

February 15, 2017

Honorable Council Members Maui County Council County of Maui, Hawaii

Re. Agenda Item for February 17, 2017, AUTHORIZING ACCEPTANCE OF A DONATION TO THE COUNTY OF MAUI, DEPARTMENT OF PARKS AND RECREATION, MAINTENANCE DIVISION, FROM BEYOND PESTICIDES FOR SOIL ANALYSIS AND REVIEW OF CURRENT TURF MAINTENANCE PRACTICES

Dear Honorable Council Members:

Regarding the Friday, February 17, Council meeting agenda item, "AUTHORIZING ACCEPTANCE OF A DONATION TO THE COUNTY OF MAUI, DEPARTMENT OF PARKS AND RECREATION, MAINTENANCE DIVISION, FROM BEYOND PESTICIDES FOR SOIL ANALYSIS AND REVIEW OF CURRENT TURF MAINTENANCE PRACTICES, I would like to provide you with background on the project. Parks and public spaces can be managed successfully and to community expectations with organic land management practices that do not rely on toxic chemicals. To that end, Beyond Pesticides provides support to facilitate the transition to this approach. We are able to provide a donation of technical services to implement organic management on pilot sites in Maui, as outlined in the organic management action plan that has been developed in collaboration with the County of Maui Department of Parks and Recreation. Under that plan, Beyond Pesticides will

- Document existing site conditions utilizing a questionnaire and site visit.
- Determine site expectations,
- Collect and test soil and analyze nutrient, textural, and soil microbial life.
- Assess current and past management practices, both cultural and product.
- Evaluate records on current material and product use,
- Formulate a management report and plan to transition in areas of the Parks Department's choosing,
- Help develop contract specifications for the related work that the Department contracts out, and
- Provide technical assistance through the first year of transition.

A Systems Approach without Toxic Chemicals

As background, I note that chemical-intensive turf and landscape management programs are generally centered on a synthetic product approach that continually treats symptoms with toxic chemicals. In fact, toxic pesticides are not needed for successful turf management. Rather, a systems approach incorporates preventive steps based on building soil biomass to improve soil fertility and turf grass health, organic products based on a soil analysis that determines need, and specific cultural practices, including mowing height, aeration, dethatching, and over-seeding.

Organic turf management, which meets the standards of the federal Organic Foods Production Act, is a "feed-the-soil" approach that centers on natural, organic fertilization, microbial inoculants, compost teas, and compost topdressing as needed. This approach builds a soil environment rich in microbiology that will produce strong, healthy turf able to withstand stress. The aim of a natural approach to land care is not to simply swap one herbicide or insecticide for another, but instead build a soil environment rich in microbial diversity that will produce strong, resilient, healthy landscapes able to withstand stress from weeds, pests, fungus, and disease.

The great aspect about an organic approach to turf care is that its principles are universally applicable. Yes, timing, application rates, and specific site conditions are critical to understanding the specific chemistry, biology, and structure of a soil so that it can be transitioned from conventional to organic care appropriately, but this is the case in any part of the country. Further, this is the reason why a soil sample is a critical first step within an organic management plan. Based on a list of weeds provided, that the Parks Department is currently controlling with toxic pesticides, most of these are also a problem in areas of the mainland United States. Clover, for instance, can be easily controlled by supplying adequate nitrogen to soils, and should never need be sprayed with a toxic pesticide. Promoting stable soil chemistry and natural soil microbial biodiversity will address weed and pest problems, regardless of the environment. We do not promise to provide a panacea, and cannot guarantee that there will not be instances of weed and pest outbreaks, but experience shows that once healthy soil is in place, these problems decrease dramatically. We will work with the County to address weed and pest issues specific to the island and adjust products and practices accordingly.

Beyond Pesticides' Resources Are Available for Maui County

Beyond Pesticides will underwrite the cost for Osborne Organics, Inc. to evaluate the soil, develop an organic management plan, and train County landscapers in organic practices. This training is intended to provide those on the ground with the knowledge and skills necessary to move forward with an organic land management policy. It is our goal to support County efforts in eliminating hazardous pesticide use by providing employees and local practitioners with the tools necessary to successfully implement natural pest and weed management practices.

Beyond Pesticides and Osborne Organics encourage and prepare municipal employees to transition to a systems-based approach to land care. This includes a reorientation to soil

management, the nurturing of beneficial organisms in the soil food web, and limited use of organic compatible products, when necessary. As a part of this program, in addition to training, the County will select a number of pilot/demonstration sites for implementation of the proposed organic land management plan. For those sites, the soil sample will be taken and analyzed for structural, chemical, and biological composition, and based on this analysis, a specified management plan will be crafted to assist in the transition from a conventional to an organic approach.

Cost of Organic is on Par with Conventional in the Long Term

Cost of implementing an organic systems approach is not likely to be substantially more than current costs, and there is likely to be a savings in the long-term. However, there is the possibility that some basic equipment over the long-term may be needed, such as a core aerator.

In considering cost, an organic land care program is not only generally on par with and, in the long-run, less expensive than a conventional chemical based program, it seeks to eliminate costly externalities borne by the community at large. Benefits associated with moving away from toxic pesticide use provides a reduction in the risk of exposure to carcinogens, neurotoxic materials, and other chemicals associated with adverse health effects, and the prevention of the contamination of ground or surface water, and the improved protection of wildlife. These are costs that residents are already paying for, through health care visits, cleanups and disposal, and the need for species conservation and habitat restoration.

Local Work

We bring important technical resources to this project. Chip Osborne, President of Osborne Organics, has over 15 years of experience, of a 35-year horticultural career, creating sustainable and healthy parks, athletic fields, and landscapes. I served a five-year term (2010-2015) on the National Organic Standards Board (NOSB), which is charged by Congress with reviewing materials in compliance with the Organic Foods Production Act. Local projects have been carried out in communities from Marblehead (Massachusetts), Asheville (North Carolina), Boulder (Colorado), to Irvine (California).

Thank you for your consideration. We look forward to working with Maui County.

Sincerely,

Jay Feldman
Executive Director

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