

Reviewing: Quality Assurance Project Plan
 Spokane River Toxics Reduction Strategy Study
 February 14, 2014 version - Limno Tech
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**DEQ Standard Quality Assurance Project Plan (QAPP)
 and/or Field Sampling Plan (FSP)**

Review/Approval Checklist

January 8, 2013—Version 2.0

✓ = yes
 X = no
 na = not applicable

This checklist is designed to help DEQ project managers and DEQ project quality assurance officers (QAOs) perform a thorough and consistent review of draft **standard** project quality assurance project plans (QAPPs) and associated field sampling plans (FSPs) prior to approving such documents. A separate checklist is available for use by staff performing review and approval of DEQ statewide generic QAPP/FSP documents.

Project staff should obtain and use the current version of this checklist each time they review and approve a DEQ standard project QAPP or FSP. The current version of the checklist is located on the DEQ quality assurance (QA) intranet site (<http://insidedeq.deq-intra/director/quality.htm>), and in TRIM (record # 2012AEB6). The checklist will be revised and updated frequently, based on feedback received from project personnel and quality system implementation changes.

This checklist is not intended to be all-inclusive and is provided as a general guide to DEQ project staff as they implement the requirements of the 2012 DEQ *Quality Management Plan*. The checklist assumes that the most current DEQ QAPP or FSP template was used to generate the draft standard QAPP or FSP under review. The checklist is a useful tool for field sampling plan (FSP) review, since all information deferred to a given FSP in the associated standard project QAPP can be tracked using the same checklist. This checklist is not intended to become a part of the project record, and it is not required to be maintained in the project file, it is simply an aid to project staff during the DEQ standard QAPP or FSP review and approval process.

General QAPP/FSP Items

- na The most current DEQ QAPP/FSP template has been used (<http://insidedeq.deq-intra/director/quality/deq-standard-qapp-template.docx>).
- The most current QAPP/FSP review/approval checklist is being used (<http://insidedeq.deq-intra/director/documents/QAPP-approval-checklist.docx>).
- The cover page contains the QAPP/FSP title, ~~region/division~~, version number, date, and ~~TRIM record number~~. ← NO
- The header, starting on the second page and on all remaining pages of the document, contains the abbreviated QAPP/FSP title and the ~~same version number~~ and date as the cover page.
- na The QAPP/FSP template instruction pages have been removed from the document prior to finalization.
- na All the QAPP/FSP template text highlighted in grey has been revised to reflect the current projects, and all the grey highlights have been removed from the document.
- na All the QAPP/FSP template text not highlighted in grey has been checked to ensure its applicability to the project. This language is applicable to most, if not all, projects. It was added to the template to meet EPA requirements for all QAPPs/FSPs in an effort to simplify QAPP/FSP generation.
- The project QAO has contacted the DEQ quality manager prior to signing the QAPP, and has updated the QAO project document tracker spreadsheet found in TRIM (record # 2012AEB8). NO

project QAO not selected

- The document has been spell checked, and all template "Notes to Author" have been removed. *no*
- na* If a section of the DEQ QAPP/FSP template is not applicable to the specific project, that has been clearly stated, along with the reason why the particular section is not applicable.
-

Section 1—Title and Approval Page

- The title and approval page (signature page) contains the QAPP/FSP title, ~~region/division~~, ~~version number~~, and date. *no*
- The project manager, project QAO, and program/regional manager have signed and dated the document for approval. *na*
- na* The name, position, and office/region fields below each signature have been filled out. FSPs are also required to state the parent QAPP title and parent QAPP TRIM number on this page.
- The project QAO has discussed the project QAPP with the DEQ quality manager prior to the QAO signing the QAPP for approval. *no*
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Section 2—Table of Contents

- The QAPP/FSP template table of contents "Author Note" has been followed, such that the table of contents has been updated.
- The table of contents has been verified to accurately reflect the contents of the document.
-

Section 3—Distribution List

- All entities involved in the project, including laboratories, are included in the distribution list table. *no*
- Each entity in the table has a defined name, project affiliation, organization/location, and contact phone number. *no*
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Section 4—Project Task Organization

- The full name of the assigned project program/regional manager, project QAO, project manager, and laboratory contact (if laboratory services are used) is defined in column 1 of Table 2. *no*
- The assigned project QAO meets *all* requirements for objectivity and independence, as defined in column 2 of Table 2 (project title/responsibility column). *no*
- If laboratory services are used, the laboratory responsibilities are clearly defined in column 2 of Table 2. *no*
- The project organizational chart has been filled out with the names of assigned project staff. *no*
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Section 5—Problem Definition/Background

na The grey highlighted example text in this section has been replaced with similar text describing the project-specific problem statement (section 5.1) and the project-specific intended use (section 5.2) of the data. The project-specific text should address all the project information that the grey highlighted example text describes.

Section 2.1.5 of EPA guidance document EPA QA/G-5 has been consulted for further guidance on what information must be contained in this section. *no*

Problem Definition is missing - important.

Section 6—Project/Task Description

na The grey highlighted example text in this section has been replaced with similar text describing the project-specific project overview (section 6.1) and the project-specific timetable (section 6.2). The project-specific text addresses all the project information that the grey highlighted example text described.

Section 2.1.6 of EPA guidance document EPA QA/G-5 has been consulted for further guidance on what information must be contained in this section.

Section 7—Quality Objectives and Criteria

Section 2.1.7 of EPA guidance document EPA QA/G-5 has been consulted for further guidance on what information must be contained in this critical section regarding data quality objectives.

The percentage of field quality control (QC) samples to be taken for the project has been clearly defined. The QAPP template assumes that 10% of the project samples will be QC samples, which is a commonly accepted value. *- QAPP assumes 50-50% sometimes*

The data quality “level” (as described in the QAPP template) necessary for the project has been clearly determined by the project manager and stated in this section of the QAPP/FSP. The DEQ QAPP template has example language for this parameter, which must be edited for the specific project.

Since all laboratories have different programs or “packages” in place to meet the QA/QC requirements of their clients, setting the required data level for a given project is best accomplished by the DEQ project manager communicating directly with the laboratory. *no*

The required project data **accuracy**, and how that will be determined, has been defined in section 7.1

The required project data **precision**, and how that will be determined, has been defined in section 7.1

How the project data will meet the **representativeness** criterion has been defined in section 7.2

How the project data will meet the **comparability** criterion has been defined in section 7.3

The required project data **completeness** has been defined in section 7.4

Section is missing clear and concise DQO criteria

Section 8—Special Training/Certification

Any special training or certification necessary for project personnel to conduct work under the QAPP/FSP has been defined.

- If a project specific health and safety plan has been developed for use, it is clearly referenced in this section. *reference but not available.*
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Section 9—Documentation and Records

- How the project will document activities, and how the associated documents and project records will be maintained, has been defined in this section. This includes field notebooks, if applicable to the project. *no - more detail required*
- The requirements for the project QAPP (and associated FSPs, if applicable), and other necessary documents, ~~to be filed and maintained in TRIM~~ have been clearly stated. *no*
- not available for review*

Section 10—Sampling Process Design

- The rationale for sampling site selection has been defined in section 10.1 *no*
- The sample design logistics have been defined in section 10.2 *incomplete*
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Section 11—Sampling Methods

- A reference to the associated sampling procedure, such as a specific SOP reference, has been included. The entire sampling procedure may be placed in this section, or referenced as an SOP, or reference made to sampling procedure that is attached as an appendix. In any case, the reference to the procedure must be clear, or the actual procedure must be included in this section.
- All references to an appendix of the QAPP/FSP containing a sampling procedure are accurate and correct. For example, if this section states that water samples will be taken in accordance with Appendix B, Appendix B must be physically present and contain a procedure to take such water samples. *no*
- All referenced procedures have been reviewed to ensure the procedures do not compromise the intended data quality. *no - not available*
- Table 3 includes all relevant sample analytes, preferred analyzing laboratory names, and the laboratory shipping address. *no - incomplete.*
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Section 12—Sample Handling and Custody

- The information in this section accurately describes the project-specific sample chain-of-custody requirements, procedures, and forms, or provides a specific reference to a procedure which does. *no*
- All references to an appendix of the QAPP/FSP, or an external procedure, containing chain-of-custody procedures or forms are accurate and correct. For example, if this section states that chain-of-custody procedures or forms are contained in Appendix B, Appendix B must be physically *no* present and address chain-of-custody procedures or forms.
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Section 13—Analytical Methods

- The source of the project sample containers and preservatives have been described in this section. *no*

na The grey highlighted text has been replaced by comparable project-specific language describing the use of laboratories.

Table 4 has been fully populated with sample types/compounds, parameters of interest, analytical methods to be used, sample container types, necessary preservative descriptions, and associated sample holding time for all samples. *partial*

Section 14—Quality Control

The QC elements described in this section are in agreement with the requirements stated in section 7 (Quality Objectives and Criteria) of the QAPP/FSP, including the means by which the QC efforts will meet the requirements of Section 7. *no*

The overall project QC frequency has been specified in section 14.1

The project sample duplicate requirements have been clearly stated.

The project field, trip, and equipment blank requirements, and any sample spike requirements, have been clearly stated. *clearly stated but not adequate missing*

field blanks

Section 15—Instrument/Equipment Testing, Inspection, and Maintenance

Any deviation from the standard approach provided in the template has been explained in detail, including how this requirement will be met. *incomplete*

Section 16—Instrument/Equipment Calibration and Frequency

Any deviation from the standard approach provided in the template for field monitoring equipment has been explained in detail, including how this requirement will be met.

Any deviation from the standard approach provided in the template for sample collection equipment has been explained in detail, including how this requirement will be met.

Section 17—Inspection/Acceptance of Supplies and Consumables

The language in this section is consistent with the requirements of the specific project, such that supplies and consumables are inspected and accepted in such a manner as to satisfy the quality requirements of the project.

Section 18—Non-Direct Measurements & Data Acquisition

- If data are to be used in the project that are not directly measured or newly generated, then such data is considered “nondirect measurement data.” Such data are more commonly referred to as “existing data.” Prior to using existing data or nondirect measurement data, the data must be fully evaluated, verified, assessed, and qualified as necessary to meet the data quality needs of the project.

Such efforts have been fully documented and explained in detail in this section of the QAPP/FSP.

Chapter 3 of EPA’s *Guidance for Quality Assurance Project Plans* (EPA QA/G-5, available at <http://www.epa.gov/quality/qs-docs/g5-final.pdf>) explains this process in detail and shall be used as a guide by DEQ project staff as they address such data in this section.

Section 19—Data Management

- Methods for maintaining and managing items such as field notes, electronic data, laboratory sample results, and laboratory reports have been detailed in this section.

 missing examples

Section 20—Assessment and Response Actions

- na The DEQ QAPP template contains standard language for this section. Any deviation from the existing language must satisfy the intent of the existing template language.

 Response Actions ~~needed~~ needed incomplete.

Section 21—Reports to Management

- This section has been completed to explain how management will be kept informed of project oversight, assessment activities, or findings. more specifics needed

- The project final summary report, if applicable, has been identified in this section.

Section 22—Data Review, Verification, and Validation

- na The DEQ QAPP template contains standard language for this section. Any deviation from the existing language must satisfy the intent of the existing template language.

Section 23—Review, Verification and Validation Methods

- na The DEQ QAPP template contains standard language for this section. Any deviation from the existing language must satisfy the intent of the existing template language.

- The project staff members who are responsible for performing data review, data verification, and data validation have been specifically identified (by position) in for this section.

Section 24—Reconciliation with User Requirements

- na The DEQ QAPP template contains standard language for this section. Any deviation from the existing language must satisfy the intent of the existing template language.

Section 25—References

- All references used or mentioned in the body of the QAPP/FSP have been added, in order of appearance in the document text, to this section. *no*
- All citations include the author, date, and title of the referenced document. The reference includes a web address or TRIM record number, if applicable. *no*
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Appendices (if applicable)

- All appendices are clearly identified with an appropriate title. *no*
- All appendices are properly reflected in the document table of contents. *no*
- All documents and information deferred to the appendix by the QAPP/FSP is actually present in the appendix. For example, if the QAPP/FSP states the chain-of-custody procedures and forms are located in the appendix, they must be physically present in the appendix. *no*
- All appendices are cited in the correct order (i.e., A, B, C...) in the body of the QAPP/FSP. *no*
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