

Barbara Bell
Director

County of Hawaii

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

25 Aupuni Street, Room 210 • Hilo, Hawai`i 96720-4252 (808) 961-8083 • Fax (808) 961-8086

COUNTY OF HAWAI'I SOLID WASTE REDUCTION REQUEST FOR INFORMATION (RFI)

May 2, 2004

INTRODUCTION:

Your firm is hereby invited to submit information on solutions you can provide for the development and implementation of a Waste Reduction Technology and related support facilities in the County of Hawai`i. This facility is one component of the Update to the Integrated Solid Waste Management Plan, dated December 31, 2002. The purpose of this request is to determine mandatory and desirable features to be specified in a future RFP and any acceptable alternatives, as well as identify potential contractors.

For more detailed information, you may access the following documents on our website at http://co.hawaii.hi.us/directory/dir envmng.htm (Please note there is one underscore in this web site address. It lies between "us/directory/dir" and "envmng".)

- The County's Integrated Solid Waste Management Plan, dated 1994,
- The Update to the Integrated Solid Waste Management Plan, with the most current waste composition analysis, dated 2002, and
- The Environmental Impact Statement for the East Hawai`i Regional Sort Station, dated February, 2004.

DEADLINE FOR INFORMATION: We will review information as it is received. However, it must be received by 4:30 PM, HST, on Wednesday, June 30, 2004. Please label all packages "Waste Reduction Technology—RFI Response".

Send to: Ms. Barbara Bell, Director

County Department of Environmental Management

25 Aupuni Street, Room 210

Hilo, HI 96720

CONTACT FOR QUESTIONS AND/OR REQUESTS FOR CLARIFICATION:

Questions and/or requests for clarification may be directed to Ms. Bell at <u>cohdem@interpac.net</u>. Answers to questions and/or requests for clarification will be promptly posted on the County of Hawai`i Department of Environmental Management website. Please note, NO clarifications will be provided by telephone. Please check the following site regularly:

<u>http://co.hawaii.hi.us/directory/dir_envmng.htm</u> (Please note there is one underscore in this web site address. It lies between "us/directory/dir" and "envmng".)

ANTICIPATED FINANCIAL CONSIDERATIONS:

The County does not expect to incur any costs in developing a Waste Reduction Technology and having an independent operator provide construction, maintenance, and operations for a long-term contract.

ANTICIPATED CONTRACTOR QUALIFICATIONS:

We think the selected contractor should have been in business for a minimum of three years and successfully completed at least two commercial and/or pilot Waste Reduction projects.

NOTES:

- Responses to this RFI will be reviewed by the department for informational purposes only, and will not be considered as offers to be accepted by the department to form a binding contract.
- The County does reserve the right to use, without compensation, any ideas presented within the responses in formulating a future RFP and any subsequent contract.
- All of the information received in response to this request for information may be made public with the exception of financial statements and any other information marked "proprietary." All proprietary information must be segregated and placed in a separate envelope so marked.
- Advertisement of any subsequent competitive solicitation that may result from this RFI will be published in local newspapers of general circulation.
- Any contractor will be required to obtain all necessary permits and approvals.
- The project will be subject to the restrictions of Chapter 103D (Procurement) section of Hawai`i Revised Statutes, unless otherwise notified.
- Any contractor and all sub-contractors will be subject to Chapter 104 (Prevailing Wages) section of Hawai'i Revised Statutes.
- While the requested information is not required for consideration for any future procurement submittals, it is highly recommended.

BACKGROUND:

The South Hilo Sanitary Landfill is projected to reach capacity sometime in 2006. The Solid Waste Division is committed to extending the life of the landfill as feasible and practical. However, we know the landfill will reach capacity relatively soon. This presents an opportunity as well as a challenge for the County.

About 43% of waste in Hawai`i County is collected at Transfer Stations, with some of the locations being extremely rural. Some people have grown accustomed to disposing of anything they desire. You will need to consider how your firm would handle Household Hazardous Waste, bulky items, appliances, aggregates, or whatever could possibly be dumped into a trailer at a rural unsecured location as well as all operations and timing of services.

The County will be increasing source-separated recycling programs in the near term. We are presently diverting about 18% from landfilling, mainly through creating mulch from greenwaste, recycling scrap metal and automobiles and through traditional recycling. These recyclables will be diminishing in the waste stream over time.

QUESTIONS: Please answer all applicable questions.

TYPE OF TECHNOLOGY: Incineration, Thermal Gassification, Anaerobic Digestion, or Other (Specify)

CONTACT INFORMATION:

Name of Company:

Years in Business:

Contact Person:

Mailing Address:

Phone:

Email:

Website:

MATERIAL STREAMS/OUANTITIES:

- 1. What waste stream components are you able to process? (Glass, metal, plastics, raw greenwaste, paper fibers, treated lumber, construction/demolition debris, other? Please be specific.)
- 2. What waste stream components do you prefer? Any pre-processing requirements? (Raw greenwaste, construction lumber shorts, treated and untreated, plastics, paper fibers, other? Please be specific.)
- 3. What components of the waste stream are you unable to process?
- 4. Are there ratios of inputs needed? What are the limits?
- 5. What would you do with traditional recyclables, especially cardboard, newspaper, and office paper?

END-PRODUCTS/RESIDUE:

- 6. What is the end-product or residue? Are there any beneficial re-use possibilities? If so, are there any permitting/regulatory issues? Please include any test data regarding constituents.
- 7. What are the by-products? Emissions? Please include any test data regarding constituents.
- 8. What is the composition of any residue (in tons and as a percentage of total MSW by weight and by volume)? What percentage of the total waste stream will you recycle/recover? What are the materials?
- 9. What percentage of the total waste stream will you divert from landfilling?

SIZING/ECONOMIES OF SCALE:

- 10. Is the technology scaleable?
- 11. Is it modular? If so, in what increments?
- 12. What is the minimum tonnage you can process daily?

- 13. What is the maximum tonnage you can process daily?
- 14. Would you prefer the whole island's waste stream or would you rather East Hawai`i only, West Hawai`i only?
- 15. Tell us specifically how your firm would deal with particular Hawai`i County challenges. (i.e. low volume over a large area).

FINANCING:

- 16. What are the possibilities for financing?
- 17. Would you be able to operate the already designed Sort Station while proceeding with your Waste Reduction Technology solution? For example, would you operate part of the facility initially while processing the required construction and operation permits? Please explain.
- 18. Would you be able to operate an already designed and constructed Sort Station while proceeding with your Waste Reduction Technology?
- 19. If you finance the capital costs, how long of a contract do you need? If the County was to own the facility at the end of any contract, what effect does that have on any contract?
- 20. If the County finances the capital costs, how long of a contract do you need? What other considerations would you have with public financing?
- 21. Would you consider asking the State of Hawai`i for Special Purpose Revenue Bonds? If so, in what amount?

CAPITAL COSTS:

- 22. Are you willing to finance the construction? If so, at what interest rate? Please be as specific as possible about terms and payments from the County.
- 23. If you base the payback on tons/day and a tipping fee, what would be the amount/ton? Would volume be a cost consideration? Would it include any transportation? If so, from where to where? Would it include any up-front processing?
- 24. If we need more capacity, what are the break points in tons/day, and what are their costs (after the initial construction).
- 25. What would be the design life for the facility and its major equipment?
- 26. What would the community and/or local government customarily provide? Roads? Water? Power? Wastewater? Equipment?
- 27. Would trash haulers be required to prepare materials brought to your facility in any way? Please explain.

OPERATING COSTS:

- 28. What are the annual operating costs? What do they include? What do they not include? Tipping fees for any residue, insurance, wages, benefits, maintenance, and contingencies? Please be specific.
- 29. What are the annual operating costs per ton at 50 tons/day, 100 tons/day, 150 tons/day, 200 tons/day, 300 tons/day, 400 tons/day, 500 tons/day, 600 tons/day?
- 30. What type of incentives would you need to divert 50%, 60%, 70%, or more from landfilling?
- 31. How does recycling fit with your diversion estimates?

DOWN TIME:

- 32. What is your annual maintenance schedule?
- 33. Would the facility be processing any waste? Does your process have redundancy?
- 34. How long is needed for regular maintenance? How often for each occurrence?
- 35. Would there be a need for landfilling while you are doing maintenance or repairs?
- 36. At initial start up, do you need a ramp-up time? If so, over how long and at what quantities of waste?
- 37. What is your history for reliability?

SIZE/LOCATION:

- 38. Minimum/maximum acreage needed:
- 39. What utilities do you need, and in what amounts?
- 40. Do you generate any wastewater? What amounts?
- 41. Do you need proximity to transmission lines, or have other special transmission requirements? If they are not present, how would you expect them to be provided?
- 42. Do you have an ideal site in mind? If so, where? If not, do you have criteria for a site? If so, what are the criteria?

ENERGY CONSUMPTION AND PRODUCTION:

- 43. Does the process consume electric power (kWh per ton processed)?
- 44. Does the process export electric power for sale to a third party that is net power produced in excess of that consumed by the process (kWh per ton processed)?
- 45. If electric power will be produced, what would be the MW capacity (net export to the electric utility grid) for a plant processing 50 tons/day? 100 tons/day? 150 tons/day 200 tons/day? 300 tons/day? 400 tons/day? 500 tons/day? 600 tons/day?

- 46. Could the facility be operated so that electric power export was maximized between 6 a.m. and 10 p.m.? And minimized between 10 p.m. and 6 a.m.?
- 47. Would the electric power output be steady, that is, output various less than ± 1 MW/min?
- 48. Could the operation of the plant be designed and operated for firm, dispatchable electric power export?

EXISTING FACILITIES:

49. How many facilities are in operation that you have built or operate? Where are they located? Please provide all contact information.

STAFF AND EXPERIENCE:

50. Please provide names with qualifications and education of key staff.

NON-BENEFICIAL END PRODUCTS:

51. What are all the end products? Have you had them (it) tested? What were the results? Please provide copies of any test results.

RISKS:

- 52. Have you ever held a performance bond? In what amount?
- 53. Has there ever been any confusion, from any party, regarding whether you were performing or not?
- 54. How many operational facilities do you own or control? Where are they? How much is processed in average tonnage/day? What is the nature of any/all agreements?
- 55. Has your firm ever been in a contract that was terminated prior to the contract expiration date? If yes, please explain.

ENVIRONMENTAL IMPACTS:

- 56. Will there be any smell, fumes, dust, particulates, furons, dioxin, heavy metals, or any other byproducts due to combustion or degeneration of waste in any way?
- 57. What are the relative greenhouse gas emissions?
- 58. Could the plant be designed so that the noise level at its perimeter is less than 70 dBA? 55dBA? 45dBA?

SOCIAL IMPACTS:

- 59. How much residual waste would you generate? Must it be landfilled? Is there any beneficial use, and if so, is it permitted?
- 60. Would trucking be required? From where to where? What times of day are best? What times of day are not viable?
- 61. Would there be lighting at the site during the night? How many hours/day? Is it contained or ambient?
- 62. Do you require certain hours of operation?

PERMITTING/TIMELINES:

- 63. How long would you hope for from a County fully executed contract to full operation? How long would you reasonably expect this process to take? In your experience, how long has it taken for a facility to be fully operational?
- 64. What permits are required for your process?
- 65. What is the average length of time to obtain each permit?

TRANSPORTATION:

- 66. Do you envision hauling residual, recyclables, or anything else? If so, please identify and include it in your cost estimates?
- 67. If any transportation is required and you would rather not do it, who do you expect would?
- 68. Do you have any plans for backhaul of materials?

PILOT PROJECT:

69. Would you be able to set up a pilot or demonstration project?