

Grant Round Application for LRC LXXVII (77)-C

TECHNICAL ADVISOR'S SUMMARY and RECOMMENDATION

LRC-LXXVII (77) – C

“Validation of the Multielement Sorbent Trap (MEST) Method for Measurement of HCl and Metals”

Submitted by: EERC

Request for: \$245,000; Total Project Costs: \$860,000;

Principal Investigator: John Pavlish

Description of the Project:

The Energy & Environmental Research Center (EERC), through the Center for Air Toxic Metals® (CATM®), has developed a multielement sorbent trap (MEST) sampling method that can be utilized for trace metal and halogen sampling. As a potential alternative to EPA M29 and M26/26A, the EERC developed the MEST method with two separate sampling applications: one for metals (MEST-M) and one for halogens (MEST-H), in particular HCl.

The goals of the proposed project are as follows:

1. Validate a simple, low-cost MEST-H method for measurement of HCl by collecting specific data that can be used to support determination and acceptance of MEST-H as an alternative method to M26 (and M26a).
2. Address questions and provide data to EPA as necessary to gain acceptance of the MEST method for measurement of HCl as an alternative method to M26 (and M26a). The goal is to have EPA recognize the MEST-H method as an alternative method that can be used in place of M26 (and M26a).
3. Continue to develop, test, and evaluate the MEST-M method for measurement of metals. Recently, a new trap material was identified that has background metals concentrations that are an order of magnitude lower than previously tested materials.

Technical Advisor's Recommendation: Fund

Fund subject to the following:

- Matching Funding received from all the parties.
- Technical advisor participates in Advisory group

Conflict of Interest:

Basin Electric
Otter Tail Power
Minnesota Power (ALLETE)