

SAMPLING TECHNIQUE

- **Sampling intervals in biogas plant**

- Weekly during startup
- Later, fortnightly
- Monthly when the biogas plant shows a stable performance

- **For a standard biogas substrate analysis - approx. 500 mL sample volume is required**

- **For BMP (Biomethane potential) test**

- sample needed - 500 gms (if solid)
- substrate sample needed - 1000 ml (if liquid)

- **Sample bottles of PP or PET make (preferably in that order) to be used**

- **For microbe culture test, Polystyrene (PS) make sample bottles are recommended**

- **Sample bottle should have a wide opening**

- **Rinse the substrate containing lines sufficiently before sampling**

- **Fill the sample bottle completely and closely air-tight it**

- **Cool down the sample in cold water or ice pack (preferably less than 5 °C to eliminate any gas production**
- **Mark the sample with a non-water soluble sticker and note the following:**
 - Date of sampling
 - Sample origin (pre-F, F , post-F or, storage)
 - Fermentation temp. measured at the time the sample is taken
- **For heterogenous substrates, its recommended to source the sample from several points**
- **Sample from several collection points, if possible needs to be shredded and mixed well**
- **Keep collected samples refrigerated (<5 °C) during storage**
- **Preferably transport the sample within 24 hours from the sample collection**
- **Transport the samples using freezer pack at (<5 °C) to our lab**
- **For long-term sample storage and transport (more than one week)**
 - you may freeze the samples using dry-ice/ ice pack (not applicable for sample that needs to undergo microbial analysis or culture test)

Note : F-Fermentation

SAMPLES FOR MICRO-BIOLOGICAL TEST

- **All samples must be shipped**
 - cold, and not frozen (use freezer packs)
- **Sample should remain upright.**
- **Samples that are not shipped properly may be rejected by the lab**

ADDRESS FOR SENDING THE SAMPLE

To,
Dr. Sanjeev Mishra
Sardar Swaran Singh National Institute of Bio-Energy
12km stone, Jalandhar-Kapurthala Road Wadala Kalan,
Kapurthala, Punjab-144601, India