

**QUANTIFICATION PROTOCOL FOR
Methane Capture from the Anaerobic Treatment of Industrial Wastewater**

Technical and Policy Issue Summary

October, 2008

Background

In conjunction with the development of the Alberta protocol document, a listing of key technical and policy issues was developed to guide discussions as part of the technical and stakeholder review processes. The following document provides a listing of the key issues for discussion. Many of the issues have both a technical and policy component and are listed under both sections, as required.

The following technical and policy issues may be considered as part of the technical and stakeholder review processes:

- **Protocol Scope (Page 1-2):**
 - Are the project and baseline configurations sufficiently broad as to capture the full scope of possible anaerobic wastewater treatment projects in the food processing industry?
 - Does the protocol scope appropriately address projects that have a baseline condition of biogas flaring and implement activities to utilize the biogas for energy?
- **Protocol Applicability (Page 6)**
 - Is the first applicability criterion sufficient to establish a baseline condition of anaerobic wastewater treatment with methane emissions?
 - Are there any applicable regulations that would impact the eligibility of anaerobic wastewater treatment projects?
- **Baseline Scenario (Page 17):**
 - Is the definition of the baseline scenario reasonable for the scope and project types considered in this protocol?
 - Is the baseline scenario for projects that flare biogas applicable to project proponents and is the quantification approach reasonable?
- **Quantification Approaches (Table 2.4 on page 31):**
 - Is the mass balance quantification approach in Table 2.4 for baseline emissions from the anaerobic wastewater treatment process (B7 on page 40) technically accurate and reasonable for a variety of wastewater treatment systems?

- Does the protocol accurately address the issue of sedimentation (loss of COD) in the equation on page 40 under B7?
- Is the quantification approach for flaring of biogas appropriate in its use of the destruction efficiency (B17 on page 43)?
- Do the metering requirements in Table 2.4 balance technical rigour and reasonableness (e.g. monthly measurement for methane % of biogas, weekly COD measurements, daily flow measurements etc.)?
- **Appendices (page 55 onward):**
 - Is the flexibility mechanism for projects that do not enhance the anaerobic digestion process reasonable in its use of site specific biogas data to develop methane conversion factors on a monthly basis provided that there are at least 2 years of data available (see Appendix A)?
 - Does the fugitive emission monitoring guidance in Appendix C represent a reasonable and technically proficient approach to managing fugitive methane emissions?