

DRBC Specifications Evaluation Worksheet REV 08/08/2016

Title	Purpose	Relevance to SRRTTF QAPP	Comments and Review Actions
<p>Listing of Laboratories Known to Perform Low Level PCB Congener Analyses</p>	<p>Identifies acceptable laboratories</p>	<p>Axys is identified laboratory. QAPP Table 1 p 2</p> <p>Permittees use other laboratories.</p>	<p><i>Use Ecology's accredited list</i> <i>Address lab contamination in the lab specs</i> <i>Recognize that there are limitations to the data.</i></p> <p><i>Don't specify columns but address in specification if needed. Past data is from a variety of columns and analytical methods.</i></p> <p>Kris Holm with check with Idaho permittees about laboratory requirements.</p> <p>Idaho permittees currently use AXYS. EPA accredits labs through the NELAC program.</p> <p>What about Ecology accredited labs? Accreditation for PCB congeners:</p> <ul style="list-style-type: none"> Ecology list attached. Has many of the same lab as DRBC plus some others. <p>The Ecology accreditation process uses 3rd party proficiency testing as well as reviews of the labs management system and SOPs.</p> <p>Ecology also recognizes other states and will review proficiency testing from other accreditations.</p> <p>Lab contamination can be difficult if analyte is "everywhere". Labs should include in a case narrative an explanation if there is</p>

			<p>contamination and explain why. Customer can call and work with lab to resolve it. (Alan Rue, ECY)</p> <ul style="list-style-type: none"> EPA/Idaho requirements EPA does not accredit labs for 1668. Permits don't require accredited labs and for sampling the environment, specify the Task Force standards as acceptable (Section I.F) Influent and effluent requires EPA method 8082 or 1668 but not the lab (Seciton 1.B.12) <p>Other questions: Also, do columns matter and does that affect choice of lab?</p> <p>Recommendation that we not be too prescriptive with respect to column since it could eliminate a column that works well. Technological changes happen quickly and new columns being developed. (AL). The DB5 column (used by Pacific Rim) did not separate the TEQ congeners as well but this has been addressed.</p> <p>Pacific Rim has a new improved column that is similar to AXYS. ALS is the lab that was recently selected for the air deposition work.</p> <p>Greg Covallo said the list on the DRBC website wasn't meant to be exclusive, but rather just indicate a handful of labs that were known to do the analysis (only about four of the labs on the list actually do the DRBC work routinely). There wasn't a</p>
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			<p>particular reason that Pacific Rim was excluded from the list.</p> <p>Going off the Ecology accreditation list makes the most sense on this topic unless there are specific labs that folks have issues with.</p> <p>This would be of benefit with respect to Ecology purchasing policies as well.</p>
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Sampling Labeling and Identification	Specifies labeling criteria	SAP pp 21, 32	<p>The DRBC scheme applies to dischargers. Is it useful to establish this?</p> <p>Should it be expanded? Do we need to discriminate by type (river, effluent, media – sediment, water, fish) What about historical data, would this apply?</p> <p>See the meeting website for proposed labeling scheme. The proposed scheme uses codes for location ID, Sample types, and date/time.</p>
Estimated Detection Limit	Specifies how EDL is calculated	<p>Method 1668C</p> <p>QAPP App B, Exhibit A, Spec 1</p> <p>Axys Standard Analytical Procedure</p>	<p><i>Recommendation to report as required by 1668C, since that is what we are using.</i></p> <p><i>The EDL equation comes is derived from a similar equation in EPA SW-846 method 8290 for dioxin. (KF)</i></p> <p><i>This specification is not needed since it is in the method.</i></p> <p>Where does this come from? Is it in the methods?</p>

			<p>The EDL is a method goal prescribed in 1668. Laboratories do their own studies to derive their MDL or method detection limits. These are laboratory specific. When a laboratory is accredited, it is evaluated on the basis of being able to achieve the EDL. MDLs should be close to the EDL. An MDL that is vastly different than (i.e., 10x) the EDL is considered suspect. (AR)</p> <p>Mike Hermanson followed up with Greg Covallo about this equation.</p> <p>The DRBC protocols are for 1668A. 1668C doesn't use EDL but uses DL in order to calculate sample specific detection limits.</p> <p>See also April 2010 summary of differences between 1668C and 1668A. EMDLs have been changed to MDLs.</p>
<p>Reporting Rules for Co-eluting Congeners</p>	<p>Specifies how congeners are reported when then co-elute</p>	<p>Method 1668C</p> <p>QAPP App B, Exhibit A, Spec 1</p> <p>Axys Standard Analytical Procedure</p>	<p><i>The selected database should allow for the flexibility of handling different types of data.</i></p> <p><i>Report congeners as they are presented in the laboratory report.</i></p> <p>Adriane Borgias to ask Lisa Rodenburg about fingerprinting and whether co-elution matters.</p> <p>This was discussed further and it was determined that this rule would not be needed for an Access database.</p>

			However, at some point someone might needed to use this procedure if working in spreadsheets.
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Description of Data Qualifiers	Identifies the meanings of qualifier flags	<p>QAPP p 41</p> <p>QAPP App B, Exhibit A, Spec 1</p>	<p>Use of flags are inconsistent but data should be evaluated to see if it is flagged appropriately.</p> <ul style="list-style-type: none"> • Start with flag description in QAPP • Develop a good definition for the flag and how it is to be used. • Be able to reassign flag when data is reported <p>Question: is the AXYS RFP that the Task Force uses consistent with Ecology’s use of flags?</p> <p>The DRBC flags don’t match the SRRTTF flags.</p> <p>See Table on meeting notice with the data flags used by SRRTTF.</p> <p>The next step with this table would be to have discussions around how these flags are used to sum data.</p> <p>It was discussed adding blank flags for the data: B3 for 3x censor; B5 for 5x censor, and B10 for 10x sensor. Another blank management technique is simple subtraction, which would be appropriate for fingerprinting.</p> <p>Other points of discussion:</p> <ul style="list-style-type: none"> • Homologs

			<ul style="list-style-type: none"> Flags that apply to PCB analysis from other methods <p>Adriane Borgias to summarize Ecology data flags.</p>
Electronic Data Deliverables	3 spreadsheets identifying the data fields for laboratory data	QAPP App B, Exhibit A, Spec 1	<p>Use the current EDD format unless there is a need to change it. This should be evaluated as part of the pilot project.</p> <p>See spreadsheet from Duwamish consultant. This answers the DRBC vs. EIM question. Include an evaluation of these deliverables in the pilot project with goal of being compatible with EIM. Adriane Borgias to compare with contract. Tim Towey to compare with another contract lab.</p>
Method Blank Contamination Decision Rules	Identifies censoring procedure for method blanks (uses 10x)	<p>QAPP pp 17, 28</p> <p>Censoring procedures vary from (no censoring, 3x, to 10x) depending on data needs</p>	<p>Preserve the ability to do any approach in the database. Also, the situation where the laboratory is running multiple blanks per sample.</p> <p>Define other blanks and how they are used (i.e., trip, rinsate, etc.)</p> <p>There is a concern about how to qualify and number. Censoring would not happen at the lab method blank stage but at the data evaluation and reporting stages.</p> <p>Recommendation that we store all data, samples and blanks.</p> <p>See also the flowchart in LEICOS report and compare with SRRTF specifications. What are the implications in lab costs if samples need to be rerun?</p>

			<p><i>There should be agreement about when a lab needs to rerun a sample ... how is this qualified in the database?</i></p> <p><i>Data users should make the choice of decision rules clear.</i></p>
Title	Purpose	Relevance to SRRTTF QAPP	Comments and Review Actions
Hard Copy Data Deliverables	Specifies data delivery protocols	QAPP App B, Exhibit A, Spec 1	<p>Tim Towey compared this with what we are getting from AXYS. DRBC is asking for Level IV data, we are asking for something like Level II or Level III data. Typically Level IV data is quite detailed (i.e., every piece of data a lab produces) and more than what we need. If we asked for Level IV, another lab would need to validate it. We are currently getting a good chunk of what DRBC asked for and also accreditation data.</p> <p>Define the data levels in the packages and their intended use.</p>
Rinsate Blank Contamination Assessment	Identifies procedure to be used for contamination of rinsate (i.e., field) blanks (uses 3x)	Not specifically addressed in QAPP	<p><i>Change title to "Equipment Blank Contamination Assessment"</i></p> <p><i>The blank acceptance rules should be addressed when the report is developed.</i></p> <p><i>The laboratory should analyzed the equipment blank with the same batch of samples. So the blanks are associated with the relevant sampling event. For the database, retain the batch codes from the laboratory. We need a process for associating the blanks with the samples.</i></p>

			<p><i>We also use different sampling collection techniques: Effluent (open to atmosphere) – field or equipment blank which does get opened vs. submerged sample-travel blank that doesn’t get opened. Also groundwater samples, which have rinsate blanks.</i></p>
<p>Sample, Replicate and Blank Collection Techniques</p>	<p>Identifies how continuous and non continuous discharges are sampled. Includes replicate and blanks.</p>	<p>SAP Sections 4, 7, and Appendices</p>	<p><i>We do have more sample types: effluent, stormwater, ambient, groundwater, spring, suspended sediment.</i></p> <p>Ecology permits currently require effluent composite samples. This seems to be ok, and sampler contamination doesn’t seem to be an issue so far. The sampling is covered under the permit QAPPs, which will be resubmitted with the next permit cycle.</p> <p>Idaho permits use the TF QAPP. Idaho permits also have upstream/downstream sampling requirements.</p> <p>Stormwater QAPPs also use composite samplers.</p> <p>For groundwater, Ecology’s EAP protocol is ok.</p> <p>Question about frequency of blank samples.</p>
<p>Project Quality Control Requirements</p>	<p>Summary of QA/QC requirements, some of which are repeated above.</p> <p>Based on Method 1668A.</p>	<p>QAPP, SAP, and Method 1668C</p>	<p>All to review for next meeting.</p> <p>Not clear what this document is, but it appears to apply to the laboratory so expectations are clear.</p>

Discussion Items:

How will this be used? The DRBC targeted these protocols for use by dischargers and effluent measurements. The Spokane Task Force has a slightly different need. These are intended to be protocols that will be used if an entity wants to develop comparable Spokane River data. Will this protocol be used by EPA and Ecology in the permits? For example, the QAPP protocol was used by EPA in the Idaho permits. Ecology doesn't currently plan to specify the QAPP protocols in the permits.