LAW OFFICE OF MARC CHYTILO

Environmental Law

April 1, 2016

County of Santa Barbara Board of Supervisors 105 E. Anapamu Street, Suite 407 Santa Barbara, CA 93101 *By hand delivery and by email to sbcob@co.santa-barbara.ca.us*

RE: Funding for Resource Recovery Project at Tajiguas Landfill – 4/5 Agenda Item #6

Dear Chair Adam and Supervisors,

This office represents the Gaviota Coast Conservancy (GCC) in this matter. GCC overwhelmingly supports the primary goal of the Resource Recovery Project (TRRP) of reducing landfill dependence by diverting Municipal Solid Waste (MSW) that is not currently recycled. However, GCC has a number of serious concerns regarding the TRRP as currently proposed including its proposed location at the Tajiguas Landfill on the Gaviota Coast, its financial viability, and the long-term environmental consequences of relying on *dirty* Materials Recovery Facility (MRF) and Anaerobic Digestion (AD) technology.

A core premise of the TRRP has always been, until quite recently, that it would be financed entirely with private dollars, and thus public funds would not be placed at risk. The 2009 Request for Proposals (RFP) approved by the Board describes the role of the Contractor as follows: "the Contractor will accept and process Acceptable Waste from the Public Participants, permit, finance, design, construct, start-up, acceptance test, own and operate and maintain the Facility." (RFP, 10/20/09, p. 4-3 (emphasis added). Elements of the Project, in particular the AD, are largely unproven technologies at this scale and with a waste stream comparable to Santa Barbara's. The few municipalities that have approved AD facilities (San Jose, Monterrey) are unable or unwilling to disclose any hard data regarding the success of their operations in the areas of testing and disclosing the toxicity and chemical, physical, and microbial characteristics of the digestate, which is a critical aspect of the TRRP's viability. The PWD has been miserly and dilatory in disclosing information about many aspects of the Project, as evidenced by the withholding the Deal Points Memo that was referenced as "Attached" to a Staff Report released on March 15 but not released until less than 24 hours before the submittal deadline for this letter. Other documents germane to the Project have not been made available at all, leading to GCC's request that the Board's action be deferred pending the release of this information to the public for review.

While GCC understands the motivation to reduce the overall cost of the Project, GCC has serious concerns about seeking public funds for a project that is financially, technologically, and environmentally risky. To the extent those risks will be borne by the County and the public, it is critical that the Board have all the information it needs to make an informed decision. Unfortunately based on our review of the Project materials and in consultation with solid waste management experts, there are many unanswered questions and questionable assumptions that must be addressed.

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In our July 7, 2015 letter to your Board¹, we focused on the risks associated with the dirty MRF technology, and postulated that enhanced source separation is a cheaper and far more environmentally sound alternative. Since that time, we have learned a great deal about AD technology, and based on the information currently available, it appears that expanded food waste collection² coupled with aerobic composting is likewise a cheaper and more environmentally sound alternative for organics. Furthermore this would yield higher quality compost, which can be used in "carbon farming" on local ranchlands as substantially more effective GHG sequestration methodology, as is being done in Marin County. Before conceptually approving the Deal Points or taking any further action to advance this Project, we respectfully request that the Board request additional information, and continue the hearing to enable the Board and members of the public to review that information.

A) Risks and Uncertainties Associated with Anaerobic Digestion Technology

Before successful efforts by the solid waste lobby to reclassify AD from "transformation" (one step above landfilling in CalRecycle's hierarchy) to "composting", AD was regarded as solely a way to capture energy from waste, and the "digestate" was essentially just a useless byproduct. Anaerobic digestion, by definition, occurs without oxygen and relies on microbes that thrive in an oxygen free environment. Accordingly, without subsequent aerobic composting of the digestate, it is a stinky mess akin to sewage sludge. To convert the digestate from useless sludge into an (arguably) usable product, all the anaerobic microbes must be replaced by aerobic microbes. We've heard from individuals intimately familiar with AD facilities elsewhere in the state, that they are encountering significant difficulties in getting the digestate to compost properly, requiring much higher amounts of other organic inputs at increased cost and consequence. In addition, the EIR describes the "potential for MSW-derived digestate to contain metals and other contaminants not suitable for all compost end users" (FSEIR p. 3-17) and further explains that organic waste from the MRF may contain inert contaminants including glass and plastic, and that "at least 90 percent" would be removed (FSEIR p. 3-21.) With glass shards and other contaminants present, the compost produced from the Project will not be usable for agriculture. Contaminated compost that does not meet applicable standards and/or cannot be marketed may well end up back in the landfill - compromising the primary goal of the RRP Project, or if contamination is severe enough could require disposal as hazardous waste requiring substantial cost and effort. Either outcome entails significant financial and energy inputs for a useless end product and outcome. Notably, the Deal Points include no requirements regarding compost quality, and contain no provisions explaining what happens to the additional residue should the residue from processing exceed 40% (see Deal Points, p. 3, \P i).

¹ Available at: <u>https://santabarbara.legistar.com/LegislationDetail.aspx?ID=2353567&GUID=CCF79AB4-E14D-4E13-BAF2-B7A0731AD23B&Options=&Search=</u>

² Mandated by revised State regulatory standards that are still in development.

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This begs the question: why not aerobically compost the material in the first place? We've heard that AD offers the distinct advantage of capturing GHGs and converting them to usable electricity, however only 10% of the mass of the organic material loaded into the digesters would be converted to bio-gas. (FSEIR, p. 3-17.) By contrast, high quality compost is being applied to ranchlands in Marin County to sequester carbon, and simultaneously improve farm productivity and viability and enhance ecosystem functions.³ Carbon farming should be seriously explored as a means of sequestering carbon from the organic waste stream to advance the goals of Santa Barbara County's Climate Action Plan, and may even exceed the GHG reductions anticipated from the AD process. Carbon Farming, the subject of a recent presentation at the Faulkner Gallery and gaining increasing traction as a GHG mitigation strategy with enormous potential that was referenced in the Paris Accord.⁴ Carbon farming is a far more robust and effective GHG sequestration method than capturing a relatively small volume of methane from carbon that could otherwise be sequestered in soils. Carbon farming requires a large volume of very high quality compost, which must satisfy the local agricultural community (in particular but not exclusively organic growers) to gain acceptance. The necessary high quality compost needed for carbon farming can be produced using existing technologies and the County's current compost vendor. There is little benefit to adding the expensive, risky and uncertain AD process for a nominal reduction in the land required for the composting, as contended by staff.

B) Additional Information Regarding AD and Composting Required for an Informed Decision

Staff has asked the Board to authorize preparation and submittal of permit applications to the Air Pollution Control District, Regional Water Quality Control Board and CalRecycle. The Board has not yet certified the EIR or even formally identified the Project Description by formalizing its agreement with the vender. The public has had less than 24 hours to evaluate a single spaced technical 9-page deal point memo covering dozens of issues. Key County Project staff are on vacation and unavailable this week, delaying public access to important and timely requested information. The Board is being asked to put the cart before the horse in preparing and submitting technical applications for a Project that is still ill-formed and for which the public has been ill-informed. We ask that this action be deferred until the requested information is disclosed and several critical questions regarding the technical and financial viability of the AD aspects of the Project are answered.

³ See Marin Carbon Project website: <u>http://www.marincarbonproject.org/about</u> and one of its partners, Marin RCD at <u>http://www.marinred.org/seq-c-program/</u>

⁴ See <u>http://www.npr.org/sections/thesalt/2015/12/07/458063708/carbon-farming-gets-a-nod-at-paris-climate-conference</u>. See also <u>http://www.carboncycle.org/carbon-farming/</u> and http://modernfarmer.com/2016/03/carbon-farming/ ("Carbon farming is agriculture's answer to climate change.")

Specifically, we request that the Board direct Staff to return to the Board at a later date with the following information:

- 1) The performance and financial review of the proposed AD facility prepared by HDR during the summer of 2015 (referenced in Board Letter, pp. 4-5 but not made available to GCC upon request) (as well as the similar review of the MRF performed by D. Edwards, Inc.)
- 2) Cost data comparing AD to aerobic composting. Based on the information we currently have, it appears that aerobic composting would generate substantial cost savings because it would yield the 40 Million dollar AD facility unnecessary.
- 3) Data regarding the quality of the finished digestate compost material (including its physical, chemical, and microbial composition), and markets for that material. We note that Public Works staff refers to Gilroy's MSW-derived compost finding increasing demand (although it is free), however to our knowledge Gilroy's compost does not derive from AD rather from aerobic composting. Actual real-world examples of the end use of AD-derived compost material is absolutely essential to the Board's decision.
- 4) Data on the actual diversion rates consistently achieved by other jurisdictions using AD technology.
- 5) A detailed comparison between the quality and marketability of compost derived from aerobic composting, and quality and marketability of compost derived from digestate.
- 6) The data and assumptions underpinning Public Work's assumption that there is insufficient space at Tajiguas to aerobically compost organics.
- 7) The data and assumptions underpinning Public Work's determination that only a small fraction of the 73,000 tons of organics expected to be processed in the AD could be separated at the source (which would greatly reduce the contamination of the organic material as well as avoiding the costly AD facility).

C) Conclusion

Before committing to finance the RRP with public funds, it is critical that the public be assured that AD is the best solution for the County's organic waste. Unfortunately the current record does not provide that assurance. Accordingly we respectfully urge the Board to request additional information from Staff including the above, and to continue this hearing to a later date for this data and information to inform the County's and the public's review of this important decision. Chair Wolf and Board of Supervisors July 2, 2015 Page 5

Respectfully submitted,

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