinions to EPA staff in the afternoon, or they can be sent to Mr. John Aponte at the directorate of the Caribbean Division of the EPA. You may obtain a copy of the address in the table at the entrance of the room. EPA will evaluate all comments received, and will answer them in a document that will be prepared as part of the final decision to be taken by the Agency.

As announced in the public notice about this view, the EPA held five sessions on 3 consecutive days. The sessions are distributed as follows: the first session yesterday August 25, 2012, from 1:00 to 4:00 pm and the second session was held last night, from 6:00 to 10:00 night, the third session was this afternoon Sunday, August 26, from 1:00 to 4:00 pm, the fourth session is this that we are making today Sunday, August 26, from 6:00 to 10:00 pm. The fifth and final session will be on Monday, August 27, from 1:00 to 4:00 pm. All sessions are open to the public. Those wishing to express themselves verbally had two ways to register. The first, option was to pre-registration by contacting Mr. John Aponte of our Division. The second was to register in person at any of the five sessions of public hearings.

The pre-registration procedure was included in the public notice of this view. All those who previously registered for sessions of August 25 and /or August 26, and did not have the opportunity to speak will **be granted preference** to speak at fifth session this coming Monday, August 27, 2012. Also, if time permits, those who wish to participate and did not register will have an opportunity to do so on August 27, 2012.

To hear each of the speakers in this public hearing, we have established rules and procedures, and they need to be observed at all times by the participants. The procedures in this public hearing will be documented for the record through a transcript prepared by a professional stenographer, who is present. We also have simultaneous translation from English to Spanish or vice versa of what is presented



in each of the sessions. Those interested can pick up the headphones in the central part of the building. It is necessary that all participants of this hearing are registered to enter the room and are noted on the list of attendees. Those who will speak should tell me whether they are submitting written comments today. For this session of the public hearing, fourteen (14) people have duly registered as speakers. These have already been notified either by email or by registering on entry day.

This hearing is conducted under the rules of procedure established in Part 124 of Title 40 of the Code of Federal Regulations. The order of the deponents shall be as follows: The first opportunity will be given to elected officials or their designee, followed by federal, state and municipal, and other speakers in the order they registered. Note that to ensure the opportunity for expression of all participants, we will be strict with the time limits, and speakers not be allowed to shift their allotted time to other speakers to extend their set time. Due to the number of people interested in speaking and to give opportunity to all, time for each intervention should not exceed 10 minutes. There will be a designated person to notify each speaker when they have one (1) minute left to conclude their presentation, and to notify when their set time is over. If his speech exceeds the set time, the microphone will be turned off to make way for the next speaker. We ask all **participants to remain silent until it is your turn to speak, and** show respect for the diversity of opinions in the proceedings and to listen to all the deponents. Please do not interrupt the work or cause unnecessary distractions. To maintain order, I ask that if you want to make some kind of protest, or have a discussion with someone, we ask you to leave the room to do so, while the session continues.

For recording purposes, when called to present your deposition, please clearly state your name and the entity you represent, if applicable. When presenting, please address the panel directly. If a deponent wishes to submit written copy of his or her presentation, please indicate that and deliver it to an EPA representative, making sure to include your name, postal address and telephone number written on the paper. I remind you that these hearings are being recorded for transcription purposes. Thank you very much for your cooperation. Now, we will proceed with the depositions and presentations. The first speaker for this afternoon will be Bishop Rafael Moreno.

He will be follow by the second speaker, Ms. Isaili Marines.

**Bishop Rafael Moreno:** Good evening brothers and sisters of the EPA. For the record, my name is Rafael Moreno, Bishop of the Methodist Church of Puerto Rico. It pleases me greatly to be here this afternoon. We salute you in love and peace.

**José Font:** Thank you.

**Bishop Rafael Moreno:** In the peace of our **Lord Jesus** Christ. Our Christian faith calls us to sing with the psalmist David, in Psalm 24: "The earth and its fullness are the Lord's is the earth and its fullness, the world and those who dwell therein, for he founded it upon the seas and established it upon the rivers." On the other hand, the first chapter of Genesis, the first book of the Bible, ends with the statement: "God saw all that he had made, and it was very good." Today we are called to affirm the faith that unites us and to defend the right to live with dignity and plenitude.

The Social Principles affirmed and testified in the tradition and theology of our beloved Methodist Church of Puerto Rico challenge us to promote and I quote: "A more environmentally just and a better quality of life for all creation." In the Book of Discipline of the Methodist Church of Puerto Rico 2010, under the title: *The Natural World*, it states: "All creation is the Lord's and we are responsible for the way we use and abuse it. Water, air, soil, minerals, energy sources, plants, animal life and space, must be assessed and conserved because they are God's creation and not just because they are useful to humans," and later added: " ... we support the actions by governments and industries that tend to conserve fossil fuels and others, and to eliminate those mineral collection methods that destroy the plants, animals and the earth. Regarding the use of energy resources we support and encourage social legislation aimed at rational and careful processing of parts of the non-human world into energy for human use, and that reduce or eliminate the dependency in energy producing technologies that endanger health, safety and even the very existence of human and non-human creation, present and future. We also urge full support of energy conservation and responsible development of all energy resources, with special attention to the development of renewable sources of energy so the goodness of the Earth can be reaffirmed."

Regarding the project to install and operate an incinerator in the neighborhood of Cambalache in Arecibo, we join the voices of the people who are speaking out against this giant garbage burner. This project is a threat; its harmful effects will be reflected in the ecological balance so necessary for life on the planet and the deteriorating quality of life, in the quality of air and water bodies, health, and deteriorate the economy and the quality of life in the region, and quite possibly, the whole country.

I thank Superintendents Reverend Eduardo I. García Soto and Sergio J. Valentín Reyes, who led by Superintendent María de los Ángeles Herrera Morales, have been coordinating the participation and presence of the Methodist Church of Puerto Rico in all things related to the incinerator. They will work collaboratively with the Board of our Conference of Church and Society, especially with its interim president, the Missionary Sonia N. Vargas Maldonado, with Dr. Deborah Arús and Diaconal Minister Maria Teresa Santiago, both members of the Board of our Conference of Church and Society.

Well brothers and sisters, our Christian faith, based on the Bible, and our main book and in our Social Principles, especially in the natural world, challenge us to

promote a more environmentally just and better quality of life for all creation. God calls us to take care of creation and to protect the life of everything that could damage it or attempt to end it. Based on our beliefs and the value of life, the Methodist Church of Puerto Rico through me, his son, is totally opposed to the proposed incinerator for the neighborhood of Cambalache in Arecibo, which would be operated by multinational firm Energy Answers.

We believe that the landfill used at this time should not exist, but in no way should be replaced by a polluting incinerator. No technology exists to avoid the impact of the incinerator as a polluter of human beings, water, land, flora, fauna, air, cattle, and other animals and all creation, including the karst. The incinerator is an out-of-date piece of equipment, and needs to be discarded in these times. It is not compatible with a good quality of life because of the toxics emanating from it, such as dioxins, mercury, chromium, cadmium, lead, arsenic, nickel and beryllium. The municipalities of San Juan, Caguas and Guaynabo did not allow it in their soil and in the United States of America one has not been built since 1995. The incinerator on the one hand does not create jobs and promotes the generation of more garbage, to justify its existence and its costs.

Moreover, this incineration plant would cost the town \$500 million, for a debt of 30 years.

We support, with solidarity, the Mothers in Black of Arecibo, the Reverend Julia Pagán Carmen Cabrera, President of the National Bureau of Latin American Council of Churches, and all citizens and organizations who oppose the installation of the incinerator in our beloved town of Arecibo. In addition we also join those who support zero waste alternatives. In defense of the environment and ecological justice, we accept responsibility as a church to raise awareness and educate our people to reuse things, to reduce the production of waste, to recycle and turn trash into compost and manure. We believe that the creation of recycling and composting plants would produce more jobs, would contribute more to the economy of the country and it would be more compatible with the quality of life than landfills or incinerators.

The Methodist Church of Puerto Rico raises its voice as one people against the proposed incinerator for Cambalache, Arecibo and propose waste management through reuse, recycling, composting and zero waste. This is stated in Resolution No. 3, adopted in our Connectional Conference on Saturday June 10, 2012 in the town of Guayama, P.R.

In solidarity with the love of Jesus Christ,  
Rev. Rafael Moreno Rivas, Bishop of the Methodist Church of Puerto Rico.

May God bless you and keep our country healthy and pollution free. May the grace and peace of the Lord be with all of you. Amen.

**José Font:** Thank you Bishop Rafael Moreno.

**Bishop Rafael Moreno:** Thank you. God bless you.

**José Font:** We continue with Misailis Marines. She is not present, so the now the turn is for Martha Quiñones.

**Unidentified person public:** Apolinar Cintrón.

**José Font:** not on the list, in the order that I have.

**Martha Quiñones:** He has not spoken but ... Well good afternoon to all, as they are following the guidelines .... I had already spoken before and Apolinar had not spoken but ... no problem. My name is Marta Quinones; I am an environmental economist and planner. Yesterday I talked, and I want to finish my deposition and ... Logically, yesterday I was saying was that you cannot play with the health of the people and that we are against the incinerator because it causes steady and persistent harm to people's health. And the basic question was how much does a human life cost? How much is it worth? And how much does the peoples' health costs? And I do not think the incinerator is worth more than human life. You mentioned that we are talking about the significant deterioration of air quality. And that's fine ... well you have to be careful with that. Threatening the human capital we have in Puerto Rico is an injury to all Puerto Ricans who are currently working and those not working, too, but also to our future generations. That's why some experts, voluntarily, have come here to give evidence, to insist that the data provided was wrong, that the information provided is not correct and they are generously giving us the information that should be in those documents to be evaluated. Obviously, yesterday I was talking about the things we need to include in that document to protect the health of the people, and of course, to improve our quality of life.

Basically, I would like to ask that all costs be analyzed. But we also need to measure the costs for each of these parents who are going to have a sick child. Those days of work that the father and the mother will lose, no one's going to compensate. Besides, the mental anguish you will be creating. That loss of income, the loss of productivity, loss of school days that they will have each of these children will also affect the quality of their education. Because to the extent that they are absent from the school, then they are deficient in the subjects they are assigned. The continuous medications all these kids would need, and of course we are talking about children with asthma, we are not looking at the other types of diseases that Dr. González informed us as cancer and other serious illnesses that will degenerate the reproductive systems for both women and for men, it is also very important to measure that. And of course there is another element to be included here that corresponds to each of the patterns in Puerto Rico, because to the extent that we have more people sick the health insurance premium costs will increase. With increasing health insurance premiums, many employers are going to be obliged to not offer the health plan, which leaves us facing an alarming situation, as we will have more sick people. For an adult with asthma or any of these conditions it is the same scenario: lost workdays, income, productivity, but

also have frequent hospitalizations of 8-12 days continuously, frequent visits to the emergency room. And it is reported that a person with asthma has to visit emergency rooms twice a month to function. That's a lot of money we also have to contemplate. And of course all these days of restricted activities are to be measured. But one of the most dangerous effects of this proposal are the people who will have to be incapacitated due to health conditions. And that's very important, because the more disabled people we have, the less we will have people working in the country and more people will rely on the few people who are going to be working. And that is, logically, in the case that the health of those who are working is not affected. I come from a workplace where people are reporting continuously cancer situations, cancer situations that incapacitate them. But these people cannot afford to be disabled; they have to keep working. And then we all have to be there watching these people with little strength continuously working to put bread on their home because they have no way to support themselves - and that we have to ponder. Finally, I wanted to mention again, was that I have complaints from several people who have not come to speak here. Why? As I noted yesterday, but say today more persistently, there are some politicians, especially one that is predicted to win the mayoral election, who told many businessmen to favor the project and not be against it because otherwise they would not have government contracts. And that is how our society is threatening the rights of all citizens to demonstrate, to defend their lives and the lives of their families. So it is important that we defend those rights, and it is important that we remain aware of those little details because threats do not build a country. With threats we destroy the economy of the country continually, and destroy the few businesses we have here who are willing to fight for health and for the environment. Those businesses they are not taking up that fight in solidarity, showing that they are good people, because they are under threat, especially from politicians and people with power. And it is also important that we take that into account. Thank you very much.

José Font: Thank you Ms. Quiñones. The next turn belongs to Ms. Jennifer Molina, and after Jennifer Molina, Dr. Hiram Ruiz.

**Jennifer Molina:** Good afternoon to all. My name is Jennifer Molina; I live in the Islote neighborhood, in the area of Piquiña, right here in Arecibo. I'll give my speech, and I have several letters here from people who asked me to read them here. According to reports on the effects of incineration, in relation to health, the location of the Energy Answers incinerator is aimed at producing the genocide of our people, not only damaging the health of those who live in Arecibo, their neighborhoods and villages, it also will affect unborn children and nursing mothers. It is my understanding that because Arecibo a town that in recent years has been led to the decline in its quality of life and its urban structures, that used to represent the pride of its progress, and the reduction of its population, it has been chosen to be the site of this thrash-burning exterminator on the island, the aforementioned incinerator. Are we humans also disposables to those supporting the installation of the incinerator in Arecibo?

Well I am a mother, I have two girls and one of them is joining me here today, the other is in the care of her father. And I I am really against this because my girls are in their developmental stages; the younger one is only two years and six months old and she really is a sweetheart, I enjoy raising her every day and I understand the damage this can do to the environment, the diseases this can bring into her body.

And I have other letters here with me, which I was authorized to read. Here's one by Miguel Acevedo from the Sabana Hoyos neighborhood and Maria Rivera Correa and reads: "I hereby inform you that I disagree with the construction of the Energy Answers incinerator at Arecibo for the following reasons: the garbage incinerator in this town will bring more diseases our community, such as asthma, allergies and other respiratory problems, besides producing certain types of cancer. This incinerator is going to expose us to airborne toxins over long periods of time, which will make asthma attacks more frequent, since I am a person with that condition." And other people Benjamín Rodríguez Figueroa and Iris Olmos Rojas. Here is what they say: "I have daughters of childbearing age who will be affected in the event of pregnancy, as the ashes would cause damage to the fetuses. Newborns would face the same risks, because in the process of breastfeeding they would receive impure food. There is the possibility that children in a polluted environment could be born with cerebral dysfunction, as published in medical reports. The cancer rate is extremely high in Arecibo. This is so because Arecibo has other facilities similar to the proposed by Energy Answers, polluting with toxic fumes an extensive area of our environment. I do not want to be part of such pollution. The EPA has a duty to protect us, and will have to bear the consequences for damage occasioned by Energy Answers in our community.

And I have another letter here today by Angel Román, Noel Coliano Gonzalez, Johnny Rivera, Josefina Valle and Jorge Munoz Román. It says: Knowing the risks caused by the garbage incinerator, as several studies conferences and forums I've attended report, I conclude that I do not want the incinerator proposed by Energy Answers installed in Arecibo. There are too many dangers. Even the EPA cannot guarantee us thrash burning free of toxic waste or mechanical and operational failures. I do not trust the EPA, by the way it has worked in previous cases of contamination, as in Battery Recycling, on land near the Cambalache neighborhood. I am not willing to take that imminent risk. And finally ... Miguel Acevedo Ortiz and María Rivera Correa. We hereby inform you that we disagree with the construction of Energy Answers incinerator in Arecibo, for the following reasons:

1. Incinerating trash in our town will bring our community more diseases, such as asthma, allergies and other respiratory problems, as well as producing certain types of cancer.
2. This incinerator will expose us to toxins in the air pollutants for long periods of time, thus causing more frequent episodes of my asthma, as I am a person with that condition.

This will affect not only these persons but also several people. And really I do not agree with this and I have these letters here that according to this, if you want you can have access to them, they can check and see all those names.

**José Font:** Thank you Jennifer. If you can deliver the letters in the input table please, for the record. Thank you.

**Jennifer Molina:** Ok, thank you.

**Jose Font:** Dr. Hiram Ruiz is present here? Apolinar Pérez Cintrón.

**Apolinar Pérez Cintrón:** Good afternoon, board members, good afternoon to the audience. My name is Apolinar Pérez Cintrón, teacher for 35 years in the Department of Education and professor in the departments of Humanities and Social Sciences at the University of Puerto Rico and the Universidad Interamericana. I come to this hearing also as a member of the environmental organization CEDA of Arecibo, which for many years has been fighting to protect and save different environmental areas of Arecibo, and also in my capacity as mayor candidate for the Puerto Rican Independence Party. I do not agree with the incinerator proposed by Energy Answers. Through the years Arecibo has only had polluting factories, polluting the environment. And these decisions violate our right to enjoy good health. Our village is behind and in serious trouble as a result of bad decisions made in relation to projects that are located here. Obviously, government leaders do not seek advice and the opinion of the people is not taken into account. So I want to report that this project threatens the health and survival of our families, besides all the natural life, plant and animal that has developed in our environment. I am opposed to incinerate waste in Puerto Rico from other towns, also causing major problems in detriment of our people. This is an attack on our health and therefore against our lives. I would like to add that recently we participated in a meeting of the Department of Tourism on a project that is to be established from the area of Barceloneta to Arecibo, a project that has some positive elements, but we are not fully endorsing. But why would they build a touristic development when a factory in the area of Cambalache threatens our city by releasing lead into the air? We know about the lead, because you, the EPA, intervened and fined the factory for this lead pollution. But it seems that nothing else has happened. We would like that to be completed, with the lead, battery factory here in Arecibo. We have this problem every time we passed there at night, because it seems that they're ready and throw all that smoke by night as if it will stay there in that area any more. On the other hand the power plant also releases other types of metals and then add to that Energy Answers with its toxic ash, with dioxins. So I do not want to imagine that tourists would come to Arecibo when they discover that Arecibo is a source of contamination by these factories, and that would deprive us of significant income. The situation of the landfill and the incineration at the district of Garrochales near Cercadillo in Arecibo has been discussed recently in national media. And the people of Cercadillo have been lied to; they've been told falsely that once the incinerator is operational it will end Cercadillo's problems because it will close the landfill. I would like to say and explain that we have known about the

problems of the landfill for a while, and our agency has also been involved with that site, even fining it. But it looks like that site has some people who manage to protect it, I don't know at what company level or local government level, because the landfill remains there, and we know, by a report that precisely EPA made, that it was required to those who manage the landfill to take a series of measures that would improve a little, improve how ... a lot, maybe ... how the landfill is to be managed through the years ... but that is not what we would like, to see the landfill continue to exist, but in the short term is impossible to let go of the landfill. So landfills are also a hoax and eventually we would like, in the long run, in 15, 20 years, that it closes. Then it would be required a serious recycling project, encompassing our country, our Puerto Rican nation. That remains to be done. That has yet to be done and I think the U.S. and the world are calling for a recycling project, so that many things that end up in the landfill never go there on the first place. The threat to the urban area in Arecibo, which is huge, and to the plains to our west and south are serious, all dangers that loom over the dairy industry, which is the main industry in this area, because pastures would be contaminated, too. So I repeat that as a people, as a Puerto Rican nation, we need to establish a recycling project, that is the important thing. And I close my speech by saying that I have a series of signed depositions by other people that I will deliver to the table. But I also would like to close repudiating, with all the strengths in my spirit, to the supposedly Puerto Rican scientists who for some silver coins support this incinerator, this source of disease. Thank you.

**José Font:** Thank you. Next turn belongs to Mrs. Alba Cardona. After Alba Cardona, the next turn will be for Eileen Rodríguez Colón.

**Alba Cardona:** Yes, good evening. My name is Alba Cardona, I live in the Santa neighborhood of Arecibo and I'm going to read my deposition: Imminent danger to our communities: The incinerator will produce more than 600 tons of toxic ash that will affect our health, especially our respiratory organs. The toxics will increase the frequency of my asthma attacks. And who knows the dire consequences! Since the health benefits were severely cut in the government plan, this would affect my family budget, which is extremely limited, by having to pay for additional medical expenses not covered by the current plan. Again as I have a group, some letters to deliver, some groups who could not attend. They are here in Arecibo, and their names are Ivonne Román, Carmen Román, María Díaz, Ana Cabrera, Adela Correa, Pura Adolfia, Sixto Rivera Román Ana Rivera Román, Yesenia Valentín, Naida Martínez, María Fernández, Francisco Rivera and Migdalia Martínez. Well that's it, good night, thank you very much.

**José Font:** Thank you Mrs. Cardona. Next turn belongs to Eileen Colón Rodríguez.

**Eileen Colón Rodríguez:** Good evening. My name is Eileen Colón Rodríguez and I am a local resident of the area of Santana at the Los Llanos neighborhood in Arecibo. I live about two kilometers from the proposed site to install Energy Answers' incinerator, wrongly named "waste to energy". I am a retired teacher and



an asthma patient since childhood. On June 15, 2012, the EPA reported that it had adopted new limits on the emission of ultrafine particles, that particulate matter (PM) size of 2.5 since the American Lung Association, and other entities say that these emissions cause premature deaths, damage to the heart and lungs, cancer and reproductive harm. It is recognized that imposing a stricter standard will eliminate 35,700 cases of premature deaths in the United States of America. It will eliminate 2,350 heart attacks, 23,900 visits in hospitals and doctors. One moment please .... 29,800 cases of acute bronchitis, 1.4 million cases of aggravated asthma, and 2.7 million absences to the education system and in the workforce. Since Energy Answers filed its application the standards for mercury and lead have changed, and now particulate matter PM 2.5 is also known as "shut" but we have not heard that this corporation has filed any document involving a review of its application to comply with the new standards. This means that existing standards at the time of application may subject me and other asthma patient in Arecibo to the effects of ultrafine particles, fine particles and wandering ashes. According to Ms. Abby Wait from the Environmental Technology Verification Program, the "turbo sort", a proposed filtering technology has never been evaluated by the agency. This means the arguments that the filters are advanced technology are the proposing party's claim for their interest and, without the certification of trusted sources, such as government programs that check whether technologies perform as intended. Due to my health condition, I am unable to perform productive work. I have had to submit to multiple treatments. This plant will threaten my life and the lives of all other asthmatics, who are in my situation. We are already the town with the most cases of asthma, so I ask the EPA that to consider this reality and the possibility that this permit is a death sentence for asthmatics in Arecibo before issuing a ruling on this matter. Thank you very much.

**José Font:** Thank you, Ms. Colón Rodríguez. Is Dr. Hiram Ruiz is with us? Is Ms. Isailí Marines is with us? Cristina Rivera?

**Cristina Rivera:** Good evening everyone. My name is Cristina Rivera and I belong to the Mothers in Black of Arecibo. Like the last evening, I have come to deliver a number of letters from residents regarding their opposition to Energy Answers' project. First, I have one by Ruth A. Rivera Ríos, which reads as follows: "I do not agree to the construction of the incinerator proposed by Energy Answers. Over the years, only factories that bring environmental pollutants have come to Arecibo. These decisions violate our rights to enjoy good health. Our village has been left behind as a result of poor decisions about the projects, the projects that are located here. The opinion of the people who reside here is not taken into consideration, and when the people is invited to a meeting is to justify, pro forma, because it is mandatory, that a procedure comes into effect. Then the authorities will disregard the proposals of the people. I want to report that this project threatens the health and survival of my family, without forgetting all natural life: plants and animals in our environment. I am opposed to incinerate in Arecibo other people's thrash, to the detriment of the inhabitants of our town. This is an attack on our health, and therefore against our lives." I have another of Angel L. Montijo. "I hereby inform you that I disagree with the construction of Energy Answers

incinerator in Arecibo, for the following reasons: Incinerating garbage will bring more diseases to our community, such as asthma, allergies and other respiratory problems, and will produce certain types of cancer. This incinerator is going to release toxins and pollutants for long periods of time, so there will be more frequent episodes of my asthma, as I am a person with that condition.

I have brought another by Carmen Mejías, Santos Cruz Olmo, Xiomara Rodríguez, María del Carmen Román, Ileana Martínez Mejías, Iduamel Martínez Tavarez, and it reads as follows: "I have daughters of childbearing age who will be affected in the event of pregnancy, as the ashes would cause damage to the fetuses. Newborns would face the same risks, because in the process of breastfeeding they would receive impure food. There is the possibility that children in a polluted environment could be born with cerebral dysfunction, as published in medical reports. The cancer rate is extremely high in Arecibo. This is so because Arecibo has other facilities similar to the proposed by Energy Answers, polluting with toxic fumes an extensive area of our environment. I do not want to be part of such pollution. The EPA has a duty to protect us, and will have to bear the consequences for damage occasioned by the Energy Answers in our community."

I have another from John M. Valdés, Blanca Olmeda, Alex G. Valdés, Reynaldo Fernández, Jorge Valdés, Xiomara Valdés Cabrera, Lydia Valdés Cabrera, Luz C. Ramírez Negrón, Kimberly Valdés Cabrera, Noel A. Cruz, Magdalena Sierra, Fernando Olmeda, Maribel Olmo Sierra, Carmen D. Sierra Ríos, Keila Olmeda, Agustín Sierra Ríos, and they write the following: "The scientific community has proved beyond doubt the adverse health effects caused by the toxins released by the incineration process. It is a proven fact that the incidence of cancer is higher in populations that are close to areas where these incineration technologies are used. I am not willing, because of the risk to my health, to have this incinerator near my residence, where I have my home and my family, to be exposed to the risk of malignant environment pollution that could generate incurable diseases. It is unfair that a community is forced, against its will, to take a high risk that over time will be lethal when it is known beforehand that the incinerator will cause dangers to the health of its inhabitants.

The other letter is signed by Elines Figueroa Serrano, Crisanda Abolastia, Luis Cabrera Ruiz, Leocadio Rivera, Luis E. Rivera, and reads: It says: Knowing the risks caused by the garbage incinerator, as several studies conferences and forums I've attended report, I conclude that I do not want the incinerator proposed by Energy Answers installed in Arecibo. There are too many dangers, even the EPA cannot guarantee us a trash burning free of toxic waste or mechanical and operational failures. I do not trust the EPA because of the way it has acted in previous cases of contamination, as in Battery Recycling, on land near the Cambalache neighborhood. I am not willing to take that imminent risk. Good evening and thank you very much.

**José Font:** Yes, thank you Ms. Rivera. The next turn belongs to Attorney Aleyda Centeno who represents Mr. Fernando Márquez. I understand that your paper is in

English, so people who want to get translation stop by the table to get the simultaneous translation headset.

Attorney Centeno if you can wait a minute what the person ... After Ms. Leyda Centeno the next turn is for Mr. Javier Biaggi.

**José Font:** Attorney Centeno can start her presentation.

**Aleyda Centeno:** Thank you. Good evening to all who listen. This is a presentation by Mr. Fernando J. Marquez. The first part is in Spanish, and the the second part is in English.

**Jose Font:** Go ahead.

**Aleyda Centeno:** It is titled Comments and concerns about the proposed toxic waste incinerator in Arecibo, Fernando J. Marquez, [Fjm4444@hotmail.com](mailto:Fjm4444@hotmail.com) :

Attention Mr. José Font: I, Fernando J. Marquez, business owner and resident of Arecibo, strongly disagree with the proposed installation of a waste incineration plant in our town of Arecibo. As the business owner and merchant in Arecibo, for over 22 years I have observed the currents and water around the proposed site for the Energy Answers plant. I worry about how building this proposed incinerator will greatly affect the health of my people because for most of the time the air flows in the direction of the residential areas of the town. In addition, the area is one of great environmental value because of its bodies of water, including the nature reserve of Caño Tiburones, the delta and estuary of the Río Grande de Arecibo, the Tanamá River and the remainder of the Rio Santiago, surround it. I am also concerned that they want to locate the plant in a tsunami hazard zone and in terrain that tends to flood, and how the plant could be affected in case of a disaster of such magnitudes. You do not want to think that these things can happen, but you should be prepared for an event of this magnitude. We saw it in Japan where the earthquake and the tsunami it created caused significant damage to the nuclear plant. Would Energy Answers plant be ready for an event of this magnitude? What would be the damage to adjacent areas downstream? If recent annual phenomena were evaluated, such as the seven hundred million pounds of Sahara dust, the volcanic ash from Souffriere Hills, the continued landfill fires in Arecibo, the lead fumes in a desolated area, according to the EPA. What about the emissions from pharmaceutical companies, the two existing small incinerators in Arecibo, saltpeter, spores and fungi found in the tropical humidity of Arecibo, the projected increase in water levels in the Atlantic and changes in global temperature? I have had several conversations with various experts related to this project, whom are willing to testify if necessary, and they have brought to my attention several points that disturb me greatly. These issues must be addressed and clarified immediately prior to considering granting any permission proposed incinerator.

They are:

- 1) What are the potential major upset conditions that could happen at the incinerator?
- 2) What would be the worst-case major upset event, such as an explosion and fire that have occurred at many other state of the art incinerators in the United States and worldwide?
- 3) What types of emissions will be produced during major upset events and malfunctions? Unburned gasses of volatile organic compounds and dioxins? Higher particulate matter such as pm10, pm 2.5 and ultrafines?
- 4) What potential volumes of unburned and uncontrolled emissions could occur due to major upset events in the incinerator?
- 5) Does the incinerator possess a vent stack or Bypass Vent Stack that will be used during emergencies, when the air pollution control system needs to be bypassed?

If the incinerators have bypass vent stacks, we ask the following questions and raise these concerns:

- a. The air modeling completely failed to review and consider bypass vent stacks operations
  - b. No discussion was presented on the types of major upsets that result in use of the Bypass Vent Stacks
  - c. No data or information was presented on the duration of bypass vent stack openings
  - d. No data or information was presented on the volume of emissions from bypass vent stacks openings
  - e. No data or information was presented on the kinds of toxics and criteria pollutants released during bypass vent stacks openings
  - f. What emissions monitoring will be conducted during bypass vent stacks openings? It appears that no actual emissions monitoring will be required of bypass vent stack opening
  - g. What permit limits are placed on the bypass vent stack opening? It appears that no limits have been proposed on the bypass vent stack openings
- 6) What is the permit limit on the number of major upset events each year in the incinerator?
  - 7) What is the permit limit, beg your pardon, -- What is the permit limit on the length or duration of a major upset event in minutes and hours?
  - 8) What is the permit limit on the maximum allowable emissions rate during major upset events for Volatile Organic Compounds and PAHs, CO, PM10, PM2.5, ultrafines, metals, HCl, HF and other air toxins?
  - 9) Will there be a community acid gas related corrosion monitoring program, to monitor corrosion caused by the release of acid gasses, such as hydrogen chloride (HCL), hydrogen fluoride (HF), sulfuric acid (H2SO4) and other acid gasses? We request that a community corrosion monitoring program be required as a condition of the permit.
  - 10) We require video monitoring of the small stacks be made part of the permit, so that major upsets are videotaped and monitored. We also require that public be guarantied to have access to video of the plant operations.
  - 11) Will the Smokestack Opacity limit be cero emissions of soot? Any soot pollution level above cero opacity will result in community impacts from the soot, such as

during major upsets when the opacity may spike above the permit speed limit to 50-100 percent opacity

12) We require that the community be allowed to track the opacity monitoring data.

13) We require incinerators daily operational and monitoring data be placed on real-time online access to the community to track the incinerator.

14) We require the smokestack have a dioxin continual sampling and analysis system to terming on a near real-time basis the dioxin emissions since such systems have been in place in many European incinerators since the 1990s.

15) Air modeling should be worst-case analysis of highest emissions such as fires mentioned under the emergency equipment section.

16) Air modeling did not consider or evaluate major upset events and is seriously flawed from a public health perspective, since all incinerators have experienced major upset air pollution events when emissions of nearly all pollutants are often many times above the permits maximum allowable emissions rate limitations. The air modeling completely failed to review major upset conditions and no discussion was presented on the types of major upsets, the duration of major upsets, the kinds of toxic and criteria pollutants or the volumes of emissions. The air modeling is a pie-in-the-sky scenario... I have not finished, so I would ask you to let me go on a later turn. Thank you.

**José Font:** Sure. Thank you. Ok, thanks. Dr. Ruiz. Next witness Dr. Hiram Ruiz.

**Dr. Hiram Ruiz Arroyo:** Good evening to the panel and all the friends who are joining us here. I am Hiram Ruiz Arroyo, a dermatologist and skin oncologist, and I want present a "disclosure: I'm here on a voluntary basis especially for my patients. For forty years I have been practicing in this area. And I have no ... I have to make a "disclosure," I do not receive money from any company that has anything to do with waste treatment or any company at all. I'm here voluntarily, OK? The Energy Answers employees are very competent people, and I appreciate that, but they are working for a corporation whose first and primary goal is to turn a profit. I want to establish that point first because it is important. What I'm going to talk about is that, for me, my personal opinion, we cannot add another toxic incinerator at Barrio Cambalache, Santana and Islote, since there are three incinerators already in that area. Besides, of course, that the wind comes from the east to Arecibo, so we should also consider the other plants that are adjacent to Arecibo. We know that there is a thermo-electric plant in Islote, a battery incinerator in Cambalache and biological products incinerator in Santana. Obviously the problem that confronts Energy Answers, and any other business organization that wants to add another incinerator to this area, is basically a health problem. So regardless of the money they will generate, it causes a serious health problem. The President's Cancer Panel, is led by Dr. Lasalle Leffall and Dr. and friend Margaret Kripke. In 2009, President Obama appointed this panel to study the effects of toxic substances and cancer, and they determined that the true burden of cancer induced by the environment had been greatly underestimated. They found about eighty thousand chemicals in the market, many of which affect millions of Americans, and these have not been investigated and regulated. The panel's recommendation to the President, they strongly urged President Obama to use the power of his office to

remove the carcinogens and other toxins in our water, food and air, which unnecessarily increase our health care costs, hurt our productivity and is devastating to our health. That is a thick book, the report of this committee, and I was very impressed. So there is other evidence that I want to remind friends here. It is well proven that if you do an examination of the blood leaving the umbilical cord of a newborn - and indeed a good study to do in Arecibo - contains over 250 toxic foreign substances. That's in a newborn. So when we put an incinerator in Arecibo because we have to determine where the debris will fall. If this were on the moon or in the Sahara desert but it still produce toxic impact would obviously not be the same. We know that incinerators emit many toxic substances, depending on what you put in there. We know that it produces acid gases, hydrochloric acid, formic acid, sulfuric acid, and toxic metals, such as mercury, lead, cadmium. We know that many of these are neurotoxic and affect the kidneys. But what is important for you to know is that this will not be the first time that this substances will be introduced in Arecibo, we already have them here, these substances are entering now our body, the food, air, through the skin, in agricultural, pharmaceuticals and industrial products. So we must see that we are adding toxicity, we are not reducing it. There is an agency, I do not know if it's been mentioned here, that we must also hear. It is called The Agency for Toxic Substances and Disease Registry and this is an organization that works hard with the EPA. I've never heard anyone from the EPA mention it, and they study the reactions of the toxics and the diseases they cause. Mercury we know that is not going to come just for the incinerator, mercury is a problem with the fish, the fish is a large protein, but why do you believe it is not recommended that you eat fish seven days a week on an island, despite all the health benefits of fish? Because we cannot determine how much mercury you will eat by consuming those fish, and mercury is a very toxic substance, so it is recommended that you eat fish no more than three times a week. Also the mercury has been ... automobiles emit mercury, apart from incinerators, and there is a dispute about dental fillings, when your dentists extracts lead..eh..mercury from your teeth is mandatory for the dentist to put it in a box throw it away because it is toxic, rather toxic. So there is a controversy, really, but we have to take this into consideration. Lead poisoning and you know about chronic lead poisoning. Every year 2.5 million tons of lead is released. Batteries, in front of Energy Answers there is a battery factory in Arecibo, what do we do about that? We have to look for information on that factory to see how much lead is emitting. I think cadmium that goes into the battery is really toxic. So let's put a plant in front of this flatland and a little to the side is the thermo-electric. I have understood that it is operating, sometimes with waiver. All this has not been studied and it has to do with permission to be given to a plant or not. There has been talk of nanoparticles, yeah, look at that as a problem because these incinerators do not have a suitable filter for nanoparticles, and cannot contain them. And nanoparticles are traveling long distances with neurotoxic metals in them that can affect the brain. Introduce what we call free radicals, which are substances that destroy cells and can also carry dioxin and furan. Dioxins, as your know, act like toxic hormones when enter the body and replace our hormonal system to produce disease. The systems of insulin, cortisone, male and female hormones are altered by dioxin. They accumulate in fat tissue so they are very,

very lethal for pregnant women, who have fatty tissue during pregnancy, for babies and even for babies that are nursing. One example that struck me is that there is talk that a liter of milk from cows that has dioxins, which are in that environment, has the same amount of dioxins that a man breathing in the same field could absorb in fourteen years. So these are substances that are not controlled by the incinerator. And incinerators are known to contaminate the animals in a radius of fifty miles. Arecibo - Think how far they will get. I think off the battery factory there is a problem with ranchers, ... Finally, I would like to say that Dr. Mark Williams is a doctor and EPA biologist. He is dedicated to study how particulate pollutants, transported airborne, destroy the immune system, especially the lungs, and promote fatigue and other diseases. He works at The Office of Research and Development Division of Environmental Health of the EPA. This is a doctor from the EPA that I wished could come to Puerto Rico. He is the editor of the leading journal of immunology and toxicology, The Journal of Environmental Immunology and Toxicology. We encourage EPA to bring Dr. Williams here to study pollution and toxic effects of the three plants we already have. So we have three plants, Cambalache, Islote and Santana. Finally, I will summarize, given that there are three incinerators and given that no study has been made to measure the toxic emissions from these three plants, I believe that granting a permit to Energy Answers would not be a smart and would aggravate the contamination in this region. I think the EPA should recommend to the Government of Puerto Rico to desist from adding this incinerator and that the Government initiate a study to reduce real toxics in Arecibo in accordance with the policies of toxics reduction of President Barack Obama. Thank you very much.

**José Font:** Thank you, Dr. Ruiz. The next turn is the Mr. Javier Biaggi.

**Javier Biaggi:** Good evening to all. The good thing about these hearings is that, certainly, you dissipate the doubts you might have as you listen the proceedings. And that's really the true value, not just each of us submitting to EPA a written deposition, but to obtain information. Regarding – I have a few points, but - Regarding a detail, the federal HUD, Federal Housing and Urban Development, federal, in some of the items of the contract, prohibits states subsidize housing under Title 8 that are near landfills and incinerators. And that question yet we are yet to discuss here is what will happen with the federal regulations and all subsidized housing in Arecibo? And what will happen to these residents if this is so, and if this applies well to the presence of this incinerator? So it's a question EPA needs to answer us. It would be an inter-agency consultation. There is a big question we have is that this plant will use, will have a tank of twelve thousand gallons of aqueous ammonia 19% and we were checking now this, the Material Safety Data Sheet and it does present a hazard. Not only for the case of a spill or an extraordinary event as it transit of Highway # 2, but also for residents of Arecibo, but also the Safety Data Sheet tells us that it is highly toxic to fish. Since this plant so close to the Rio Grande de Arecibo, we want EPA to tell us if Energy Answers has some security measures in place in relation to this, not the minimal or the sufficient, but the real ones. We think this is highly dangerous for the people. We have here an ice plant that occasionally releases ammonia gas. And one day

they released so much of this gas that all inhabitants from the Martell neighborhood had to evacuate because the stench and irritation were horrible. We also need EPA help us with this, because the information is not flowing as much. Energy Answers will need 2.1 million gallons of water to the condensers. They tell us that this water will be extracted from the Caño Tiburones, they speak of the drainage canal wastewater Caño Tiburones. Which is, I've never heard that the mouth of a river is the wastewater from the watershed. The output of a river or water body should not be considered wastewater, it is part of a normal life cycle. But the amount or the biological density of the water to extract, we want to know what amount of fish larvae and eggs will be, as well as of crustaceans and mollusks, because it is important, the cetí (tiny fish found in Puerto Rico) and many other things depend on them, and if we will also jeopardize our fish, we will be facing difficulties. The other thing is that if the EPA approves this, those 2.1 million gallons will be extracted from this plant that would be in violation of a state law, 317 of December 24, 98, which forbids pumping water from and draining wetlands. Cano de los Tiburones is internationally recognized as an important wetland for bird life. It is historically recognized as the largest wetland in Puerto Rico. Obviously this is a threat to wildlife and we had no information from Fish and Wildlife, except from area directly affected by the "site" where the incinerator is to be built, but we have no information about the extraction of water, what will be its effect. And we want EPA to make that query to Fish and Wildlife and also if you have to the Engineering Corps. Obviously we have an issue that confuses us every day. Is the issue of dioxins, has spoken of them, we have discussed a thousand times. Eh ... The proponents, during visits they made to communities, said that my house's BBQ produces more dioxin than that plant would produce in a year. If so, and that is true, I want the EPA to do a comparison study if indeed these BBQ 's are producing that amount of dioxins. If they say they are but we are using it then this is a public risk that neither you nor anyone else knows, only they knew. There is another part of the permit that disturbs me. In the permit request they ask for permission for emissions of about 37 grams, the emission permit is for 37 grams, or up to 37 grams per year of dioxins. That is a barbaric amount considering that comparable incinerators emit about 9 grams. Is this because they intend to build more than one incinerator with this permit? You know, we do not understand why this is so, in other words, we are talking about an awful lot of emissions that are allowed for in this permit. The other thing is that, you know, EPA finally declared this year and made a "statement" about what is in the National Academy of Science position regarding dioxins, the first part. But the second part of that information I do not know if it came out and I would like to know when that information from that second part will be released. Because we want to know the real effects of these PCBs in the population, and particularly in our populations. The World Health Organization says 10 kilograms - 10 nano grams - per kilogram of weight per day is a risk, and in the same way the American Health Association says that one nano gram per kilogram per day has an effect on the reproductive system. And obviously with these guys, with 37 grams of dioxin released in a year, this certainly will exceed that amount by a whole lot, and we want to know who are the first to be affected by the dispersion. We know that the nanoparticles have the property that they are so subtle that many of them do not even touch the ground,



but remain floating in the air, in the atmosphere. And in that sense we want to be very sure that if this issue is one that is - how can we - what the United States says, in this case EPA, that these nanoparticles and pollution are in the air in an amount, a dosis that we can resist. I want to make two corrections: The Battery Recycling company really does not recycle batteries; they recycle lead from the battery and that's another euphemism. And all who know and have had the experience of Saharan dust in these last days, the Saharan dust particle is much larger than the particles of dioxins and nano-particles, and the EPA needs to be much clearer in telling the public what will be the effects of these larger dust particles. Thank you very much and I hope to be able to finish later.

**Jose Font:** Thank you Mr. Biaggi. Is Ms. Marini Isaili here? Is there anyone new who has arrived and did not have an address during the course of the views do you want to do it now? Well, then I have yet to finish the presentation by Mr. Fernando Márquez represented by Ms. Centeno. I understand that with 10 or 15 minutes we can finish Márquez's presentation? Remember that this portion is in English.

**Aleyda Centeno:** Ok. I continue in paragraph 16 where I left it, the last sentence reads as follows:

The air modeling is a pie-in-the-sky scenario of smooth incinerator operations when this is not real world based on all other incinerators.

17. Toxic Acid Gas emissions of Hydrogen Chloride, Sulfuric Acid mist and Hydrogen Fluoride or Fluorides is unacceptable. The total of 39.8 tons per year of Hydrogen Chloride, Sulfuric Acid and Hydrogen Fluoride or Fluorides acids to be emitted and will harm the community's health and property. Hydrogen Chloride is permitted at 12.5 tons per year, sulfuric acid mist at 16.6 tons per year, and fluorides as Hydrogen Fluoride at 10.8 tons per year.

18. The permit lacks any Stack Control Emission Monitoring System, monitoring system for the toxic acid gases of Hydrogen Chloride, Sulfuric Acid and Hydrogen Fluoride. This is unacceptable! There will be no method of continuous compliance demonstration that the incinerators are meeting these limits, which we find outrageously high.

19. The total tons of acid gases at 39.8 tons equal nearly 79,600,000 pounds a year of dangerous and toxic acidic chemicals Hydrogen Chloride, Sulfuric Acid and Hydrogen Fluoride.

20. Lead emissions from the incinerator pose a major health concern since we already have too much lead in area homes and the lead baseline used in the air modeling did not consider existing lead contamination problems in the community, such as the one created by Battery Recycling, Inc, and Cambalache Thermoelectric Power Plant, as known by EPA. The lead air modeling is completely flawed and inadequate for protecting the community.

21. We require a continuous lead ambient air monitoring program to track the incinerator lead emissions in the community.

22. We need more blood lead monitoring and testing in our children immediately, due to Battery Recycling Inc.'s non compliance in Arecibo.

23. Zinc oxide is produced by burning tires due to the high levels of zinc present in tires and we are concerned about zinc oxide air emissions from the incinerator. No ambient air standards exist for zinc oxide but this pollutant has been measured downwind of tire burning sites such as industrial boilers. We require that a zinc oxide monitoring system be set up in the community.

24. The proposed incinerator project is far from state-of-the-art because we do not believe that the community's health will be protected by these facilities. The allowed emissions we find to be unacceptable and outrageously high even if they are met.

25. We request that a comprehensive compliance history review be conducted immediately of Energy Answers complete history at every incinerator site they have operated. Why has no comprehensive review of Energy Answers compliance history been conducted so far? Where are the compliance records? Once it has obtained these records, EPA should produce them for the community.

26. We view this Energy Answers incinerator with large volumes of toxic pollution in our community as another example of environmental injustice and that EPA needs to do a much better analysis of the Energy Answers application since we believe there are many flaws and holes in it. We continue to have major concerns with environmental injustice being perpetrated here in our community and EPA has not done nearly enough to alleviate our concerns of disproportionate impacts since the incinerator will be built here.

27. Energy Answers' two municipal waste incinerators plan to emit at least 1,304.05 tons a year of criteria and toxic air pollution into our community's air supply. That is equal to 2,608,100 pounds of air pollution and 9,843.94 pounds every day of operation.

For Nitrogen Oxides it will be 352 tons per year that equals 704,000 pounds.

Of Carbon Monoxide 357 tons per year = 714,000 pounds

Volatile Organic Compounds its 52.4 tons per year

Sulfur Dioxide 260 tons per year

Sulfuric Acid Mist 16.6 tons per year

Hydrochloric Acid 124 tons per year

Hydrofluoric Acid 10.8 tons per year

Metals 51.7 tons per year

Particulate Matter 58.76 tons per year

PM10 105.41 tons per year

PM2.5 90.35 tons per year

CO2 - 466,619 tons per year = 933,238,000 pounds

The largest pollutant emitted will be carbon dioxide.

28. We are concerned that Energy Answers actual emissions will be far higher depending on the number of major upset events, duration of major upset events, and the types of emissions from these major upset events. The potential for major upset events has been heavily ignored in the application and Best Available Control Technology review.

29. What volume of the 52.4 tons of Volatile Organic Compounds are Polycyclic Aromatic Hydrocarbons, which are known human cancer-causing agents like Benzo-a-pyrene?

30. Why does the permit not address Polycyclic Aromatic Hydrocarbons due to the fact that all incinerators produce PAHs and their exceptionally toxic characteristics?

31. Why did the air modeling completely ignore highly toxic Polycyclic Aromatic Hydrocarbons?

32. Why are there no real limits in the permit on Polycyclic Aromatic Hydrocarbons including Benzo-a-pyrene and related PAHs?

33. What is the potential for PAHs to be absorbed onto soot/PM2.5 fine particles?

34. The EPA is currently proposing a stricter annual standard less than 15 micrograms per cubic meter for PM2.5. This raises the concern that current PM2.5 standards are not protective of human health.

35. When the incinerators have upset conditions, what is the Opacity/Soot limit that the smokestacks will have to meet and why is that not proposed in the permit?

36. Why are no PM2.5 Control Emission Monitoring Systems being required on the smokestacks as a demonstration of continuous compliance?

37. PM2.5/Soot emissions are extremely toxic as follows:

Soot known as fine particulate matter is regulated as PM2.5 meaning particles smaller than 2.5 microns in aerodynamic diameter. Note that we are not talking about yard dust or desert sand that is more like PM50-100 and much larger than PM2.5 soot particles. Note that every industrial factory, especially older ones, emit soot or PM2.5 particles and typically the older plants emit much higher volumes of soot. PM2.5 particles are combustion byproducts, meaning they come from burning fossil fuels and trash in incinerators, and also Coal, Crude Oil, Petroleum Coke, Diesel, Fuel Oils, and Natural Gas. Note that Coal, Crude Oil, Pet Coke and Diesel/Fuel Oils are worse in releasing more PM2.5 soot particles than burning gas. Natural gas produces very little soot or PM2.5. Incinerators are among the most toxic sources of PM2.5/Soot fine particles. Soot is highly toxic for two reasons and greatly hazardous for these same two reasons:

1. Fine particles are a hazard because they are so tiny and microscopic that they easily penetrate deeply into the lung tissues including the alveolar sacs where oxygen is exchanged for CO<sub>2</sub>. Air pollution is more damaging when it reaches deep inside the sensitive lung tissues. PM2.5 fine particles or Soot is extremely hazardous due to its microscopic characteristics, although billions of soot particles are visible when they LUMP together during release from a smokestack or diesel tailpipe so that a cloud of soot appears for an instant; once the soot particles separate, they are no longer visible to the naked eye.

2. Toxicity. Soot is highly toxic and we know part of the story here although not all of it. Soot is highly toxic due to toxic substances that it's made of including carcinogens and compounds that are like a Lethal Injection!

A. One type of Soot compounds is Polycyclic Aromatic Hydrocarbons or PAHs. All smoke or soot contains PAHs. They are a type of Benzene made of multiple benzene rings like Benzo-a-pyrene, a super carcinogen more potent than benzene itself. The California Air Resources Board in 1996 classified about 40 PAHs as human carcinogens including Benzo-a-pyrene, although there are hundreds of PAHs. PAHs are a sign of poor combustion! So if coal and fossil fuels do not burn

100% and they do not achieve 100% efficiency, some PAHs are produced in the cooling stack or tail pipe gases and they stick together as Soot! Smoking Flares at Oil Refineries and Chemical Plants are releasing huge volumes of Soot! But there is no monitoring of Soot from Flares since none of the thousands of Flares are actually monitored 24/7 for how much Soot is generated.

B. Metals may also be present in the Soot. Metals vary from fossil fuel to fossil fuel. One theory of why soot pollution is harmful is that it changes the blood so it becomes slightly thicker and a person is more prone to a heart attack. Studies show that the blood thickens! Soot particles are associated with bad air days in many cases in urban areas. I am done. Thank you very much.

**José Font:** Thank you Attorney Centeno. Any person who has arrived and has not been able to have some kind of speech during the course of these hearings yesterday and today? We will take a break and come back in fifteen minutes.

**(Break)**

**José Font:** I have a person who had not talked before, but is interested in taking the microphone. Her name is Silvia González. Ms. González, please, take the microphone.

**Silvia González:** Good evening, my name is Silvia Gonzalez and he is my son, Jan. Are you going to say your name?

Jan: Yes, Jan Rafael García González

**Silvia González:** Jan, can you tell me why we are here, why Mom came here and why you came? Jan, quick, please.

**Jan:** To care for Puerto Rico.

**Silvia González:** Hi, my name is Silvia Gonzalez and I come in my personal capacity and as a member of the Union Sovereignty Movement to present my opposition to the authorization of the installation of the incinerator, and that is my commitment as a mother to protect and defend the land that I chose to educate and develop my son. My actions and those of my generation will affect future generations. As a mother I will fight for the right of my child, and all children of Puerto Rico, to enjoy a clean environment. By this I mean that particulate pollution and dioxins to which my son and all the children of my country are going to be exposed is paying a heavy price. The health of my people will be affected negatively with respiratory complications and in other cases the particulate contamination of heavy metals into the bloodstream will create severe conditions in our bodies. There are clean and effective recycling options, whose implementation produces zero emissions. Why accept to limit the quality of life of my child if I can educate our people on how to be part of a clean recycling system? For this I say no to the incinerator. Thank you very much.

**José Font:** Thank you, Mrs. González. I have here a person who has just arrived, named Ian Gonzalez also interested in taking the microphone.

**Ian González:** Good evening everyone. My name is Ian González, a student at UPR Arecibo; I come here because from the beginning I have not supported this incinerator issue. I come here before you because I'm tired of being one who listens; I want my voice to be finally heard. I get nervous, of course, but one of my concerns is that I do not understand yet why we are still in these hearings for the incinerator process? Because we know the problems, big problems it that brings to us humans here on the island, how does it affect the health? I know there are possibilities, and I know that there are solutions to this. As an example, last semester 52 students from the island and I were participated in a program whose mission was to educate in the public schools of Puerto Rico, students in kindergarten through fourth grade - fourth year to forgive me - on composting and solids waste management. Why are we doing this? Because we have to attack the issue starting with educating the community, and we have to begin with our children. This created, generated results. We saw children recycling by composting. This what we do is try to reduce landfill. I know that there are solutions. The incinerator worries me greatly. I want that, you hear, you hear my word, both as a student, young, young athlete also that this is something else that would affect us in terms of breathing, oxygen, and other things. I worry, I worry and I want to understand all these concerns and we all know that there are solutions, and know that we will continue to fight until they tell them NO to the incinerator. Thank you.

**José Font:** Thank you, Ian González. I understand that Mrs. Teresa Sánchez representing some citizens of the municipality of Arecibo would like to read some letters.

**Teresa Sánchez:** Good evening. My name is Teresa Sánchez, and I will read this letter from Mrs. Ruth Rivera, who's here, but she really, not everyone has this ability to read in public and public speaking. The most important thing is that this lady is an asthmatic patient. He lives near the landfill between Factor 2 and Garrochales. The place she lives is a highly contaminated with a high percentage of cases of asthma and cancer. She said: I cannot read, but you explain, please. She is against this project for that reason because that area is very vulnerable and therefore she does not want to have a ... another project that will affect health more in that area. And he says the following: We hereby inform you that we disagree with the construction of Energy Answers incinerator in Arecibo, for the following reasons:

1. Incinerating trash in our town will bring our community more diseases, such as asthma, allergies and other respiratory problems, as well as producing certain types of cancer.

2. This incinerator will expose us to toxins in the air pollutants for long periods of time, thus causing more frequent episodes of my asthma, as I am a person with that condition.

Regards, Ms. Ruth Rivera from the Garrochales neighborhood, Arecibo, Puerto Rico.

This neighborhood is close to the Arecibo watershed and where they expect to build the proposed incinerator. Thank you.

**José Font:** Thank you. Any other person who has not had the opportunity to make some remarks during the hearings held yesterday afternoon and tonight? In the absence of additional people then we go to recess and stay here in the living room just in case someone has not spread and came to this place, he or she could make his speech.

Go ahead Mr. Carlos García.

**Mr. Carlos García:** Good evening again for the record my name is Carlos Mario García, a resident of Arecibo. I have other questions that EPA should clarify.

Engineer Font said that this hearings will only - will only consider the permit for prevention of significant deterioration of air quality of the Energy Answers PDS project by its acronym in English - and many of the earlier speakers have questioned the issue of the distribution of the ashes. And I wonder if these hearings will consider who will conduct the evaluation of the distribution of the ashes? Because this is an issue that is extremely important because it has been clearly demonstrated by scientific evidence that these ashes are toxic. And if you are not going to pass judgment on that then who will? Or is it a case that if there is no regulatory agency that will pass judgment on that this amounts to a blank check for Energy Answers do whatever they want with those toxic ashes? I think the EPA has to answer us this question. There is another issue I want to bring to the attention. In documents provided by Energy Answers mentions that they will use ammonia in the process and says that there it will be a 12,000 gallon tank. But nowhere in the documentation there is language about the measures being taken to protect citizens in the event of an accident with that tank, if there is a spill of ammonium. I remember, I worked in the Upjohn pharmaceutical and Upjohn also used ammonia, there was a 10,000 gallon tank and as part of the Upjohn permit they were forced to make a dispersion modeling in case there was an event that a tank and exhaust, if I remember correctly, this modeling indicated that if there was an accident with this tank - and the factory was in Barceloneta, Upjohn was not one kilometer of Arecibo - said that the cloud of ammonia would be in Arecibo in minutes, in a half an hour - and nowhere in the documentation has provided Energy Answers says anything about this. Another issue of concern is what measures are there to protect the tank against natural catastrophic events such as floods? We know that where they plan to build or plan to build this facility is a flood-

prone area and there have been floods where the river gets into where they want to build this facility. And we've seen here in Puerto Rico flooding events where underground gasoline tanks have left floating, and we have seen that and it has been reported in the press, both print and television. And we have not seen anything out there how they say will protect us from this threat. I think once again demonstrates that these documents are incomplete, they have given it for consideration is incomplete. Therefore they must provide this information so that it can be evaluated and once they do you have to give us the opportunity to evaluate that. So, do not say that is given to you and it's over. We demand that once they provide that information, as the most interested party in this matter, that we pass judgment. And hope so. Thank you very much.

**José Font:** Thanks. Attorney Centeno had requested to speak, too.

**Aleyda Centeno:** Yes Good evening, regarding a matter that does not, presumably, does not have to do with the air permit; we have some very strong questions. I would like to express something before we adjourn tonight. In the Energy Answers documents I was reviewed, I saw that they are suggesting that one of the catalysts, substances that are to be used to neutralize the acids is lime. Everyone knows that lime is drawn in Puerto Rico out of the hummocks and in Puerto Rico there is a law on protection of the karst region, which is being completely ignored by the Environmental Quality Board and is still a blank check for people who want to destroy haystacks out there. Does this mean that Energy Answers operates for 30 years will the wooded hills of Puerto Rico will disappear? Does this mean that we are not only going to be jeopardizing our health, our economic health and our environmental well-being, but also we will be destroying the scenic beauty that Puerto Rico has in the karst region? That's a question I want to leave on the table, apparently not related to the air permit, but it is very relevant to the permission being granted. That is it.

**Jose Font:** Many thanks, Attorney Centeno. Dr. Márquez - Dr. González, sorry.

**Dr. Angel González:** Yes, Doctor Angel González, chairman of the public and environmental health committee of the College of Medical Surgeons. I just want a few little minutes - Is just that I got more information related to the massive fire that took the SIMAS plant in 2007, and would like to illustrate this panel in relation to that and perhaps also bring to the attention of the public. Yesterday I mentioned that in 2007, the SIMAS plant, a flagship for Energy Answers, had a catastrophic fire that lasted two days, which required the participation of fire departments from 36 surrounding communities, they needed a more than 150 firefighters, and it caused, - that caused - 18 million in losses. Besides that the other information I have is that provoke, that fire caused the neighbors to be told that they had to stay home, they had to close all the windows, they had to put a "cap" to windows and doors due to concerns regarding the possible toxins that this smoke had. And besides that the neighbors who reported to this newspaper called the Standard Times of Rochester, brought to the attention of journalists, that an explosion like the one that had preceded the fire was nothing new, even if, when dense smoke

began to appear, they knew something different was going on. The neighbors said that many times following the explosion, homes would shake, which frightened them. Two years after this accident, this incident at the plant, OSHA fined SIMAS for four serious violations, including maintain oxygen tanks near the ignition area and the use of "duct tape" for electrical connections. I wanted to raise with the EPA the question that if it forces Energy Answers, as a result of this experience, to provide the community that may be threatened by their operations if the plant is approved, of a contingency plans for emergencies, some trainings etc. in case something similar to what happened at the SIMAS plant happens again. Good night.

**José Font:** Thank you Dr. González. Since do not have any additional people here waiting to speak now, we will call a recess and EPA staff will remain here until the conclusion of the scheduled end of the hearings.

**(8:48 pm Recess)**

**(9:26 pm) José Font:** Well, having gone into recess at 8:48 p.m. tonight and given that at this time, we have no other additional deponent views this evening, Sunday August 26, 2012, we will close today's session. Thank you.