HASQARD Focus Group
Meeting Minutes
March 20, 2012

The meeting was called to order by Huei Meznarich, HASQARD Focus Group Chair at 2:05 PM on March 20, 2012 in Conference Room 308 at 2420 Stevens.

Those attending were: Huei Meznarich (Chair), Cliff Watkins (Secretary), Jeff Cheadle, Glen Clark, Scot Fitzgerald, Larry Markel, Noe'l Smith-Jackson, Chris Sutton, Amanda Tuttle, Sam Vega, Rick Warriner and Eric Wyse.

I. Huei Meznarich requested comments on the minutes from the February 21, 2012 meeting. No HASQARD Focus Group members present stated any comments on the February 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 two or three more minor edits to resolve in a red-line of version of Volume 1 that addresses the QSAS deviations from HASQARD. These red-lines are mostly in the procedures section to add language to make it clear under what circumstances a procedure or method may be changed. Larry anticipates completion of the red-line version in two weeks.

b. The Status of the review for Volume 2 was discussed. Chris Sutton continues to address the comments received. Chris stated that many comments are formatting and wording comments. The difficult comments to address are some of those received from WCH where they are in stark disagreement with WRPS sampling personnel's desire to address deviations allowed for highly radioactive samples. The WCH comments indicate a preference to have no language associated with samples of elevated radioactivity. This issue will require compromise and resolution. Chris hopes to have these issues resolved prior to the next HASQARD Focus Group meeting.

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 5.2.3.

Prior to discussing Section 5.2.3, Huei Meznarich reported on the action item she had from the February meeting to investigate the ASTM Standard E-29, *Standard Practice for Using Significant Digits in Test Data to Determine Conformance with Specifications.* This standard is referenced in Sections 5.2.1 and 5.2.2 of HASQARD Volume 4. In the ASTM Standard, the document specifically stated it is a guidance document and should not be referenced as a requirement. Rather, the document provides only recommendations on how to address significant figures. The Focus Group discussed the fact that the existing language in Sections 5.2.1 and 5.2.2 stated no requirement and if none is stated the value of retaining or deleting the Sections. The end result of the discussion was to retain the Section 5.2.1 and add some requirements language to read:

"The number of significant figures reported is a function of the limits of the particular analysis method. Basic rules for significant figures and for calculating values and retaining the number of significant figures shall be based upon an authoritative source or accepted standard such as the American Society for Testing and Materials (ASTM) E-29, *Standard Practice for Using Significant Digits in Test Data to Determine Conformance with Specifications*.

Reported values should contain only the appropriate number of significant figures. Recognizing that vendor-supplied software may not meet the general rules for significant figures, the laboratory should work with the client to determine the best way to report results, based on the project needs."

Section 5.2.2 was revised to read:

"When a figure is to be rounded to fewer digits than the total number available, the rounding-off procedure shall be based upon an authoritative source or accepted standard such as that described in ASTM E-29. A brief description of the ASTM E-29 procedure follows:

- When the first digit discarded is less than 5, the last digit retained should not be changed.
- When the first digit discarded is greater than 5, the last figure retained should be increased by 1.
- When the first digit discarded is exactly 5, followed only by zeros, the last digit retained should be rounded upward if it is an odd number, but no adjustment made if it is an even number."

Returning to Section 5.2.3, the HASQARD Focus Group discussed the list of requirements specified for data review. Eric Wyse mentioned that he is working on a revision to the ATL QAP at this time and wanted to know if this list was comprehensive (i.e., does this Section encompass all the laboratory is required to do for data review?). After reviewing the contents of the section, and noting the references to Volume 1 and Section 8.0 in this Section, the Focus Group agreed it is an acceptably extensive set of requirements. The Focus Group members present decided there was a need to clarify the language associated with client-specific expectations in the last bullet of the Section and that bullet was revised to read:

"For counting-based radioanalytical analysis, negative results below -3 sigma (combined standard uncertainty) are evaluated. If the cause is random, the problem is addressed in the case narrative. If the cause is systematic, the problem is corrected and the affected sample(s) shall be re-prepared and/or rerun if sufficient sample material remains, unless client-specific requirements/specifications dictate otherwise. The client shall be notified prior to such actions when additional costs will be incurred. When client requirements/specifications cannot be met, the client shall be notified; results shall either be accepted or new work scope agreed on."

The Focus Group members present decided that references to IDLs in Section 5.3 weren't universally applicable and decided to change the paragraph that referenced them as shown:

"Inorganic or organic results shall be reported as numeric values with appropriate data qualifiers if above the ~~IDL~~ applicable detection limit (see Section 7.5.1 for details). If the value is less than the applicable detection limit ~~IDL~~, it can be reported as undetectable."

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 could not determine what that meant during the meeting and deferred discussion on this to a later date. **EDITOR'S NOTE**: In looking at this now after the meeting, I believe this means that radioanalytical results shall not be reported as "less than" values (e.g., <10 pCi/L). The action remains open to bring this to closure at a future Focus Group meeting.

The Focus Group members present discussed the language in Section 5.3.2 concerning an immediate reporting capability. The current wording implies that an immediate reporting system needs to be present for all clients at all times. This may not always be the case. Therefore, the language was revised to read:

"When applicable to a client's needs, an immediate data reporting system shall be established between the laboratory and the client to address an emergency situation. The type of information, level of approval, data reporting format, and means of delivery shall be discussed and agreed upon between the laboratory and the client. The emergency situation may include but is not limited to screening activities for safety issues, critical analytes, or limiting sample amount."

The Focus Group members present discussed the definition of high purity water given in HASQARD. 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 centered around 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.

The Focus Group members present discussed the requirements specified in Section 6.1.4, "Reagents." After discussion, it was agreed that the existing language and proposed new language for this section were trying to incorporate thoughts on two concepts that needed to be discussed separately. Those concepts are 1) the acceptance testing of reagents prior to use, and 2) the monitoring of reagents as they are used to ensure they continue to meet acceptability criteria. After, agreeing that the two concepts needed to be addressed separately, the Section was revised to read:

"Each laboratory is responsible for ensuring that reagents used for data collection activities are of sufficient quality for the operation performed. The acceptability of quality affecting reagents shall be assured by checking reagent lots prior to use (e.g., checking clean-up reagents such as Florisil to ensure adequate recovery of analytes and adequate exclusion of interferences) or ordering reagents with documented certification of purity. Reagent quality is regularly monitored via preparative and analytical QC performance. Supporting documentation regarding preapproval of the reagents used shall be

filed in a manner that is easily retrievable. Purchased stock mixtures and reagents shall be labeled to indicate the date on which the mixtures/reagents were opened and the expiration date. The laboratory will either verify the concentration of titrants used in accordance with written laboratory procedures or purchase titrants with certificates of analysis."

After discussing Section 6.1.4, the Secretary noted the time for closure of the meeting was at hand. Therefore, the Chair stated that rather than start into Section 6.1.5 the meeting should be adjourned.

Hearing no additional new business, and no objections to the proposal to adjourn, the meeting was adjourned at 4:28 PM. The next meeting is scheduled for April 17, 2012 at 2:00 PM in 2420 Stevens, Room 308.