April 23, 2012

The Honorable Ernest Y. Martin, Chair
and Councilmembers
Honolulu City Council
530 South King Street, Room 202
Honolulu, Hawai‘i 96813

Subject: Analysis of HRP-56, LLC “No Cost to the City” Proposal

Dear Chair Martin and Councilmembers,

I note with considerable dismay that full funding for the second digester at the Sand Island Wastewater Treatment Plant (WWTP) has not been restored in the fiscal year (FY) 2013 executive capital budget, Bill 15 (2012), CD1, FD1, proposed.

Last year when the council deleted the funds for the second digester from the FY 2012 budget over our objection, the administration was asked to investigate alternative technologies through Reso 11-182. We respected your request and shouldered the unplanned expense of having AECOM, wastewater engineering consultants, conduct the research and prepare both a primary report and a supplemental report. After a year delay we are back where we began with the wastewater experts all recommending a second digester be built at Sand Island. From the councilmembers comments in CC 117 (12),1 even permitted interaction group (PIG) councilmembers, some previously against a second digester, now agree this is the best technology to use at Sand Island WWTP.

The deleted funds in the FY 2013 budget would appear to result from a disagreement with our decision to retain Synagro as the operator at Sand Island WWTP. Some councilmembers feel it would save money, even after paying an early termination penalty (almost three million dollars, adjusted for inflation) to cancel the contract with our current operator, to put a project such as the one proposed by HRP-56, LLC (HRP-56) out for competitive bidding at “no capital cost to the city.”2

Before coming to our final decision on the Synagro contract, the administration spent a great deal of time with representatives of HRP-56. We met with representatives of Caterpillar and Matrix Services (Matrix); spoke with Applied Filter Technology (AFT); and spoke with Veolia Water Services (Veolia). We listened intently to their presentations to us and to the executive matters and

1 Reports by PIG councilmembers Ikaika Anderson, Romy Cachola and Ann Kobayashi summarizing their HRP-56-sponsored trip to San Francisco January 14 to 18, 2012 to view an operation similar to that HRP-56 proposes to provide for Honolulu “at no capital cost to the city.”

2 Hereafter shortened to ‘no cost’ financing.
legal affairs committee (EMLA) on April 3, 2012, and carefully read the reports in CC 117 (12).

Between my office, corporation counsel, budget and fiscal services, environmental services, and knowledgeable consultants, we researched and assessed the particular components of HRP-56's proposal as well as the pros and cons of “no cost” financing. And while I have written to you on this subject before, MM 36 (12),3 I do so again to emphasize in greater detail the concerns we have with a proposal such as that suggested by HRP-56, and with “no cost” construction.

**What is included in HRP-56's proposal:**

Under HRP-56's proposal, Matrix would build a thermophilic digester that would digest, but not dewater or dry the biosolids. Caterpillar would provide cogeneration with ATF filtering, which would clean the biogas and convert it to electricity to power a portion of the operation. Veolia would operate the digester. Caterpillar would provide the financing, and the capital investment and shareholders' profit would be repaid by selling the cogenerated electricity back to the city at set rates.

**What is not included in HRP-56's proposal:**

The logistics and expense of disposal of the biosolids “cake” (although it isn't stated in the proposal we presume they are intending at the very least to dewater the sludge into “cake”) would become the responsibility of the city.4 The current mesophilic digester would not be utilized unless it was converted to a thermophilic digester at the city's expense. Recycling biosolids as land-applied fertilizer pellets would be discontinued. The chemical stabilization unit and the lift station projects currently being developed are not included.

Cake has approximately four times the volume of dried biosolids (pellets). This volume would have to be trucked from Sand Island through other council districts5 to H-POWER or the landfill, or the city would have to purchase a “farm” in another council district on which to compost the biosolids. Cake has the consistency of thick mud (more accurately, *odorous* thick mud) and there is limited odor suppression available during trucking and disposal.

These, among other concerns, are discussed below.

**The administration's concerns:**

1. As I indicated in MM 36(12), it would be more expensive for the ratepayers to accept HRP-56's “no capital cost to the city” proposal than for the city to finance the project.
   - Private sector interest rates are higher than the city's, which are historically low; and the private sector realizes a profit, which the city does not. Therefore, the cost to the

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4 Disposal of the biosolids is currently the responsibility of Synagro, at their expense, with certain refundables.
5 The route would be Sand Island Access Road to H1, past the airport, through Aiea/Pearl City, through Waipahu, past Waipio, Kapolei, Makakilo and ending at Campbell Industrial Park.
ratepayers in the end would be less if the city financed the second digester and cogeneration (or 'cogen') projects.

- The electric bill at Sand Island in FY 2011 was over nine million dollars and it may top twelve million in FY 2012. If the city financed the second digester and cogen, the electricity produced would be a direct savings to the ratepayers. We would not have to pay an intermediary a profit under a power purchase agreement (PPA).

- Thermophilic digesters run at a higher heat than mesophilic digesters, thus thermophilic digesters may reduce the benefits savings to be gained from cogeneration of electricity.

- Terminating the Synagro contract, 'for convenience' exposes the city ratepayers to almost three million dollars in contracted penalties, adjusted for inflation.

2. **There is no reliable basis for the $3,300,000 figure HRP-56 represented as Veolia’s operating cost estimate, which renders questionable the overall financial plan.**

- As noted above we spoke with Veolia, specifically James Good, executive vice president of Veolia Water North America-West, who gave us permission to share his comments with the council. Notably, his conversations with HRP-56 did not include operation and maintenance of the cogeneration unit or the first digester.

- Mr. Good said his company has not provided cost information or estimates to HRP-56; they have no contract, memorandum of understanding or letter of intent in place to provide any support to HRP-56; nor have they requested any documents in order to provide operating cost estimates.

- With reference to HRP-56’s testimony at the EMLA hearing, Mr. Good said, “I'm not at all pleased with the representations that HRP made about our relationship which, other than for a few conversations, does not exist.”

3. **HRP-56’s proposal does not include the disposal of biosolids or odor suppression during trucking and disposal, or the cost of either, which are currently borne by Synagro.**

- HRP-56’s cake has approximately four times the volume of pellets. This volume would have to be trucked from Sand Island through other council districts to a disposal site, either the landfill, H-POWER or a composting site. Closed tankers cannot be used because of the consistency of the product; it is transported in rolloff containers with canvas-type covers.

- Disposal would result in a significant unplanned expense to the city for truck fleet expansion, manpower and fuel consumption.

- Disposal at the landfill will require further air-drying in batches or diversion of bulky items from H-POWER to absorb and mix with it; this defeats the goal of diverting waste from
the landfill. H-POWER could take the cake as a backup facility, but only at the third boiler (once it’s online). Or as suggested by HRP-56, the city must invest in a site or “farm” for composting the cake, and then deal with marketing the compost.

- Complete suppression of the odor while trucking or at the disposal venue is not realistically possible, but any associated cost would be the city’s responsibility.

- Synagro dries the biosolids and markets it as fertilizer pellets at their expense except for a few refundables. The result is approximately one-fourth the volume of pellets compared to cake. While we are not making money off the pellets, we are not spending money either.

4. **HRP-56’s proposal is dependant upon owning the equipment for 20 years; ownership of the equipment by the city is non-negotiable to us for several reasons.**

- The regulatory agencies require certification by the environmental services director subjecting him to personal liability in certain circumstances. *This is a significant personal commitment asked of few if any other city employees and the potential consequences cannot be subject to a vendor’s control.*

- The city cannot be hampered by ‘ownership’ disputes or threatened walkouts if there are performance or financial issues with HRP-56.

- HRP-56 told us financing through Caterpillar was dependent on them retaining ownership; therefore their proposal is incompatible with the needs of the city.

5. **In order to avoid delaying construction of the second digester, cogeneration should be a separate project that follows the second digester.**

- Under Synagro’s contract, construction of the second digester would not require competitive bidding, which makes it the quickest remediation at Sand Island WWTP. The cogeneration aspect of the project may or may not require competitive bidding, and if it does, it can be added after it goes through the procurement process.

- HRP-56’s proposal is subject to competitive bidding, which will delay construction of the second digester. Revenue from the power purchase agreement (PPA) amortizes the loan for construction and equipment; therefore their proposal does not allow for separating the two projects. This is incompatible with the city’s need to expedite the second digester.

6. **At a time of significant operating challenges at Sand Island, terminating the Synagro contract would leave the solids handling unit without experienced operators, and capacity and redundancy solutions and regulatory fixes would be unacceptably delayed.**

- Synagro is currently manning the digester 24/7 in an effort to preempt capacity problems before they escalate. Without a contracted operator, city staff would be required to operate the current digester. Under HRP-56’s proposal, once the second digester is
operating, Veolia would operate it; but the city would need to continue operating and managing the original digester to ensure system redundancy. This would mean additional cost.

- If the city took over operation of the current digester, we would have to pull qualified digester operators from other treatment plants and train them in pelletization. Because there are so few of them, this will create staffing shortages and overtime expenses at the other major treatment plants as well as at Sand Island. As the council is aware, there is a scarcity of applicants who qualify and then complete the position requirements.

- Synagro’s contract includes projects underway for a chemical stabilization unit, which is needed as interim capacity backup until the second digester is built; and a lift station, which is a regulatory requirement. If Synagro’s contract were cancelled, these critical projects would be cancelled as well.

Consideration of the legal problems of a few Synagro employees in the continental United States is to us deflecting attention from the real matter at hand, particularly in light of MM 30 (12). A simple Google search of Veolia will show Synagro is not alone in having a few bad apples. We no more consider it a reflection of Synagro’s work ethic in Hawai‘i than we do of Veolia’s work ethic at the Honouliuli wastewater reclamation facility, neither of which has been questionable.

I believe the administration’s analysis has been painstaking and objective. Three primary considerations tipped the scales in determining not to cancel Synagro’s contract: first, the expediency in getting the second digester built and operational without delay; second, the lower cost for the ratepayers using city financing and saving biosolids disposal expenses; and third, avoiding disruption that would impact what has been to date successful handling of a challenging situation at the Sand Island WWTP.

I am asking you to consider the impact of your decision not only on district seven, but also on the many communities in your own respective districts. I respectfully request that the council restore the full appropriation in the FY 2013 budget for the second digester.

Very truly yours,

Peter B. Carlisle
Mayor

cc: Tim Steinberger, Director, Environmental Services

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6 Transmittal of March 10, 2012 letter from Joseph L. Page of Synagro and the U. S. Attorney’s Sentencing Memorandum regarding the Detroit case (one employee and one consultant were indicted and convicted; the investigation has been completed and no further charges will be forthcoming against Synagro employees).