Summary of Metals Subgroup Meeting held during the AOAC International Meeting, Dallas, Texas USA, September 22, 2008

Metals Subgroup Members Attending:

Lars Jorhem (National Food Administration, Sweden), Bill Mindak (Food and Drug Administration, USA), Steve Capar, Metals Subgroup Chair (Food and Drug Administration, USA), Damien Browne (PepsiCo, Ireland)

Others Attending:

David Anderson (Food and Drug Administration, USA), Nancy Thiex (South Dakota State University, USA; AOAC Agricultural Materials Community, Feed Additives & Contaminants Subgroup)

- Out of the 37 Metals Subgroup members, only 4 were present. The chair indicated insufficient number of members present to conduct business that requires voting.
- The Chair explained the need to nominate and vote for new chair and secretary and solicited nominations. None were put forward by the attendees.
- The Chair explained the potential need for voting members of the subgroup is when there is a need to move an item (for example, a method or procedure) from the subgroup to the community. The community would then vote on approving the item; potentially either a community procedure or a method recommended to the AOAC Official Methods Board (OMB) for collaborative study. However, until these voting procedures are explained by the community and the OMB the Subgroup should wait to select voting members.
- The Chair stated next years goals for the subgroup:
    - Develop Single Laboratory Validation (SLV) protocols related to metals (elemental analysis). These protocols are to be specific to the analytical procedures and instrumentation used most frequently for elemental analysis.
    - Choose the method most needed by the subgroup and initiate the process of selecting the best method and conducting an SLV.
- The Chair discussed that the methods needs of the subgroup are being sought. A "Method Interest" survey was sent to members on September 9, 2008 but only a few responses were received prior to the meeting. A method for arsenic speciation in food has been mentioned frequently as priority method need. The chair's and other laboratories are currently working on methods for arsenic speciation in food. Each laboratory may complete an SLV of their method. There were comments from the group that no regulatory limits for arsenic species in food have been established on which to base the required performance criteria of a method. However, subgroup may be able to utilize arsenic species risk assessments for specific foods, if available.
- Cory Murphy (Canadian Food Inspection Agency; not in attendance) has indicted to the chair an interested in helping the subgroup develop its SLV. The chair sent a number of SLV related documents to the subgroup on September 9, 2008. Cory may seek help from other subgroup members and all members will be able to comment and vote on the submitted document.
- The Chair mentioned other methods that are of interest to some members including (a) Hg, Pb, Cd and As by ICP-MS, (b) iodine, (c) shorter leach times for ceramicware analyses.

- Lars Jorhem said that the Nordic Committee on Food Analysis (NMKL) has ICP-MS methods for Hg and other elements. In addition, a laboratory in Germany has a method for iodine. Next on NMKL's agenda is a method for inorganic As in foods and Hg in fish products. NMKL coordinates the Nordic collaboration with the European Committee for Standardization (CEN) Technical Committee 275 (Food Analysis - Horizontal Methods) Working Group 10 (Trace Elements (Heavy Metals)) regarding food analysis. Methods are proposed by a given group to a working group who in turn submit it to a technical committee. The purpose is to generate useful methods for use in Europe. Lars agreed to send the chair information on the source of CEN methods pertaining to elemental analysis of food. On September 30, 2009, Lars sent the chair the following list of methods currently being investigated by the Working Group.

  EN 15111:2005 Foodstuffs - Determination of trace elements - Determination of iodine in dietetic foods by ICP-MS (inductively coupled plasma mass spectrometry)

  EN 15517:2008 Foodstuffs - Determination of trace elements - Determination of inorganic arsenic in seaweed by hydride generation atomic absorption spectrometry (HGAAS) after acid extraction

  prEN 15763:---- Foodstuffs - Determination of trace elements - Determination of arsenic, cadmium, mercury and lead in foodstuffs by inductively coupled plasma mass spectrometry (ICP-MS) after pressure digestion

  prEN 15764:---- Foodstuffs - Determination of trace elements - Determination of tin by flame and graphite furnace atomic absorption spectrometry (FAAS and GFAAS) after pressure digestion

  prEN 15765:---- Foodstuffs - Determination of trace elements - Determination of tin by inductively coupled plasma mass spectrometry (ICP-MS) after pressure digestion

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[Many thanks to Dave Anderson for taking notes]

Prepared June 14, 2009:SGC