

Appendix B: Contractor Addendum

Note to Contractors and those using this Addendum form:

1. **Once the form is completed, DELETE THIS SECTION**
2. Instructions for filling in this Addendum are in red as are suggestions for what needs to go in the document. Tables and other figures that can be used as part of the Addendum---just adjusted for the project will be in black. **Anything in red should be deleted out of the QAPP Contractor Addendum.**
3. In each Section there is generic information or instructions, however, please refer to the SCDHEC [QAPP Guide](#).
4. This is considered an ADDENDUM to the UST Programmatic QAPP. While the UST Programmatic QAPP gives specific direction, this addendum will fill in site specific/lab specific/contractor specific information. Please refer to each section of the UST Programmatic QAPP as this Addendum is prepared. Realize that this Addendum is supposed to be site specific.
5. For help with the parts of the QAPP call the SCDHEC UST QAPP Coordinator at (803) 898-0634 or email at: vincenmm@dhec.sc.gov. For help with specific UST issues please contact your UST Project Manager.
6. Please understand that you are responsible for anything in the UST Programmatic QAPP as well as what is in the Addendum you produce for the project.

Section A: Project Management

A1 Title and Approval Page

Quality Assurance Project Plan
Addendum to the SCDHEC UST Programmatic QAPP
For

Name of Project/Site and UST Permit Number

Site Location (Address, City, State)

Prepared by: _____

Affiliation and Contact Information

Date: _____

Day/Month/Year

Name of Certified Contractor and Contractor Certification Number

Approvals

Name _____ Date _____
UST Project Manager Signature

Name _____ Date _____
Contractor QA Manager Signature

Name _____ Date _____
Site Rehabilitation Contractor Signature

Name _____ Date _____
Laboratory Director Signature

Other signatures may be required and should be added as directed by UST Project Manager.

Signatures of all parties who may be involved in UST Site Rehabilitation work stating they have received the most recent version of the UST Programmatic QAPP. (Including those on the Approvals page and in the Distribution List)

A2 Table of Contents

A3 Distribution and Project Organization List

The distribution and project organization list is a list of individuals either directly participating in the project or overseeing the project. The UST Programmatic QAPP has specific roles and the responsibilities of each role, however, personnel assigned to these roles must be identified in this QAPP Contractor Addendum. Anyone performing essential functions in this project (not given in the UST Programmatic QAPP) should be listed below and their duties outlined. Those listed below must have access to the UST Programmatic QAPP and receive a copy of the site-specific QAPP Contractor Addendum as well as any updates/revisions. Please notice that some SCDHEC titles are already listed below along with their addresses. The writer of the site-specific QAPP Contractor Addendum is to identify the UST Project Manager who is assigned to this specific project in the table below. Licensed professionals (e.g., PE, PG, well driller, surveyor) listed in the table must provide applicable license information (type, number, expiration date) in the third column. Additional rows are left for other personnel who are essential to this project either from SCDHEC or subcontractors.

| Name | Title/Role from UST Master QAPP | License/Number/Exp. date | Organization/Address | Telephone Number | Fax Number | Email Address |
|------|---------------------------------|--------------------------|---|------------------|--------------|---------------|
| | UST Technical Project Manager | | SCDHEC, UST Management Division, 2600 Bull St., Columbia, SC, 29201 | 803-898-2544 | 803-898-0673 | |
| | Contractor Project Manager | | | | | |
| | Contractor Field Manager | | | | | |
| | Contractor Project Verifier | | | | | |
| | Field Staff | | | | | |
| | Well Services/ Driller | | | | | |
| | Laboratory Director | | | | | |
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Table 1A Addendum Distribution and Project Organization List

It is understood that certification records must be produced if requested by SCDHEC.

A4 Problem Definition/Background

Discuss the background (as much as is known) of the site and appropriate historical information, and why this site is being assessed.

Please answer the following: Does this project fall under UST or Brownfields area?

A5 Project/Task Description

1. *Summarize what is known about the work to be done. This can be a short sentence indicating what the Scope of this project is (see Master QAPP Section A6).*

2. *The work will begin within _____ after cost approval and sampling should be complete by _____.*

3. *Are there any time or resource constraints? Include those factors that may interfere with the tentative schedule.*

A6 Data Quality Objectives (DQOs) and Data Quality Indicators (DQIs)

The Addendum will complete what is given in the Programmatic QAPP Guide on the DOQ Process. Specifically this is Step 4: Defining the Study boundary—which includes a map of the property (Attachment) to show what the extent of the study will cover.

Detail the geographical area that is to be part of the project. Maps should be included to show not only the topography and the geographical area of the State, but also to show more detail of the site itself including property lines.

A7 Certification

The Labs that will be used for this project must be certified by the SCDHEC Office of Environmental Certification for every analysis that they will perform. The information for the Laboratories and their SCDHEC Certificate number must be included in this addendum.

**The Following Laboratory(ies) will be used for this Project:
All labs being used (including ones subcontracted) must be included.**

Commercial Lab(s)

Please give the information as listed below for each Laboratory that is being used for sample analysis.

Full Name of the Laboratory _____
Name of Lab Director _____
SCDHEC Certification Number _____

Full Name of the Laboratory _____
Name of Lab Director _____
SCDHEC Certification Number _____

(If more than 2 labs are being used, copy the above 3 lines and insert into this document)

Please note: SCDHEC may require that the contractor submit some or all of the Laboratory's SOPs as part of this QAPP.

A8 Documents and Records

**Personnel will receive the most current version of the QAPP Contractor Addendum via:
(Check all that apply)**

US Mail Courier Hand delivered

Other (please specify): _____

This section requires a list of the records—pertinent to the project- produced during the project by the Contractor, Laboratories, and Subcontractors. Please note that the Programmatic QAPP requires records to be kept at least 5 years.

| Record | Produced By | Hardcopy/ Electronic | Storage Location For how long? | Archival |
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Table 2A Record Identification, Storage, and Disposal

Section B Measurement/Data Acquisition

B1 Sampling Process/Experimental Design

In the table below list the schedule for project activities. This would include drilling the wells, developing the wells, collecting samples and so on.

| Task | Start Date | End Date | Comments |
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Table 3A Sampling Activities

B2 Sampling Methods

Please note: The contractor must follow sampling protocols as given in the UST QAPP.

Estimate the number of samples of each matrix that are expected to be collected:

| | |
|--------------------------------------|-------|
| Soil | _____ |
| Ground Water from monitoring wells | _____ |
| From Drinking/Irrigation water wells | _____ |
| From surface water features | _____ |
| Duplicate samples | _____ |
| Field blanks | _____ |
| Trip blanks | _____ |
| Total number of Water samples | _____ |

In this next part indicate if the samples will be homogenized and split and describe the way this will be done.

The samples will be (check all that apply): ____ Grab ____ Homogenized ____ Split

If homogenized or split are checked please indicate how will it be done and the equipment needed.

If decontamination procedures differ from Appendix H, please provide details.

Identify any equipment and support facilities needed. This may include such things as Fed-ex® to ship the samples, a Geoprobe®, field analysis done by another contractor (who must be certified), or electricity to run sampling equipment.

Address the actions to be taken when problems occur in the field, and the person responsible for taking corrective action and how the corrective action will be documented.

| Failure | Response | Documentation | Individual Responsible |
|---------|----------|---------------|------------------------|
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Table 4A Field Corrective Action

B3 Sample Handling and Custody

This section deals with how samples are physically handled. Please answer the following questions and please attach a copy of the Lab’s chain of custody. If multiple labs are used along with multiple chains of custodies, all of them must be attached. The chain of custody procedure should describe how the sample’s location is accounted from collection to disposal (for each lab). If the laboratory has a SOP for this, it may be attached as long as sampling personnel understand that they must adhere to it. Please note that holding times and preservation for samples must adhere to the requirements in the Master UST QAPP. Preservation and sample handling details must be given in either a case narrative or on the Chain of Custody.

1. *How will the samples get from the Site to the Lab to ensure holding requirements are met?*
2. *If sample preservation procedures differ from the UST Programmatic QAPP, please provide details.*
3. *If chain of custody procedures differ from the UST Programmatic QAPP, please provide details.*

B4 Analytical Methods

This section will give specific information about exactly which methods will be used for analysis. The allowable methods are given in the Programmatic QAPP, but often there are choices so the Contractor’s addendum must list the exact methods that will be used. Although the SOPs of the lab are reviewed during their Laboratory Certification Process, UST or the OQA may require submission of some or all SOPs. SOPs may be identified by the full nomenclature from the lab or by abbreviation as long as the abbreviations are explained. **Do not submit laboratory QA plans or SOPs unless they are requested by the UST Management Division Project Manager.**

The tables below may be used for the first requirement.

1. *Identify the method which the SOP references and the equipment or instrumentation that is needed:*

| Parameter | Method Referenced | Comments |
|-----------|-------------------|----------|
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Table 5A Analytical SOPs and Referenced Methods

Item 2 may be in an attachment from the Lab from their QA/QC plan or written out below because the Lab has a QA/QC plan that states what is done, but field personnel do not.

2. **Provide SOPs for the Kerr Method or the Ferrous Iron Method if these are parameters for this study. This can be attached or written here. If attached, please note that it is an attachment and where it is located (if applicable).**

B5 Quality Control Requirements:

All QC will follow the requirements laid out in Section B5 of the UST Programmatic QAPP. If procedures for QC differ from the UST Programmatic QAPP, please provide details.

B6 Field Instrument and Equipment Testing, Inspection and Maintenance

1. Identify all field equipment needing periodic maintenance, the schedule for this, and the person responsible.

| Instrument | Serial Number | Type of Maintenance | Frequency | Person responsible |
|------------|---------------|---------------------|-----------|--------------------|
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Table 6A Instrument and Equipment Maintenance

B7 Instrument Calibration and Frequency

1. Identify equipment, tools, and instruments for field work that should be calibrated and the frequency.
2. Describe how the calibrations should be performed and documented, indicating test criteria and standards or certified equipment.
3. Identify how deficiencies should be resolved and documented. Identify the person responsible for corrective action.

| Instrument | Serial Number | Calibration Procedure | Frequency of Calibration | Acceptance Criteria | Corrective Action (CA) | Person Responsible for CA |
|------------|---------------|-----------------------|--------------------------|---------------------|------------------------|---------------------------|
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Table 7A Instrument Calibration Criteria and Corrective Action

B8 Inspection/Acceptance Requirements for Supplies and Consumables

1. If procedures for storage, handling or transport of supplies/consumables differ from the UST Programmatic QAPP, please provide details.

Consumables are things like disposable bailers, nitrile gloves, sample containers, and so on.

B9 Data Acquisition Requirements (Non-Direct Measurements)

This section discusses data that was not generated by this project. This includes historical data, information Tax Maps, computer databases, weather data from the National Weather Service, Scientific Literature, and so on. This discussion must include information about why this data is usable for this project.

1. Identify data sources, for example, computer databases or literature files, or models that should be accessed or used.
2. Describe the intended use of this information and the rationale for their selection, i.e.,
3. Provide its relevance to the project.
4. Indicate the justification criteria for use of these data sources and/or models.

| Data Source | Used for | Relevance | Justification for use in this project | Comments |
|-------------|----------|-----------|---------------------------------------|----------|
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Table 8A Non-Direct Measurements

5. Identify key resources/support facilities needed. This will probably be non-applicable for most projects. This would be addressed if the contractor employed someone to provide data modeling, database upkeep, and so on.

B10 Data Management

1. Describe the data management scheme from field to final use and storage.

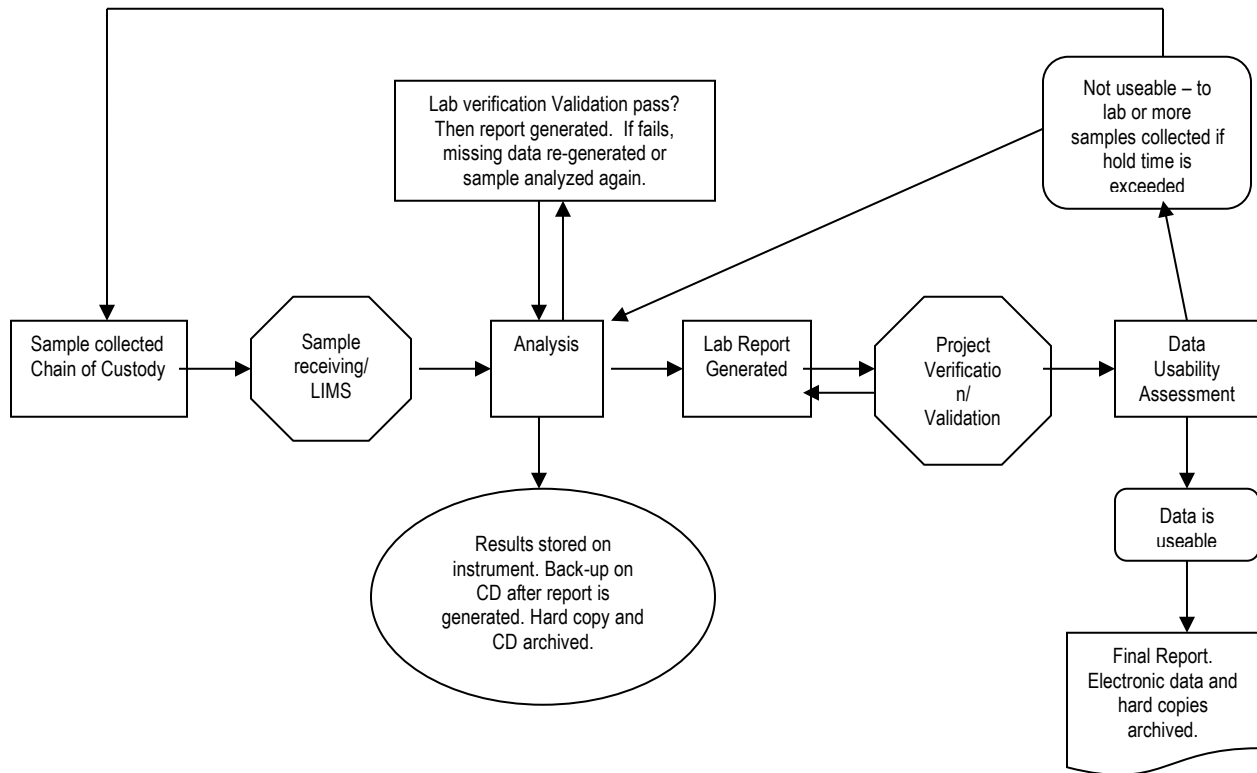


Figure 1 Example of a Data Management Scheme

A diagram, such as the one above, can be used to satisfy Item 1 or a description can be used instead.

2. How does the lab and field staff ensure that no unauthorized changes are made to the chain of custody, sampling notebooks, laboratory notebooks and computer records?
3. How does the lab ensure that there are no errors in samples records including times when sample information is compiled, data calculated and/or transmitted?

Items 2 and 3: This is a discussion of how errors will be avoided. This includes errors in the field paperwork, chain of custody and laboratory processes. Usually this is done by overview of a supervisor who looks over work or rechecks calculations. Software issues also come into play here. Is there a process to keep data from being corrupted or restoring it if the data becomes corrupted? Is there a process to avoid data loss though computer malfunctions? What about security of the data? Is the data protected from tampering? How does the Lab or contractor know that the software/hardware that is used is acceptable? In each process, identify who is responsible for oversight.

4. How will the data be archived once the report is produced? How can it be retrieved? (This applies to both electronic and hard copies).

Section C Assessment and Oversight

C1 Assessment and Response Actions

1. *The Contractor is supposed to observe field personnel daily during sampling activities to ensure samples are collected and handled properly and report problems to DHEC within 24 hours. Please state who is responsible for doing this, what observations will be made, and how those observations will be made. Will this person have the authority to stop work if severe problems are seen?*
2. *The SCDHEC UST QAPP states that the Lab will receive an Offsite Technical System Audit. For this project, what assessments will be done by the Contractor on the Commercial Lab(s) that are being used—other than their certification audit? When or how often are these done? Who will the results be given to and who has the ability to stop work if problems are severe?*

C2 Reports to Management

See the SCDHEC UST Programmatic QAPP.

Section D Data Validation and Usability

See the SCDHEC UST Programmatic QAPP.