**HASQARD Focus Group**
Meeting Minutes
April 17, 2012

The meeting was called to order by Huei Meznarich, HASQARD Focus Group Chair at 2:06 PM on April 17, 2012 in Conference Room 308 at 2420 Stevens.

Those attending were: Huei Meznarich (Chair), Cliff Watkins (Secretary), Lynn Albin, Taffy Almeida, Jeff Cheadle, Glen Clark, Scot Fitzgerald, Kris Kuhl-Klinger, Joan Kessner, Larry Markel, Noe'l Smith-Jackson, Cindy Taylor, Amanda Tuttle, Rich Weiss and Eric Wyse.

I. Huei Meznarich requested comments on the minutes from the March 20, 2012 meeting. No HASQARD Focus Group members present stated any comments on the March meeting minutes and, after hearing no objections, the minutes were approved.

II. The Status of the preparations of Revision 4 for Volumes 1, 2 and 3 were discussed.

a. Larry Markel reported that the QA Group has completed revising HASARD Volume 1 to address the QSAS deviations from HASQARD. The QA Group has provided the revised copy using track changes to the HASQARD Focus Group Secretary. The Focus Group agreed with the suggestion that the Secretary distribute the red-lined version of HASQARD Volume 1 to the Focus Group for review prior to discussing it page by page at the next HASQARD Focus Group meeting.

b. The Status of the review for Volume 2 was discussed. Chris Sutton was not present but it was reported that he continues to address the comments received. Volume 2 will be re-distributed for another round of review and comment upon completion of Chris' resolution of the comments.

III. HASQARD Volume 4, Revision 4 Proposals

Continuing with the process begun at the November 2011 Focus Group meeting, the Secretary projected the Word file containing the combined set of proposed revisions to Volume 4 of HASQARD as provided by the organic analysis, inorganic analysis, radiochemistry and quality assurance (QA) subcommittees on a screen for all to view. The Secretary used the software to revise as necessary as the Focus Group started discussing proposed revisions from the point they left off at the February meeting, the beginning of Section 6.1.5.

Prior to discussing Section 6.1.5, The Secretary returned to some unresolved comments made at the March 20 meeting. The first comment involved language in Section 5.3. The last paragraph in Section 5.3 contains a sentence about measured radioactivity being reported along with its total propagated uncertainty but without comparison to the estimates *a priori* MDC. The Focus Group members present at the March meeting could not determine what that meant during the meeting and deferred discussion on this to a later date. At the April meeting, Rich Weiss agreed that the language could be improved and took the **ACTION ITEM** to provide revised language on this concept.

At the March meeting, the Focus Group members present discussed the definition of high purity water given in HASQARD Section 6.1.1. The current wording in HASQARD is:

"High-purity water is generally defined as water that has been distilled or deionized, or both, so that it will have a conductivity less than 1.0 μmho/cm (greater than 1.0 megaohm-cm resistivity)."

The discussion in March centered on the fact that water with a resistivity of only slightly greater than 1.0 megaohm-cm is not very pure. In the water purification systems, the resistivity is measured at a level much higher than this internally by the system. However, upon dispensing, the resistivity increases due to chemical reactions with the atmosphere and container into which the water is dispensed. Therefore, the definition is usually specified as greater than 1.0 megaohm-cm resistivity to allow for resistivity measurements to be made after the water is dispensed for use. The group decided to table this discussion until the next meeting to allow research into a possible better definition for high purity water to occur between meetings. At the April meeting, Huei Meznarich said she had not had time to complete the research into a possible better definition for high purity water and took the **ACTION ITEM** to propose a definition at a future meeting.

In discussing Table 6-1, the Focus Group discussed the acceptance criteria for analyte concentrations measured in method blanks which are currently listed as: "<MDC, <5% sample isotope concentration, or <5% decision level." Huei Meznarich took an **ACTION ITEM** to check MARLAP for acceptance criteria listed in that document and provide an alternative set of criteria for this QC element. In this discussion, it was also agreed that the use of the terms MDA and MDC should be carefully reviewed in the document to ensure the correct term is being used in each occurrence.

In discussing Sections 6.2.6 “Tracer” and 6.2.7, “Carrier” it was agreed that a better definition of these two terms is needed. Rich Weiss took the **ACTION ITEM** to provide definitions of these terms.

In discussing Table 6-2, the Focus Group agreed that consistent language in the Corrective Action column of the table would be beneficial. Therefore, the corrective actions were changed in the table to be consistent with the Radiochemistry table and say, “Evaluate. If lab error, re-prepare and analyze. Evaluate against DQRs, notify client if still unacceptable, discuss in narrative.”

Also in discussing Table 6-2, the criteria column associated with Duplicate analyses was discussed. The criteria column currently reads: “≤ 20% RPD when result > EQL (10 times IDL, or 100 times the IDL for ICP/MS) for liquids and < 35% RPD when result is > EQL (10 times IDL, or 100 times the IDL for ICP/MS) for solid samples.” The Focus Group was unsure if the parenthetical statement was correct.

Also of concern was whether the ≤ 35% RPD when result is > EQL for solid samples was a correct figure.

In discussing the ICP/MS portion of Table 6-3, the criteria column associated with Internal Standards was discussed. The Focus Group wanted to check the acceptance criteria of 30% to 120% recovery to ensure it was consistent with current test methods. **EDITORS NOTE:** After the meeting, Eric Wyse consulted SW-846 and provided the following input: “For the ICP-MS internal standard, the acceptable response limit is provided in section 9.6 of 6020A (link below). It’s odd to me that there’s no upper limit provided … maybe there is and I haven’t found it. There really should be an upper limit – the old one was 120%, and I think that’s reasonable. Not sure whether we want to address that in HASQARD or not. Certainly if the internal standard turns out to suddenly shoot up and triple in response, for example, there’s something wrong.
http://www.epa.gov/epawaste/hazard/testmethods/sw846/pdfs/6020a.pdf”
The statement in Section 9.6 of SW-846 method 6020A is: “If the intensity of any internal standard in a sample falls below 70% of the intensity of that internal standard in the initial calibration standard, a significant matrix effect must be suspected. As an example, if the initial calibration internal standard response is 100,000 cps, anything below 70,000 cps in the sample would be unacceptable. Under these conditions, the established lower limit of quantitation has degraded and the correction ability of the internal standardization technique becomes questionable. The following procedure is followed -- First, make sure the instrument has not drifted by observing the internal standard intensities in the nearest clean matrix (calibration blank, Sec. 7.6.1). If the low internal standard intensities are also seen in the nearest

calibration blank, terminate the analysis, correct the problem, recalibrate, verify the new calibration, and reanalyze the affected samples. If drift has not occurred, matrix effects need to be removed by dilution of the affected sample. The sample must be diluted fivefold (1+4) and reanalyzed with the addition of appropriate amounts of internal standards. If the first dilution does not eliminate the problem, this procedure must be repeated until the internal-standard intensities rise to the minimum 70% limit. Reported results must be corrected for all dilutions."

In discussing the Ion Chromatography portion of Table 6-3, the criteria column associated with Low-Level Standards was discussed. The Focus Group wanted to check the acceptance criteria of 75% to 125% recovery to ensure it was consistent with current test methods. **EDITORS NOTE:** After the meeting, Eric Wyse consulted SW-846 and provided the following input: "The IC low level standard limits (referred to in the method as the 'lower limit of quantitation') are provided in section 10.3 of 9056. It says that it must be 'within 50% of the true values' – which I guess means 50-150%. http://www.epa.gov/epawaste/hazard/testmethods/sw846/pdfs/9056a.pdf" The Secretary will revise Table 6-3 accordingly.

In discussing Section 7.5, "Detection Limit Considerations" and Section 7.5.1, "Inorganic and Organic Methods" the Focus Group recalled that the matter of detection limits had been discussed at a Focus Group meeting several months ago with no final resolution on if and/or how to revise the this section. Therefore, the discussion was tabled for a sub-group discussion to occur to return a recommendation on the language for this section. Huei Meznarich accepted the **ACTION ITEM** to convene a sub-group on this topic. The Secretary was given the **ACTION ITEM** to redistribute Eric Wyse's write-up on detection limits in support of this discussion.

In discussing Section 7.7, "Control Charts," the Focus Group decided to eliminate a parenthetical statement providing examples of characteristics that could be charted. A comment in the working version of the document indicating that the current language in the electronic version of the document is from a General QA work group previously approved update was discussed. This comment made reference to Section 4.1.5.1 DOE-1 in the QSAS. Kris Kuhl-Klinger took and **ACTION ITEM** to remind the Focus Group what that reference meant. Also while discussing this section, the reference to Washington State Department of Ecology (Ecology) 02-03-055, Procedural Manual for the Environmental Laboratory Accreditation Program was discussed. It was not known if this reference is still current. No action was assigned to anyone to check this.

The Focus Group recognized that the current effort to revise HASQARD has been focused on the DOECAP and QSAS-driven requirements and their

impact on HASQARD. As such, Section 8 of Volume 4 has not been reviewed by any of the working groups. Therefore, all Focus Group members should look at this section when the final reviews are occurring.

After discussing Section 8.0, the Secretary noted that the review of Volume 4 is concluded. The Secretary proposed that the revisions noted to date will be incorporated in an "accept all changes" version of the document and distributed with the "changes tracked" version of the Volume 4 to aid in final review of this revision of the document. Along with that distribution will be a list of outstanding issues (e.g., detection limit language needs to be finalized). The Chair requested that the Secretary distribute the electronic, "changes tracked" version of Volume 1 to the Focus Group in preparation for next month's meeting. Hearing no objections, the Chair adjourned the meeting at 3:52 PM.

The next meeting is scheduled for May 15, 2012 at 2:00 PM in 2420 Stevens, Room 308.