

**ACR APPROVAL OF CDM APPROVED METHODOLOGY
AMS-III.D, VERSION 20.1
“METHANE RECOVERY IN ANIMAL MANURE MANAGEMENT SYSTEMS”**

ACR recommends use of ACR’s own published methodologies and tools where available. However, to provide flexibility to Project Proponents, ACR generally accepts the use of CDM methodologies for project registration on ACR.

AMS-III.D, version 20.1 is approved for use on ACR, subject to the following conditions.

1. **CDM applicability conditions and any restrictions apply:** Unless otherwise stated below, any required tools or criteria applicable to registration on CDM apply equally when a CDM methodology is used to register a project on ACR. The following conditions found under Section 2.2 – Applicability are clarified/modified as follows:
 - a. Paragraph 5 – No co-digestion of other organic matter other than livestock manure shall be quantified using this methodology.
 - b. Paragraph 7 - Greenfields projects are eligible without application of the referenced CDM guidance document. Capacity additions are eligible as a component of a project so long as the initial project activity has met all ACR requirements regarding start date and registration at ACR.
 - c. Paragraph 8 – Any requirements found in the methodology regarding “remaining lifetime of equipment” do not apply.
 - d. Paragraph 9 – The limitation on quantity of emission reductions claimed in a project does not apply.
2. **Normative References:**
 - a. Paragraph 11 does not apply.
 - b. Paragraph 12 – The following tool is cited in this section: “Tool to calculate baseline, project, and/or leakage emissions from electricity consumption.” When applying this tool, ACR allows the application of grid specific emission factors calculated in the U.S. EPA’s eGRID database. Please contact ACR for guidance on the application of this tool. This guidance applies for any other section where the CDM tool is referenced.
3. **Additionality:** ACR requires that additionality be demonstrated using a performance standard *or* ACR’s three-pronged additionality test per the current version of the *ACR Standard*. This requires the Project Proponent to demonstrate that the project activity: 1) exceeds regulatory/legal requirements; 2) goes beyond common practice; and 3) overcomes at least one of three implementation barriers: institutional, financial or technical. In AMS-III.D a de facto performance standard is used in conjunction with a requirement that each project exceed regulatory requirements. To be deemed additional, a project applying this methodology need only demonstrate that there is no regulatory requirement mandating the project’s collection and destruction of methane from livestock manure.

4. Baseline Emissions

- a. Only the baseline emissions quantification option in paragraph 16.(a) is permitted to quantify baseline emissions. The approach in paragraph 16.(b) is not permitted. Any section of the methodology referencing requirements or quantification approaches utilizing the baseline emissions quantification from paragraph 16.(b) are not applicable (for instance, those found in paragraphs 18 and 20.(a)(ii)).
- b. Paragraph 17.(a) – Values for the parameter, B_o , shall be taken from Table A-204 of the *Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2014* (published 2016).
- c. Paragraph 17.(b) – Values for the parameter, $VS_{LT,y}$, shall be applied for each state and animal species from Table A-206 of the *Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2014* (published 2016).
- d. Paragraph 17.(f) – Values for the parameter, MCF, shall be taken from Table 10.17 of the 2006 IPCC Guidelines for National Greenhouse Gas Inventories – Volume 4, Chapter 10.
- e. Paragraph 21 – The following tool is cited in this section: “Project emissions from flaring.” When applying this tool, the default value for open flare efficiency shall be 95% or project proponents may apply the results of a third-party source test conducted by an organization meeting or exceeding the U.S. Environmental Protection Agency’s Minimum Competency Requirements for Air Emission Testing rule to determine the actual destruction efficiency of the device.

5. Global Warming Potentials: Per ACR Standard, Version 4.0, ACR requires the use of global warming potentials from the IPCC Fourth Assessment Report (AR4).

6. Monitoring parameters (Section 5.1):

- a. Table 5 – Parameter: $BG_{burnt,y}$ – Continuous flow measurement shall mean that measured flow be recorded, at minimum, on 15 minute intervals.
- b. Table 6 – Parameter: $W_{CH_4,y}$ – A default value is not permitted. Methane content readings must be taken either continuously (i.e. a methane content reading recorded every 15 minutes, at minimum) or once per quarter (i.e. one methane content reading every 3 months).
- c. Table 9 – Parameter: FE - The following tool is cited in this section: “Project emissions from flaring.” When applying this tool, the default value for open flare efficiency shall be 95% or project proponents may apply the results of a third-party source test conducted by an organization meeting or exceeding the U.S. Environmental Protection Agency’s Minimum Competency Requirements for Air Emission Testing rule to determine the actual destruction efficiency of the device.
- d. Quality Assurance/Quality Control requirements for flow meters and methane analyzers: All flow meters and methane analyzers must be serviced/maintained and calibrated per manufacturer specifications and requirements. Each flow meter and methane analyzer in use at the project must be checked for reading accuracy within one month of the end of the reporting period. This check must demonstrate that each flow meter or methane analyzer is reporting accurately and within an acceptable error range of +/- 5%.

7. Programmatic Projects – CDM Programme of Activities requirements do not apply. See the ACR Standard for ACR requirements on programmatic projects.

8. Miscellaneous:

- a. References to a CDM Project Design Document (PDD) are to be read as a reference to ACR's required Greenhouse Gas Project Plan document.