WRITTEN ONLY

TESTIMONY BY GEORGINA K. KAWAMURA
DIRECTOR, DEPARTMENT OF BUDGET AND FINANCE
STATE OF HAWAII
TO THE HOUSE COMMITTEE ON FINANCE
ON
SENATE BILL NO. 1720, S.D.1, H.D. 1

March 31, 2008

RELATING TO SPECIAL PURPOSE REVENUE BONDS TO ASSIST JACOBY DEVELOPMENT, INC., A PROCESSING ENTERPRISE.

Senate Bill No. 1720, S.D. 1, H.D. 1, authorizes the issuance of special purpose revenue bonds to assist Jacoby Development, Inc. - Geoplasma LLC to finance the planning, designing, constructing, and equipping of, and the acquisition of lands for, a plasma municipal solid waste processing system to convert solid wastes into electricity and chemically and biologically inert slag, on the island of Oahu.

The Department recommends an amendment to two Sections of the bill, as follows (deleted language is bracketed; new language is underlined):

"SECTION 4. The department of budget and finance is authorized, from time to time, including times subsequent to June 30, [2012] 2013, to issue special purpose revenue bonds..."

"SECTION 5. The authorization to issue special purpose revenue bonds under this Act shall lapse on June 30, [2012] 2013."

The amendment to Section 5 will make the special purpose revenue bond authorization consistent with Act 148, Session Laws of Hawaii 2001, which states that no authorization shall be made for a period exceeding five years of its enactment. The amendment to Section 4 will allow the Department to refund the special purpose revenue

bonds after the June 30, 2013 lapse date, if advantageous to Jacoby Development, Inc. – Geoplasma LLC.

COMMITTEE ON FINANCE
HAWAII STATE HOUSE
Representative Marcus Oshiro, Chairman
Representative Marilyn Lee, Vice-Chairperson

Re: Senate Bill 1720 SD 1 HD1 -- Relating to Special Purpose Revenue Bonds to Assist Jacoby Development, Inc., a processing enterprise
Monday, March 31, 2008, 3:30 p.m.
Hawai'i State Capitol Room 308

Aloha Chairman Oshiro, Vice-Chairperson Lee, and members of the Committee.

My name is Dr. Hilburn O. Hillestad. I am the President of Geoplasma LLC., a subsidiary of Jacoby Development, Inc.. I apologize that I will not be able to attend the hearing today in person. And, due to extraordinary circumstances of Aloha Airlines canceling all flights today, our representative David Tarnas will also not be in attendance. By means of this written testimony, I urge your support for Senate Bill 1720, Senate Draft 1, House Draft 1, with certain amendments in Section 2 and Section 6 of this bill.

The proposal would authorize the issuance of Special Purpose Revenue Bonds for the planning, design, construction, and equipping of, and the acquisition of lands for, a plasma Municipal Solid Waste (MSW) processing system to convert solid municipal waste into electricity, and chemically and biologically inert slag. SB 1720 SD1 HD1 Section 2 currently stipulates that the facility is to be located on the island of Oahu. But, due to recent decisions by the City and County of Honolulu, we request that it be amended to read "State of Hawai'i".

You are all well aware of the critical problems facing the State regarding Municipal Solid Waste disposal. For example, Oahu generates about 1.5 million tons of MSW annually from residential, commercial and industrial sources. Currently, most this residential and commercial MSW is disposed of in two waste-to-energy plants, called H-Power. The H-Power Plants, located in Campbell Industrial Park, process over 600,000 tons of waste annually, and produce 7 percent of Oahu's electricity. Nevertheless, H-Power cannot eliminate entirely the huge amount of MSW and ash residue that ends up in the Waimanalo Gulch landfill. Noncombustible construction and demolition (C&D) debris and industrial waste goes directly to the landfill or to the Leeward side's other landfill in Nanakuli.

Nearly 1,400 tons per day are landfilled because of H-Power's technological limitations. Local residents have been vocal in their demands that this landfill be closed as soon as the current permits expire. Therefore, City and County officials have been evaluating alternative MSW and ash disposal technologies.

On January 19, 2007, the City and County of Honolulu issued a Request for Proposals, (#047), for the financing, design, construction and operation of an alternative energy facility and/or H-Power facility with an estimated cost of $350 million. On January 17, 2008, Mayor Mufi Hannemann announced that none of the proposals were selected, and the City had decided to add a third boiler to H-Power. In addition, the City would soon be inviting proposals from companies to bale and barge 100,000 tons of MSW to the mainland. As a result, we are interested to explore siting a plasma-arc gasification plant for MSW on one of the neighbor islands in the State of Hawai'i to provide a sustainable waste-to-energy solution to the landfill crises being faced there. So, we are asking for the amendment to Section 2 of SB 1720 SD1 HD1 from "island of Oahu" to "State of Hawai'i."

A major business activity of Jacoby Development, Inc., through its subsidiary, Geoplasma, LLC, is the development of plasma arc technology for the destruction of MSW. Plasma technology uses electricity to create plasma (a form of artificial lightning), with temperatures exceeding 10,000 degrees F. The development of a stable, efficient and cost-effective heat source three times hotter than conventional fossil fuels has opened the door to a wide range of applications previously not possible. Originally developed by NASA in the 1960s to test the integrity of heat shield materials, plasma torches were commercialized by industries in the 1970s for use in the steel making and metallurgy industries. In the 1980s the benefit of this high heat source to process municipal solid waste was becoming apparent.

Today, commercial projects are being developed in the U.S. and in several countries around the world to demonstrate the technical and economic feasibility of plasma arc processing of municipal/ industrial and other wastes. Hitachi Metals has constructed four (25 - 300 TPD) plasmagasification plants since 1999 in Japan using the Westinghouse Plasma Corporation technology, a key team member with Geoplasma. One of these plants, Utashinai (Sapporo), has been in operation since 2002 and currently processes 300 TPD of MSW. The technology has also been used in a General Motors plant in Defiance, Ohio, since 1989 for melting scrap metal for engine block castings. The plasma heating elements there have logged more than 500,000 hours of operation. Each gasification unit at

Geoplasma's facilities would use approximately the same size plasma-heated cupola as the one installed at the Defiance plant.

In 2006, Geoplasma was selected by St. Lucie County (Florida) to initiate contract negotiations to permit, finance, construct, operate and own a 3,000 TPD plasma arc gasification facility. The first phase, 1,500 TPD is proposed to come on line the second quarter 2011.

Due to the decision of the City and County of Honolulu to select an additional boiler at H-Power instead of another technology, such as plasma arc gasification, Geoplasma is interested to explore siting a plasma-arc gasification plant for MSW on one of the neighbor islands in the State of Hawai'i to provide a sustainable waste-to-energy solution to the landfill crises being faced there. For this reason, our company is requesting amending Section 2 of the bill to say "State of Hawai'i" instead of only "island of Oahu."

To summarize, Geoplasma requests that there be two amendments made to this measure: Section 2 be amended from "island of Oahu" to "State of Hawai'i." In addition, we ask that Section 6 be amended to be: "This Act shall take effect upon its approval."

Thank you for your consideration. Again, I ask for your support in passing Senate Bill 1720 with these amendments out of your committee.

Mahalo.