

MONITORING PROGRAM

Operations

To ensure that construction accomplishes the desired goal, an ongoing sampling program should be implemented. A local member of the community will be trained on the proper operation and procedure methods used in a sound sampling program. This includes quality and safety training that will ensure the highest quality data.

Analysis

All samples will undergo the same analysis to ensure that effluent renewal is tracked through the wetland area. Once collected, the samples will be shipped and will undergo the same analysis. This includes the following tests;

Parameter	Analytical Cost
BOD ₅	\$21.60
Fecal coliforms	\$11.20
Total suspended solids	\$8.80
Ammonia nitrogen	\$12.80
Total phosphorus	\$14.40
Total (per sample)	\$68.80

Sample Points

It is critical from a quality perspective that sample collection be performed from an area of lower concentration to an area of higher concentration of contaminants; therefore, a sample will be collected in the following locations respectively;

- 1st.** Control;
- 2nd.** Lagoon inflow;
- 3rd.** Lagoon effluent;
- 4th.** P Lake effluent;
- 5th.** Wetlands effluent; and
- 6th.** 3 taken along wetlands (between P-Lake discharge and outlet).

Water samples would be taken weekly, during periods of lagoon discharge and also 1 week prior to discharge.. With these sample locations, each stage of the treatment process would be noted, with emphasis on the wetlands area. This sampling protocol would need to be conducted over several years, to obtain data for trend analysis. It could be scaled down after the first year, to remove sample locations that are not considered essential (i.e. lagoon inflow, along wetlands flow path).