



CLIMATE  
ACTION  
RESERVE

**SUMMARY OF REVISIONS FROM  
LIVESTOCK PROJECT PROTOCOL VERSION 2.1 TO 2.2  
November 3, 2009**

In addition to minor editorial changes in the Livestock Project Protocol, Version 2.2 incorporates the following significant changes from Version 2.1:

1. **Update to the Start Date language (Section 3.2, pg. 4).**
  - a. The start date language has been adjusted to reflect the new start date policy adopted by the Reserve Board on 10/07/09. The new start date policy requires all projects to submit for listing with the Reserve no more than 6 months following the operational start date of the project. Livestock projects with start dates going back to 1/1/2001 are eligible to register with the Reserve if they submit for listing no later than 3/1/2010. After this date, the Reserve will only accept livestock projects that submit for listing no more than 6 months after their operational start date, and transfer projects that were registered elsewhere prior to 3/1/2010. To view the new policy, visit:  
<http://www.climateactionreserve.org/how/program/program-manual/>
  - b. The start date language has also been revised to allow for up to a 6 month digester start-up period prior to the operational start date.
2. **Updated guidance for eligibility of Greenfield Projects (Section 3.4, pg. 5).** The Reserve has consistently given guidance for determining when a Greenfield livestock project is eligible to register reductions from a newly installed digester at a new livestock operation. This language is now contained in the protocol.
3. **New data substitution methodology (Appendix D, pg. 62).** In response to feedback that the referenced data substitution rules in Version 2.1 were difficult to interpret and utilize, the Reserve has developed its own data substitution rules which provide clarity, certitude, and a consistent methodology. This update represents a clarification and improvement of the pre-existing data substitution provisions.

4. **Revised biogas metering requirements (Section 6, pg. 24).** Updated the language regarding the requirement for continuous metering and data recording of biogas flow from the digester to all destruction devices. Version 2.2 requires that the biogas flow be measured continuously and recorded every 15 minutes, or totalized and recorded at least daily.
5. **Revised Meter calibration requirements (Section 6.1, pg. 25).** Updated the calibration schedule consistent with the OWD and CMM V1.0 protocols.
6. **Corrected the methane density (Section 5 equations).** The methane density was adjusted to reflect STP conditions of 1 atm and 60°F rather than 1 atm and 20°C.
7. **Clarified when to zero out the solids in the baseline lagoon calculation (Section 5.2, pg. 14, footnote 22).** Clarified the language explaining when the  $(VS_{avail-1,AS} - VS_{deg-1,AS})$  term in Equation 5.3 must be zeroed out in the calculation.
8. **Biogas Collection Efficiency default value updated (Appendix B, pg. 44).** The BCE default value was updated reflecting the values recommended in the EPA Climate Leaders Offset Methodology for Managing Manure with Biogas Recovery Systems. See Table B.4.
9. **State-specific Volatile Solids default values updated (Appendix B, pg. 45).** The state-specific default values for VS were updated to reflect the most recent data reported in the EPA's Inventory of U.S. GHG Emissions and Sinks: 1990-2007 (2009). See Table B.5a.