CDM Case Study – Kinoya Biogas Project, Fiji

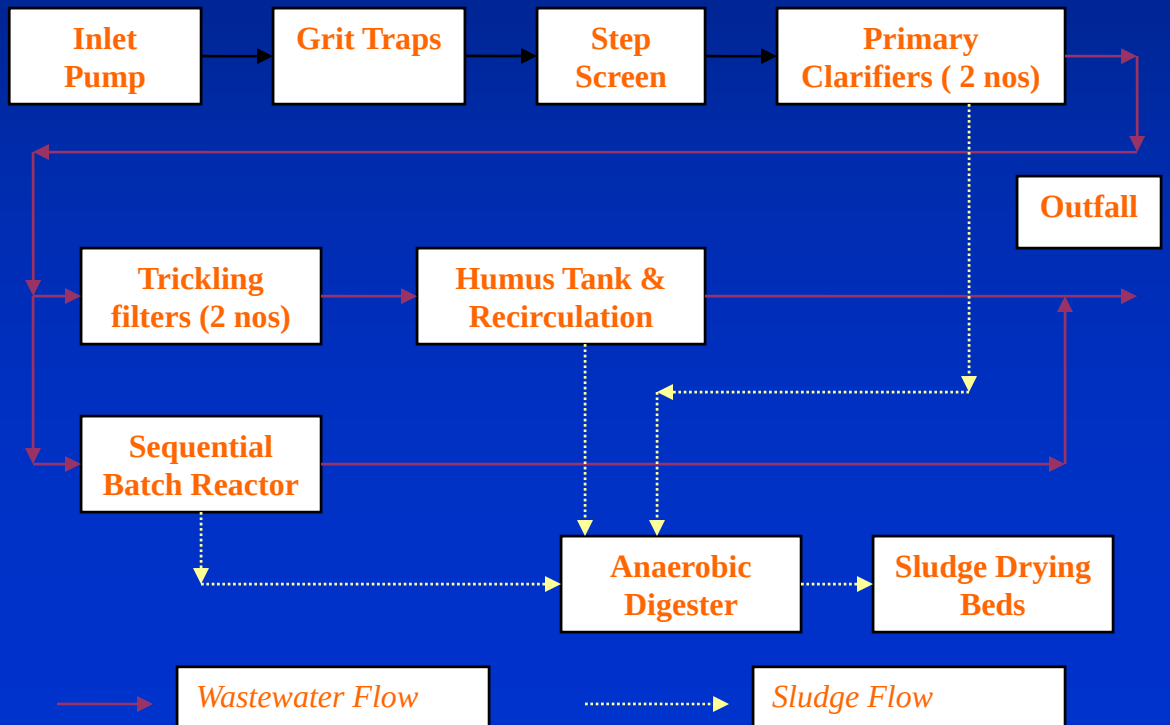
Srikanth Subbarao
Regional CDM Expert for the Pacific Islands (Consultant)
Technical Support Facility (TSF) /Carbon Market Initiative
Energy, Transport and Water Division

ADB

The Project

Domestic Sewage Treatment

- Two stage treatment – Primary & Secondary
- Primary Treatment - removal of sediments and other coarse particles
- Secondary Treatment – Biological, COD destruction & anaerobic digestion



The Project

- Current Scenario
  - The methane generated from decomposition of sludge is currently being vented into the atmosphere.
- Proposed CDM Project intervention
  - flaring the methane that is being generated by installing appropriate flaring equipment, including flaring pipe, candle, and monitoring meters

ADB

Available Project Data

Parameter	Value	Source
Chemical Oxygen Demand (COD) mg/l of Raw Effluent	630	Average value calculated for 2007, WSD
Chemical Oxygen Demand (COD) mg/l of Treated Effluent	140	Average value calculated for 2007, WSD
Total Quantity of Sludge produced (raw + humus) m3/day	180	WSD
Total Quantity of Effluent treated m3/day	30000	WSD

ADB

CDM Assessment

- CDM sectoral scope
  - Waste handling and disposal
- Scale of project
  - Small Scale
- Source of emission reductions
  - Destruction of COD in the wastewater
  - Methane recovery and flaring from anaerobic digestion of wastewater sludge
- Baseline scenario
  - venting the methane in wastewater & sludge into atmosphere.
- Approved baseline methodology
  - Type III.H - Methane recovery in waste water treatment (III.H./Version 10)
- Estimated annual CERs
  - 30,000 tCO2e

ADB

Looking Ahead

- Finalising CDM Due Diligence
- Signing of CERPA
- Development of PDD
- Host Country Approval (DNA, Fiji)
- Validation by DOE
- Registration
- Financing & Implementation
- Monitoring
- Verification & Certification
- Issuance of CERs

ADB

THANK YOU

ADB