

December 13, 2016

**National Woodchip Heating Fuel Quality Standard Advisory Committee Call**

Tuesday, December 13, 2016; 3:03 PM – 4:30 PM ET

**Call-in Information**

1-712-432-0900, 552079#

**Participants**

- **Innovative Natural Resource Solutions (INRS)** – Charlie Niebling, Charlie Levesque
- **Biomass Energy Resource Center (BERC)** – Adam Sherman
- **Biomass Energy Laboratory** – Chris Wiberg
- **ASABE** – Scott Cedarquist, Jean Walsh
- **Froling Energy** – Jim Van Valkenburgh, Mark Froling
- **New Hampshire DES** – Gary Millbury
- **Tarm Biomass** – Scott Nichols
- **Resource Systems Group** – John Hinckley
- **Forest Concepts** – Jim Dooley
- **UW-Madison** – Scott Sanford
- **West Virginia University** – Kaushlendra Singh
- **Wilson Engineering Services** – Dan Wilson
- **BTEC Staff** – Aaron Aber

**Agenda**

- I. **Welcome new members: Jon Baker, Cousineau Forest Products; Scott Sanford, Univ. Wisconsin, Madison; Mark Froling, Froling Energy**
- II. **Outline objectives for call**  
(Charlie N.): 1) Consensus on one of the three paths forward:
  - Option 1: Adopt ISO standard 17225-4 as promulgated**
  - Option 2: Adopt ISO standard 17225-4 with modifications**
  - Option 3: Develop a new standard and submit to ANSI**2) Discuss potential missing expertise on advisory committee– look for geographic diversity in any additions given strong Northeastern representation at present
- III. **Core team recommendation on approach to standard (please read attached memo)**
  - a. **Discussion, consensus**
    - (Adam): When project originally proposed, options 1 and 2 were not on radar  
(Charlie N.): Advisory Committee recommends Option 2
    - (Jim D.): Memo addresses following concerns:
      - Woodchip terminology – chipper-made vs. made with other means
      - Missing aspects of ISO standard, which was heavily based on European standards: flowability, augerability, chip size/shape, abrasive contentRecommends Option 2 to allow US to move forward quickly in facilitating trade; could be supplemented by ASABE standard
    - (Mark): Other factors that in his view are not sufficiently addressed in ISO standard include effects of water content on freezing of fuel, and fines content, which both impact flowability and compaction
  - (Adam): Should another term besides “woodchips” be used?  
(Jim V. and Mark): Woodchips narrowly defined in ISO; Froling Energy distinguishes between densified and non-densified biomass

(Adam): Recommend that standard be inclusive of wood from different pathways that meets the standard's technical specifications

**b. Legal/administrative issues with USFS, ASABE – if any**

- (Scott C.): When ISO standard adopted with modifications, it maintains baseline standard, and changes are usually made relative to technical aspects or additional provisions
- (Chris): ISO 17225-4 based primarily on European standards, and focus on the 17225 set tended to be on -1 (general) and -2 (pellets); little feedback given on -4 during formulation, so -4 retained much of the structure from -2 with little subsequent feedback on factors unique to woodchips during comment period
- (Chris): If original US standard formulated, could be brought to ISO to reformulate ISO standard (Scott C.): ASABE commonly pushes for inclusion of US-based standard deviations into ISO standards

**c. Focus, publication and dissemination of guidebook**

- (Charlie N.): The project team has been collecting a library of existing woodchip standards to serve as guide and reference. We will look into the TAPPI standards for paper and pulp industry in case there is anything helpful in that standard.
- (Scott N.): Could ISO standard be adopted as promulgated with modifications in appendix?  
(Chris): Could publish appendix to ISO standard for use in US and take to ISO for inclusion in the standard; need to be careful of how much language from ISO cited in such a document  
(Jean): Would be most timely and effective to determine what in the ISO standard would not work in the US, then distribute those deviations from the ISO standard in a guidance document  
(Charlie N.): Approach would be different from original proposal, but with diligence from the group, could move quickly to address Scott N's concern about process taking too long; subcommittee of the Advisory Committee could develop a list of deviations fairly quickly  
(Jean): With diligence, could take about one year to complete and submit the standard
- (Chris and Scott C.): Should be mindful of conversions between Imperial and metric units between US ASABE standard and ISO standard

**IV. If chosen, Process for revising/adoption of ISO standard**

**• Options 1 and 3 rejected unanimously by committee in favor of Option 2**

- (Charlie N.): Choice now between Option 2 (adopt ISO standard with modifications adopted by ISO through ANSI process) and Option 2A (adopt ISO standard as promulgated, then publish an annex of modifications)

(Jean): Determining what would not work in the US from the ISO standard would help determine if modifications are necessary, but a decision will need to be made early in the process between options 2 and 2A

- (Charlie N.): Next step – Advisory Committee “technical subcommittee” to review ISO standard and identify potential deviations; participants:
  - Project Team – BERC, INRS, ASABE, BTEC
  - Jim Dooley (Forest Concepts)
  - Chris Wiberg (Biomass Energy Lab)
  - Kaushlendra Singh (West Virginia University)
  - Mark Froling (Froling Energy)

**a. ISO; submissions of proposed revisions**

(Charlie N.): ISO 17225-1 and 17225-4 available over email; be mindful that they are subject to copyright restriction and cannot be reproduced or distributed!

**b. Initial outreach to stakeholders around revisions**

**V. Outreach**

**a. Update on current activities**

**b. Planned activities next 4-6 months**

(Charlie N.): People continue to ask to be included on stakeholder list through the website; abstract submitted to present update and invite discussion at IBCE in April; will also discuss at NEBHX and look for other opportunities to present

**VI. Other business/next meeting**

- (Scott N.): Why no woodchipper manufacturers represented?  
(Charlie N.): None volunteered during initial outreach; could be included with mindfulness to keeping advisory committee size manageable. Several manufacturers have been contacted and are on the list of stakeholders.  
(Adam): Inclusion of Cousineau represents connection to woodchip fuel producers
- **Next meeting: March 7, 2017 at 3:00 PM ET**

**Attachments**

- **Memorandum prepared by the core team** for the advisory committee's consideration and discussion. In it we make a recommendation on pathway forward to establish a U.S. standard: adoption of ISO standard with modification.
- **Memorandum from Jim Dooley, Forest Concepts** in which he makes case for pathway to developing new standard.
- **ISO 17225-1 and 17225-4**, provided by Scott Cedarquist of ASABE with reminder that these are copyrighted documents and not to be distributed or reproduced.
- **Summary of ISO standard and brief PowerPoint** from Finland's VTT Technical Research Centre.