UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 2
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Chairman Pedro Nieves Miranda
Commonwealth of Puerto Rico
Junta de Calidad Ambiental
Edificio de Agencias Ambientales
Avenida de Ponce de León 1308
Carretera Estatal 8838
Sector de Cinco
Rio Piedras, Puerto Rico 00926

Re: **"Agremax"** Manufactured Aggregate - Resolutions and Notifications

Dear Chairman Nieves:

I am writing to express concern regarding the Resolutions and Notifications established by the Puerto Rico Environmental Quality Board (EQB) for coal ash aggregate, known as "Agremax," generated by the AES Puerto Rico L.P. coal-fired power plant in Guayama (i.e., EQB Resolutions R-96-39-1 and R-00-14-2, dated October 29, 1996, April 25, 2000, respectively). As you know, Resolution R-96-39-1 concluded that the production of Agremax was not subject to solid waste regulation in Puerto Rico, while Resolution R-00-14-2 ratified Resolution R-96-39-1.

We note that the Resolutions do not include provisions for engineering controls, nor specify appropriate uses or otherwise limit the use of Agremax by end users. Rather, we understand that the Resolutions allow Agremax to be used as a product. A February 13,2007, report to the Puerto Rico legislature, detailing a study conducted by the Puerto Rico House of Representatives, supports such use, based on Agremax not exhibiting the U.S.Environmental Protection Agency (EPA) hazardous waste toxicity characteristic.

As you may know, EPA has published a proposed rule[1] for the regulation of coal combustion residuals that includes provisions for beneficial reuse. The proposed rule reiterates EPA's determination that, with regard to "...situations where large quantities of [coal combustion residues] have been used indiscriminately as unencapsulated general fill....the Agency does not consider this a beneficiai use....but rather considers it waste management" (75 F.R. 35154). The

[1] Disposal of Coal Combustion Residuals From Electric Utilities; Proposed Rule, June 21, 2010, 75 F.R. 35128 – 35264"

proposed rule states EPA's conclusion that "....these practices raise considerable environmental concerns" (75 F.R. 35155).

Our concerns regarding EQB's Resolutions are thus threefold:

1) In several states in which similar "beneficial use determinations" are in effect, a regulatory framework exists to define such use, establish engineering controls, and limit adverse environmental impacts. For example, Wisconsin prohibits "....the use of industrial byproducts as paved roadway subbase or base fill...." in residential areas. Rhode Island requires that "....end uses involving land application [of recycled product] ....shall be...subject to heightened scrutiny as to whether the use constitutes beneficial reuse or is simply an altemative means of disposal." Our understanding is that no such provisions were ever established by EQB for Agremax.

2) We have inspected ten sites in the municipalities of Arroyo, Guayama, and Salinas, where Agremax has been placed on the land, including residential areas and areas close to wetlands and surface water. It is our observation, based on these inspections and subsequent investigation, that the land placement of Agremax may constitute disposal at several of the sites inspected. The volumes observed placed on the land in some cases appeared to far exceed those we would consider necessary for the appropriate engineering use of the construction material for which Agremax was allegedly being substituted. In addition, several of the Agremax land placement sites appeared to have been abandoned, in that, despite the presence of signs indicating construction pennit issuance, the slated construction projects had not been initiated and no construction equipment or activity was noted, while several sites appeared overgrown and had been used for the illegal deposition of waste materials.

3) The locations at which some of the deposition of Agremax has taken place overlie shallow sole source drinking water aquifers, and are thus particularly sensitive to environmental harm. A 2007 EPA report[2] documents known damage cases fiom the mismanagement of coal ash in unlined landfills and surface impoundments and the subsequent contamination of drinking water aquifers through the leaching and ground water transport of contaminants in the ash. Two EPA Orders, issued in 2003 and 2004 under the Comprehensive Environmental Response, Compensation, and Liability Act, and a subsequent 2004 citizen suit taken under Section 7002 of the Resource Conservation and Recovery Act, address aquifer contamination by the leaching of toxic constituents fiom an unlined coal ash landfill in Pines, Indiana. The EPA proposed rule states that: "...EPA recognizes that seven proven damage cases involving the large scale placement, akin to disposal, of [coal combustion residues] has occurred under the guise

[2] "Coal Combustion Waste Damage Case Assessments," U.S. EPA, Office of Solid Waste, July 9, 2007

of "beneficial use"..." and that "...therefore, today's proposed rule explicitly removes these types of uses from the category of beneficial use..." (75 F.R. 35161).

Please be advised that EPA intends to investigate the potential for endangerment of human health or the environment from the land placement of Agremax in southeastern Puerto Rico, and will, as appropriate, evaluate the potential applicability of Section 7003 of the Resource Conservation and Recovery Act.

Given the above, EQB may wish to immediately reevaluate the basis for its Resolutions and Notifications for Agremax. In doing this, EQB may wish to consider: 1) beneficial use determination provisions adopted by various states, including factors such as engineering controls, limitations on allowed uses, and site monitoring and risk evaluation based on environmental conditions, and 2) as stated in the proposed rule with respect to unencapsulated beneficial reuse, "...hydraulic conductivity of the subsurface, the rainfall in the area, the depth to groundwater, and other factors...." (75 F.R. 33164).

Please feel free to contact me at (212) 647-5000 should you wish to discuss this matter further.

Sincerely yours,

Judith A. Enck

Judith A. Enck
Regional Administrator

cc: Allan Dyer, President
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