

Adverse effects of coal burning in Guayama, Puerto Rico

Chairwoman Porter, Ranking Member Gosar, Vice Ranking Member Moore and all distinguished members of this subcommittee. Thank you for the opportunity to testify today about the adverse effects of coal burning in Guayama, Puerto Rico. My name is Gerson Jiménez-Castañón and I am a Medical Doctor/Physician specialized in Internal Medicine and have been for the past 45 years. Today I come before you in the support of the potential closure of the AES Corporation coal plant in Guayama, Puerto Rico.

From 2002 to the present day, the AES Corporation (Applied Energy System) coal plant burns coal in Guayama to produce electricity. This plant is in an area very close to several neighboring communities and a few miles away from the city of Guayama. We know that the ashes, a result of the burning of coal, contain metals and radioactive isotopes, which are well known to negatively affect all living beings (plants and animals).

Some of those toxic products are:

- 1) Arsenic
- 2) Mercury
- 3) Lead
- 4) Selenium
- 5) Boron
- 6) Cadmium
- 7) Cobalt

A study published in September 2015 by Duke University (a private university in Durham, North Carolina) found that the emission of radioactivity from coal ash was 5 to 10 times more intense than that emitted from coal before burning. Medical doctors have long known

that exposure to radiation can induce the formation of various types of cancer and congenital deformities.

Medical doctors who work in the southeast area of Puerto Rico have noticed that since the AES Corporation began operating in Guayama, there has been a significant increase in diseases of the respiratory tract, urinary tract, as well as a significant increase in diagnoses of various types of cancer.

Here are some examples:

- 1) Between 1990 and 2000, the incidence rate of new annual cancer diagnoses was 103.3 cases per year.
- 2) 8 years after the AES Corporation coal plant began operating (2002), a significant increase in annual cancer diagnoses was reported. From 2010 to 2014, the average number of new cancer cases rose to 169.4 per year. This is a very significant finding.
- 3) Every month the Pathology Department of the hospital where I work reports the results of the pathological studies. Normally between 2% to 5% of the reports result with a diagnosis of cancer. During 2020, 10 of the 12 monthly reports reflected figures above 5% of cancer diagnoses in the southeastern region of Puerto Rico.

In 2016, the School of Public Health of the University of Puerto Rico, Medical Sciences Campus carried out a comparative study between a city distant from the AES Corporation coal plant (Fajardo, a city in the eastern region of Puerto Rico) and the city of Guayama where the plant is located. The selected communities have similar characteristics in their populations.

The incidence of the evaluated diagnoses was found to be much higher in Guayama than in Fajardo. Two years later, in 2018, the same study was repeated, and it was found that the health condition of the residents of Guayama had deteriorated greatly compared to the previous study.

I have sent a copy of the cited studies.

The results of the studies reviewed here make me think that there is a relationship between the contamination caused by AES Corporation and the deterioration in the health of the residents of Guayama and adjacent towns.

Thank you for your time and your consideration on an issue that is crucial for the health and well-being of not only my patients but all the residents of Guayama, Puerto Rico.