

## **Feasibility Study**

First and foremost, we would like to thank you for your inquiry and interest in Balboa Pacific and our technologies.

We would very much like to speak with you regarding your wants, needs, and expectations concerning your waste to energy, waste destruction, or recycling projects.

If we mutually agree that there is a way we can assist each other the following applies:

In order to provide the best possible service to someone wishing to establish a waste to energy, waste destruction, or recycling project, Balboa Pacific MUST conduct an on site feasibility study. This study will be extremely valuable in evaluating sites or area that have various wastes such as municipal solid wastes and mixed industrial wastes, biomass, tires, etc. The feasibility study will consist of the following:

### **Waste Audit:**

- 1) Determine the flow of waste into the facility by tons per day on an average basis. Waste flow is often dependent on many factors in various parts of the world. Waste flow changes with the time of year, which is not only influenced by weather but by the number of visiting tourists and elevation of the site.
- 2) Determine the calorie content of the waste, by selecting representative samples, shredding the samples, and conducting laboratory tests on the waste (as necessary). This information will be instrumental in finding how much electricity the Balboa Pyrolytic Gasification System can produce from the intended waste stream, which in turn will be a key component of finding the profit value of installing the Balpac System.
- 3) Determine the average moisture content of the waste. Pyrolysis systems require that the waste input have a moisture content of less than 20% to be most effective. If the waste has a moisture content in excess of 20%, a drying mechanism may be necessary to reduce moisture, or an alternative technology may be more appropriate for that particular waste stream.

### **Infrastructure Audit:**

The actual site at which the proposed facility will be located will be evaluated to determine if sufficient space is available to handle the volume of waste in a safe and effective manner. Furthermore the location will be evaluated for storage capabilities, waste separation, fuel and electricity availability, and traffic flow. If the proposed facility currently has equipment that can be used in the WTE facility, that will help bring the cost of the proposed system down and that equipment will be detailed in the final feasibility report.

### **Report:**

Upon returning to our offices, Balboa specialists will prepare a report of findings, and make recommendations on the best available waste to energy or waste destruction technology for the proposed facility. If the Balboa technology is not the best-suited technology for the proposed project we will recommend a system that might be better suited. Balboa engineers and waste specialists have a broad knowledge of available technologies. It would be much better to recommend the best available

technology than try to force our systems into a project for which it is not applicable and harm our reputation. A full report will be prepared that will describe the results of our on site audits in detail will contain necessary diagrams, pictures, and data concerning the proposed project. The most important part of the report will likely be the recommendations. If the Balboa Pacific system is part of the recommendations, the report will allow us to provide the client an accurate cost proposal. If the report makes another recommendation, it will provide the owners of the recommended technology significant data toward providing a viable cost proposal.

### **Cost and Timing:**

Generally the cost of the Feasibility Study will be between US \$65,000 and \$95,000 plus expenses. Expenses will include business or first class air fare from designated airports for two individuals, in-country transportation, four or five star accommodations (or equivalent), security (if necessary), and an English translator (if necessary).

Balboa Pacific will send a qualified engineer and a waste management specialist to the project site for between five and seven days, and will prepare the in-depth report upon return to the United States. The report will be completed within four weeks following return to the US.

50% of the feasibility cost will be required to be deposited into appropriate bank accounts three weeks prior to the expected arrival date. Airline tickets will be delivered at the same time the retainer money is deposited into the appropriate bank accounts.

The remaining 50% of the feasibility study fee will be deposited into proper bank accounts prior to the date the Balboa Pacific feasibility study team leaves the country.

### **Warranty:**

If the feasibility study finds that the Balboa technology is best suited for the project, the sum of the feasibility study will be returned to the client following the first year of successful operation of the system.

Please keep in mind that each system placed by Balboa Pacific will be built to match the specifics encountered in the waste stream. Caloric Charts on the internet are incinerator based values for an oxygen rich environment. We have industry specific values that are placed based on an oxygen free environment that destroys the waste at a molecular level rather than burning it.

Please watch the movie on our site under Media Presentations.