How to Ensure a Successful Verification

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May 10, 2011
Agenda

• Verification
• Data collection and monitoring
• Meter maintenance
• Monitoring plan requirements
• Some lessons learned
Verification

“Verification plays a vital role in upholding the *integrity* and *quality* of the data reported to both mandatory and voluntary greenhouse gas (GHG) programs *across the world*.”

-Climate Action Reserve, Verification Program Manual
Data collection and monitoring

- Proper metering
  - Correct installation
  - One meter for each stream
- Thorough monitoring
  - Operational activity
  - Eligibility

Measurements:

\( F = \text{Continuous flow rate of Biogas} \)

\( \text{CH}_4 = \text{Continuous or monthly measurement of the concentration of CH}_4 \text{ in the Biogas.} \)
Meter maintenance

- Calibration
- Field checks for meter accuracy
  - Header pipe flow meters
  - Handheld devices & pitot tubes
  - Meters with zero-flow calibration checks
- Cleaning & inspection
  - Records, records, records!
Monitoring Plan

• The following components help make a good Monitoring Plan:
  • Description of the dairy and the project
  • Flow Meter make, model and serial numbers
  • Make and model of other equipment (engines, CH4 analyzers, data acquisition system)
  • Data collection system procedures
  • Approach and schedule for:
    • Monitoring activities and roles
    • Meter maintenance/ calibration
  • Personnel involved in project
  • Version of the protocol used
Verification experience: lessons learned

• Save copies of all data files for Verifier
• Implement corrections to systems without delay
• Keep costs down, but not at cost of credits
• CAR does not allow Verifier to make judgement call on many protocol requirements, so be sure to follow protocol closely
• Requesting variance mid-verification can stall verification activities greatly
• Variances only granted once - make improvements!
• When in doubt, contact CAR
Any questions?
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