

2nd revised VERA test protocol published: 'Slurry Separation'

After the publication of the VERA test protocol for 'Covers' last week, we are proud that the VERA test protocol for 'Slurry Separation Technologies' – Version 3:2018-07 will follow today and is available for free download on our subpage 'test protocols' or directly here: VERA test protocol Slurry Separation (pdf, 556 kB).

The new version 3:2018-07 differs from the earlier version 2:2013 as follows:

- a. To obtain more reliable information about the system and its function, mass balances for all mandatory parameters are required, not only for nitrogen.
- b. In addition to livestock slurry, **biogas slurry (digestate)** is now within the scope of this test protocol.
- c. The parameters are grouped into categories by describing characteristics of the slurry or biomass, the technology itself, and the emission parameters. This should make its structure clearer.
- d. Requirements and recommendations are more precisely indicated, especially for the description of sampling and testing of certain parameters, such as mass flow and emission measurements.
- e. With the simultaneous revision of other VERA test protocols, the general format and structure of the documents have been harmonised by means of a new 'high-level structure' for VERA test protocols. This should help the user to navigate the documents, and it should be more similar to the format of an international standard.
- f. Instead of listing suitable measurement methods for the test parameters, this new version of the VERA test protocol introduces the 'standard reference method', according to EN 14793. A standard reference system is now defined for the key measurement parameters. This method has been validated, has proven its suitability for such use, and, as such, is commonly recognised. The equivalence of any other measurement method must be demonstrated, e.g. as described by EN 14793.

This revised document was drawn up by nominated international experts on the International VERA Committee (IVC) for Slurry Separation.

For Denmark: Thorkild Qvist Frandsen, Danish Technological Institute, and

Maibritt Hjorth, Aarhus University

For Germany: Andreas Lemmer, University of Hohenheim

For the Netherlands: Roland Melse and Fridtjof de Buisonjé, both WUR.

Many thanks to these VERA experts for their effort and their excellent job!

Outlook: it is planned to publish a German version of this test protocol by the autumn.