HASQARD Focus Group
Meeting Minutes
January 31, 2017

The meeting was called to order by Jonathan Sanwald, HASQARD Focus Group Chair at 2:04 PM on January 31, 2017 in Conference Room 308 at 2420 Stevens.

Those attending were: Jonathan Sanwald (Mission Support Alliance (MSA)), Focus Group Chair), Cliff Watkins (Corporate Allocation Services, DOE-RL Support Contractor, Focus Group Secretary), Lynn Albin (Washington State Department of Health), Taffy Almeida (Battelle - Pacific Northwest National Laboratory (PNNL)), Marcus Aranda (Wastren Advantage Inc. Wastren Hanford Laboratory (WHL)), Mike Barnes (Washington State Department of Ecology (Ecology)), Jeff Bramson (CH2M HILL Plateau Remediation Company (CHPRC)), Steve Chalk (U.S. Department of Energy – Richland Operations Office (DOE-RL)), Jeff Cheadle (U.S. Department of Energy – Office of River Protection (DOE-ORP)), Glen Clark (Washington River Protection Solutions (WRPS)), Dan Coughlin (WRPS), Jim Douglas (CHPRC), Sue Kon (WHL), Anthony Nagel (CHPRC), Sarah Nagel (CHPRC), Matt Perrott (MSA), Karl Pool (PNNL), Noe'l Smith-Jackson (Ecology), Chris Sutton (CHPRC), Wendy Thompson (MSA) and Jerry Yokel (Ecology).

I. Jonathan Sanwald requested review and approval of the meeting minutes from the last meeting of the HASQARD Focus Group held on October 18, 2016. Glen Clark commented that the fact that he accepted an action to conduct a gap analysis between the DOECAP QSM (Rev. 5.1) and Rev. 3 of HASQARD was not contained in the minutes from that meeting. The Secretary agreed to work with Glen to make this revision. Hearing no additional comments on the draft meeting minutes, the minutes were approved pending Glen Clark's approval of the aforementioned revision.

II. Because there were some new HASQARD Focus Group meeting attendees in the room, Jonathan Sanwald requested all attendees to introduce themselves and state their affiliation with the group.

III. The status of action items from previous meetings were discussed:

Jonathan Sanwald stated he has worked with Rich Weiss to complete a final draft audit checklist for Volumes 1 and 4 of HASQARD Rev. 4. Glen Clark has done the same for Volumes 1 and 4 of HASQARD Rev. 3.

Wendy Thompson said she has completed a draft checklist for HASQARD Rev. 4, Volume 2. Wendy shared this checklist with Jonathan who forwarded it to Jeff Bramson.

There is still a need to develop a checklist for HASQARD Rev. 4, Volume 3.

Wendy Thompson believes she has a HASQARD Rev. 2, Volume 3 checklist but does not think she knows of one for Rev. 3, Volume 3. Wendy Thompson agreed to work on a checklist for HASQARD Rev. 4, Volume 3. Jeff Bramson asked Chris Sutton if he had a HASQARD Rev. 3, Volume 3 checklist. Chris stated that he thought Steve Smith had someone do that checklist, but he is not sure where it is now.

The group discussed the needs for additional checklists. Because WRPS is still working to HASQARD Rev. 3, Glen Clark asked if anyone had a HASQARD Rev. 3, Volume 2 checklist. Nobody present at the meeting knew of a checklist for HASQARD Rev. 3, Volume 2. Jonathan Sanwald agreed to work on a Volume 2, Rev. 3 checklist. Wendy Thompson said she has an old Volume 2 checklist that may not identify the revision of HASQARD to which it is applicable and said she would send it to Jonathan to help with this task.

Wendy Thompson stated that when assessing sampling, one needs to use both a HASQARD Volume 1 and Volume 2 checklist since Volume 1 is general QA requirements that apply to sampling and analysis. Wendy noted that HASQARD Rev. 4, Volume 2 had many "should" statements that she has included in the checklist for potential evaluation during an assessment as "shall" statements (i.e., as requirements). Chris Sutton stated that there are fewer should statements in Volume 2, Rev. 4 than in Rev. 3. Chris added that when CHPRC audits sampling, the audit includes the CHPRC Environmental QAP requirements and HASQARD requirements.

Wendy Thompson suggested that if we can come up with a set of audit checklists that the HASQARD Focus Group can approve as complete and acceptable, that they be placed on the HASQARD web site for easy dissemination and better configuration management in the future. The Secretary agreed to post completed and approved checklists to the HASQARD web site once they are submitted to him.

a. Six days prior to this meeting, the HASQARD Secretary received a note from Noe'l Smith-Jackson requesting addition of an agenda item. The request was to add a discussion with the State Department of Ecology representatives regarding their concerns with the proposal to eliminate HASQARD from being applicable to commercial analytical laboratories.

   The Secretary revised the agenda accordingly and, because there were several people in attendance that were not at the October 2016 meeting, the Secretary provided explanation of why the HASQARD Focus Group had determined eliminating commercial laboratories from the scope of HASQARD in favor of specifying compliance with the DOECAP QSM was an acceptable solution to multiple issues.

   Jerry Yokel stated that the State views data that are generated to meet

regulatory requirements as regulatory data whether they come from an on-site laboratory or a commercial laboratory. The State has always relied on the fact that HASQARD was the consistent specification of minimum QA requirements for all analytical measurements made for regulatory decisions. Jerry added that on occasion the State's oversight program has been audited by EPA Region 10 and the State has always been able to use HASQARD to show how laboratory QA expectations are consistent at Hanford regardless of the Contractor generating the data. To eliminate HASQARD applicability to commercial laboratories would add concern where there was none before.

Noe'l Smith-Jackson added that the State's presence on the HASQARD Focus Group in an advisory capacity, allows them to have input to the HASQARD maintenance/development effort. The State has no input to the maintenance/development of the DOECAP QSM. The Sampling and Analysis Plans (SAPs), Field Sampling Plans and other documents specifying measurements required for decision making that are approved by Ecology all reference the HASQARD. This provides Ecology assurance that the quality requirements are understood and consistent across the Hanford Site.

Mike Barnes stated that the HASQARD was developed because the stakeholders were asking Ecology, "How do you trust the data being generated by DOE?" Ecology likes having HASQARD to address these concerns when discussing analysis results with the stakeholders. Mike stated that Ecology is often surprised at how vocal the stakeholders are about assuring quality of the analytical results.

Lynn Albin added that the Washington State Department of Health is not a regulatory group. Her view of HASQARD is that it was developed for Hanford to address the specific nature of the Hanford samples. At the time the HASQARD was developed, there was a need to ensure the quality assurance requirements associated with data generated by analyzing samples with potentially both a hazardous and radioactive component to them were understood by the laboratories.

Noe'l Smith-Jackson added that with the closure of the WSCF laboratory, there must be more commercial laboratory use than in the past. Therefore, eliminating HASQARD as being applicable to commercial laboratories would involve more samples than in the past. This assumption was confirmed by the Focus Group members in attendance. Noe'l asked how many commercial laboratories are currently under contract. Chris Sutton said that his organization has contracts with seven laboratories, four of which are part of the Test America, Inc. Jonathan Sanwald stated that there are approximately twelve commercial laboratories listed on the Hanford Evaluated Supplier List (ESL).

Because the HASQARD Focus Group Secretary was aware of the State's concerns prior to this meeting of the HASQARD Focus Group, he had an opportunity to prepare a proposed revision to Section 1.0 of HASQARD Volume 1. This revision was displayed for the Focus Group to review for the first time (i.e., the proposed revision was not completed in time to allow distribution to the entire Focus Group prior to the meeting). The intent of the revision was to retain HASQARD as being applicable to commercial laboratories while acknowledging the role of DOECAP in the commercial laboratory evaluation process.

After initially reviewing the proposed revision to Section 1.0 of Volume 1 of HASQARD, the Focus Group members in attendance began to discuss the proposal.

One of the elements of the proposed revision to Section 1.0 of HASQARD Volume 1 was a statement designating responsibilities to the requester of analytical services. Specifically, that the requester must be familiar with the differences between the DOECAP QSM and HASQARD and, if a difference exists that is significant relative to the services being requested, the HASQARD requirements not specifically addressed by the DOECAP QSM are to be included in the SOW to the laboratory.

Someone inquired as to how much difference there is between the DOECAP QSM and HASQARD. Jonathan stated that the gap analysis he and Rich Weiss performed between the DOECAP QSM and HASQARD Rev. 4 indicates an almost 25% gap between the two documents. Glen Clark has completed a similar gap analysis between the DOECAP QSM and HASQARD Rev. 3 and found much less gap than that. Glen stated that this is because while a specific criterion may not be stated exactly the same way in both documents, he "gave credit" for statements that met the intent and determined no gap existed in those instances. Glen said that if you were to take each passage as requiring an exactly equivalent statement, there would be more gaps. Jonathan Sanwald said he believes Rich Weiss probably gave less credit for statements that met the intent. Glen Clark stated that the exercise he went through to determine the gaps between HASQARD Rev. 3 and the DOECAP QSM Rev. 5.0 was very extensive and he feels he is intimately familiar with the differences as a result. After completing the review, Glen sent a note to the DOECAP leads requesting that they incorporate eight specific items in the DOECAP QSM to get it closer to equivalent with HASQARD. Glen also found that some of the differences between the DOECAP QSM and HASQARD Rev. 3 were because the DOECAP QSM is based on USEPA SW-846 and, while much of HASQARD is also based on SW-846, HASQARD is not up to date with the latest revisions to SW-846.

Because the proposed revision to Section 1.0 of Volume 1 would require the requester of laboratory services to specify additional HASQARD requirements to the laboratory in the SOW, Mike Barnes asked if the authors of sampling plans would be able to share the SOW with the State prior to the State signing the SAP. Chis Sutton stated that he did not think his company's Procurement organization would allow a SOW to be shared with the regulators. Wendy Thompson said that sometimes SAPs are approved a year or more before samples are collected. Therefore, no SOW exists at the time Ecology approves the SAP. The Secretary asked how it is that the State is assured that the proper QA is being applied at the laboratories today. Noe'l Smith-Jackson stated that this is done by assuring the HASQARD is called out in the SAP.

Jeff Bramson agreed saying that while a specific laboratory is not called out by name in a SAP, it is stated that the laboratory shall apply HASQARD QA requirements. Jeff added that CHPRC can only use laboratories that are on the Hanford ESL. The MSA Acquisition Verification Services (AVS) organization maintains the ESL for all Hanford contractors that use commercial environmental analytical laboratories. By direction of DOE, MSA has been using the DOECAP as the basis for evaluation and inclusion of laboratories on the Hanford ESL. There is an inference that a DOECAP audit assures that a laboratory can perform to HASQARD but there is no assurance or widely available knowledge of where a gap between the two exists.

Glen Clark stated that at WRPS both DOECAP and HASQARD are called out in the laboratory SOWs. The approach taken by WRPS to evaluate laboratories has been to look at the results of the DOECAP audits. Where known gaps between DOECAP and HASQARD exist, they contact the laboratory and request additional information to address these areas.

The Secretary asked about how does the State assures that the other details in HASQARD are being satisfied when they approve a SAP that references HASQARD and then see data packages that have the applicable method quality control performed. Noe'l Smith-Jackson stated that this is a matter a trust between Ecology and DOE. That is, Ecology trusts that DOE and its contractors assess the laboratories to know the requirements will be met.

Glen Clark stated that if the Focus Group agreed that HASQARD and the DOECAP QSM were equivalent, the use of DOECAP audits to evaluate laboratories would not be an issue. To do this, Glen emphasized that the effort should focus on the intent of a HASQARD requirement rather than the exact language.

Chris Sutton stated that one benefit that the QSM has is that it is based on

two nationally recognized QA standards (ISO/IEC 17025:2005 and The National Environmental Laboratory Accreditation Coalition (NELAC) Institute (TNI) standards, Volume 1).

In reviewing the proposed language for revising HASQARD Volume 1, Section 1.0, the draft suggested that if the data user determined that a difference between the DOECAP QSM and HASQARD were significant, they would need to ensure that laboratory adhere to the HASQARD requirements through a requirement in the laboratories SOW. Several Focus Group members voiced concerns about use of the word "significant" in this sentence because what is significant to one person may not be significant to another.

The Secretary stated that this was deliberate because some QA requirements that are different between the two programs may not be necessary depending on data use (e.g., spike recovery requirements for water, soil or waste samples if the data user is collecting air samples).

The representatives from Ecology stated that the standards need to be in place with no use of the term "significant" to ensure they know what the quality of the data is in all cases. Chis Sutton added that in most cases that means following EPA method requirements. A review of SW-846 to HASQARD indicates very few differences. It is how we implement SW-846 requirements that make the most difference. Glen Clark added that in some cases HASQARD requirements are more than would be required by following SW-846 alone.

Noe'l Smith-Jackson asked how often HASQARD audits of commercial laboratories are conducted.

Glen stated that WRPS audits commercial laboratories at least once every three years using checklists listing HASQARD requirements not found in the DOECAP QSM.. Where an important gap exists between HASQARD and DOECAP, they request information from the laboratory and complete the HASQARD audit. Taffy Almeida added that there have been instances where she stayed at a DOECAP audit to complete a HASQARD "gap" audit on a separate day.

Noe'l inquired about how much effort it would take to do the HASQARD "gap" audits. That is, how many laboratories and how many man-hours if an extra day was spent once every three years after a DOECAP audit.

The Focus Group members agreed that one skilled auditor could spend one extra day at each laboratory to audit all disciplines (organic, inorganic, radiochemistry and QA). Therefore, it would take 12 man-days spread across a 3 year period to do business this way.

To achieve the desired result of a DOECAP audit being deemed "equivalent" to a HASQARD audit, the Focus Group would have to keep HASQARD equivalent to DOECAP. It was stated that the speed at which we can revise HASQARD in response to DOECAP QSM revisions would not allow the two to be consistent (i.e., HASQARD would never be "caught up"). Steve Chalk asked if we could do something similar to the way DOE does with Contractors. That is, NQA-1 is revised every four years, but DOE uses references to DOE Order 414 and contract language to "lock down" a revision. Karl Pool said this would not be possible because Hanford does not have the authority to "lock down" a revision of the QSM that a laboratory uses. That is, both the laboratory and the DOECAP auditors need to keep up with what they are being audited or auditing to, which will be the most currently approved version of the DOECAP QSM.

One of the Focus Group members asked if the gaps were well known between the two. Glen Clark stated that the effort that he and others performed to do the gap analysis between HASQARD Rev. 3 (the revision in use at WRPS) and the DOECAP QSM took more than a month using both work and personal time. Based on the gaps identified, a note was sent to the DOECAP QSM authors requesting incorporation of some HASQARD requirements. In the past, the DOECAP QSM authors have incorporated HASQARD requirements identified to them.

Jonathan Sanwald stated that the most extreme approach would be to just step away from DOECAP and do HASQARD audits only. The Focus Group then discussed the ramifications of this (IG audits of the past, direction from DOE-HQ and DOE-RL to participate in DOECAP or only use DOECAP for laboratories, etc.).

Sue Kon stated that it would be beneficial to strengthen the details of the gap analysis so that these gaps were easily visible to all.

Chis Sutton stated that the proposed language for HASQARD Volume 1, Section 1.0 was a good start. He recommended that the Secretary revise it again based on input received at this meeting and send it out to the Focus Group for review and discussion at the next Focus Group meeting.

Other differences between the DOECAP QSM and HASQARD were discussed. Glen Clark added that, for example, the QSM uses a lot of equations from the Multi-Agency Radiation Laboratory Analytical Protocols (MARLAP) manual. The MARLAP is a manual that was produced by DOE, DOD, EPA, Department of Commerce (DOC), Department of Interior (DOI) and the Nuclear Regulatory Commission (NRC). Glen suggested that future revisions of the HASQARD contain

using these equations because the MARLAP is more up to date, widely recognized/accepted and a known standard for radiochemistry.

Chris Sutton and Glen Clark agreed that there are very few differences between HASQARD and the DOECAP QSM that would impact an audit. We should focus on the language of how HASQARD and DOECAP interface for use in the HASQARD such that the Focus Group can continue to manage sampling and analysis QA unique to the Hanford Site.

Noe'l Smith-Jackson asked how the interface between DOECAP and HASQARD has been communicated to the laboratories being contracted.

The only way HASQARD is expressed as a requirement to a commercial laboratory is through the laboratory SOW. Glen Clark and Wendy Thompson stated that HASQARD is referenced in the SOWs used by their projects/companies. Chris Sutton stated that when the CHPRC Soil and Groundwater project placed their most recent contracts, the MSA AVS review of the contract SOW resulted in them being required to remove references to HASQARD before using the SOW. The references to HASQARD in the CHPRC SOW were removed because the MSA QA Manager would not allow the solicitation to continue with HASQARD referenced when he would not be able to evaluate the laboratory to HASQARD. This is because MSA has received direct communication from DOE-RL stating that DOECAP is to be used as a basis for evaluation of commercial laboratories. By adding HASQARD to SOWs, two QA standards would be invoked with no consistency in the evaluation of the laboratory's conformance to HASQARD. Wendy Thompson stated that the fact that HASQARD is being invoked in different ways by different Contractors was a problem. Sarah Nagle stated that when significant gaps between HASQARD and the DOECAP QSM are known, CHPRC includes the HASQARD requirements in the SOW without calling out HASQARD by reference. Noe'l Smith-Jackson stated that it was her understanding that HASQARD was to be a stand-alone requirements document and was not to be used in conjunction with other requirements. No Focus Group member present disagreed with this view.

Chris Sutton stated the need to specify a significant amount of details on QA program implementation is less important now than in the 1990s. This is because in the last 20 years, laboratories have become astute to the EPA QA requirements and have implemented laboratory-specific QA programs that meet those requirements.

Mike Barnes stated that he does not agree that the quality of analytical services provided by commercial laboratories is that much better than it was in the 1990s. He believes that methods to resolve poor quality issues (e.g., results from areas where concentrations are well characterized and

reported as much higher or lower than the "known" trend for the expected result) exist but that these poor results are still encountered. To this point, Lynn Albin added that no laboratory audit would be able to catch a situation that would lead to a spurious erroneous result being reported for an individual project. Noe'l Smith-Jackson agreed and added that common issues such as laboratory contamination can lead to erroneous results and these issues are controlled by a sound QA program.

Glen Clark stated that in general, he believes that laboratories have begun producing more consistently high quality data since the advent of DOECAP. Sarah Nagle added that DOECAP also seeks to continually improve the program. For examples, they have begun seeking examples of data quality issues that data users have encountered at specific laboratories. This will allow them to determine if there is a trend at a specific laboratory that can be assessed in future audits. Glen Clark added that Steve Clark has replaced George Detsis as the Program Manager for the DOE Analytical Services Program (ASP). The DOE ASP is the sponsoring DOE-HQ organization for DOECAP. Steve Clark has a goal of incorporating data quality issues seen at laboratories into the scope of preparing for DOECAP audits. Thus, a pre-audit conference call will be held between the audit team members to discuss known concerns for evaluation at upcoming audits. Wendy Thompson stated that at a recent conference she attended, George Detsis presented the status of DOECAP. In this presentation, George said that there would be three "phases" of audit. Phase 1 audits are the full on-site audits occurring today. Phase 2 audits will be done by the laboratory as an internal assessment. The results will be provided to DOECAP personnel. The results of Phase 2 audits will provide information on areas within a laboratory that will be more intensely scrutinized during the next Phase 1 DOECAP audit occurring at that facility. A Phase 3 audit would be done by DOECAP auditors as a desk evaluation (i.e., no on-site visit). Sarah Nagle said that in a recent DOECAP conference call, Steve Clark has taken the Phase 3 audit concept "off the table." Glen Clark added that he has learned a great deal by being part of the DOECAP audit teams. Jonathan Sanwald stated that he thinks Steve Clark should be made aware of the issues we are discussing in trying to work to a historically significant, site-specific set of sampling and analytical QA requirements and the need/requirement to participate in DOECAP.

Jonathan Sanwald acknowledged the lateness of the hour and the fact that the Secretary needed to get a new draft of proposed language for HASQARD Volume 1, Section 1.0 for the Focus Group to evaluate before the next meeting. Additional discussion on revising Volume 1, Section 1.0 would be premature without a new proposal to discuss. Jonathan asked if there was any new business to discuss. Hearing no new business, the Focus Group Chair adjourned the meeting at 3:55 PM.

The next meeting of the HASQARD Focus Group will be February 28, 2017 in Conference Room 308 at 2420 Stevens.