

REVISION HISTORY

Document No./Revision No.	Issue Date	Action	Description
EP-ERSS-SOP-5058, R0.0	02/09/07	Major	New document number, reformatted and renumbered. Supersedes SOP-01.04
WES-EDA-QP-219, R0	10/20/10	Major	New number assigned due to reorganization.
OIO-QP-219, R1	09/02/14	Major	Minor revision to this procedure. The acronym was changed in the document control number from WES-EDA to OIO. The new number supersedes WES-EDA-QP-219, R0. The hyperlinks in the document were updated to reflect web changes. The SME conducted a technical review of the content in this procedure and deemed it accurate.
ER-SOP-10093, R0	5/2/2017	Major	Updates to transfer from ADESH to ADEM.
ER-SOP-10093, R1	9/13/2017	Minor	Changed reference in 5.4 to ER-SOP-10094, Handling, Packaging, and Transporting Field Samples.

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1. PURPOSE

This standard operating procedure (SOP) states the responsibilities and describes the process for documenting the traceability of samples collected for Los Alamos National Laboratory (LANL or Laboratory) using sample control and field documentation.

2. SCOPE

All LANL employees and their responsible subcontractors shall implement this procedure when collecting samples.

3. PRECAUTIONS AND LIMITATIONS

Following the steps in this procedure assures that samples and field documentation are collected in a manner that creates and maintains legal defensibility. Following the procedure also assures that the field data generated during sample collection are correctly entered into the environmental databases for data analysis, compliance reporting, and long-term storage.

Samples are to be identified and controlled to ensure proper documentation.

4. PREREQUISITE ACTIONS

4.1 Materials and Equipment

The list below represents the equipment necessary to complete the tasks defined within this procedure:

- Sample Management Database
- Computer
- Printer
- Sample Containers
- Custody Seals

5. PERFORMANCE – SAMPLE CONTROL AND FIELD DOCUMENTATION

5.1 Notify the Sample Management Office

User

- [1] **NOTIFY** the Sample Management Office (SMO) of the sampling campaign, at least two days in advance of the work, by completing and submitting the SMO Request spreadsheet found on the SMO homepage at https://adep.lanl.gov/adepimageslib/WebDocs/smo_order_request.xls.

NOTE *Instructions for filling out the spreadsheet (also known as the Sampling Plan) are included in the download. Guidance for allowable codes are provided on sheets 3 (Field Code Values to Print) and 4 (Analytical Methods and Analytes).*

- [2] **COMPLETE** sheet 1 (General Request Info) and sheet 2 (Analytical Request Info).
- [3] **EMAIL** finished spreadsheet to smoorderrequest@lanl.gov
- [4] **CONTACT** Sample Management staff if questions arise while completing the SMO Request spreadsheet.

5.2 Sample Request and Paperwork Creation

SMO Staff

- [1] **ENTER** Sampling Plan into the database according to client specifications on SMO Request spreadsheet.

User

- [2] **REVIEW** the sampling paperwork or summaries and **APPROVE** for final printing, or **COORDINATE** with the SMO staff to correct problems.

SMO Staff

- [3] **PRINT** the approved Sample Collection Log/Field Chain of Custody Forms (Attachment 1) and Sample Container Labels.
- [4] **CALL** requestor for paperwork receipt. (It is not possible to e-mail the paperwork.)

5.3 Sample Collection and Documentation

Field Team Member

- [1] **OBTAIN** the appropriate sample containers and custody seals from the SMO, when applicable.
- [2] **COLLECT** samples according to applicable sampling procedures.
- [3] **COMPLETE** all blank fields in the Sample Collection Log/Field Chain of Custody Form prior to sample submission to SMO.

NOTE *Summa canisters and silica gel containers do not require custody seals.*

- [4] **COMPLETE** the sample container labels and seal sample containers with sample custody seals when the sample is collected.

NOTE *To fill in multiple spaces with “OK,” draw an arrow from the first “OK” through the remainder of the spaces. (This applies to other entries as well, such as “N/A.”)*

- [5] **RECORD** “OK” in the “as collected” spaces if the “as planned” information is accurate.
- [6] **CORRECT** the information listed under “as planned” on the Sample Collection Log/Field Chain of Custody Form by filling in the information listed under “as collected,” based on field observations. Furthermore, **CORRECT** any changes to bottle size, preservation, and bottle number so they can be forwarded to analytical laboratory.

NOTE *All information entered in writing on the Sample Collection log will be entered into the database. Please write legibly.*

- [7] Special conditions for filling out Sample Collection Log/Field Chain of Custody Form:
 - a. *Priority* – **USE** this portion of the form for Stormwater sampling or cases of limited sample volume. This informs the analytical laboratory in which order you prefer the tests to be analyzed until sample is consumed. **IF** your sample does not fall into one of these cases, **THEN MARK** N/A.
 - b. *Special Instructions* – **USE** this portion of the form to provide special instructions to the analytical laboratory (e.g., quicker turnaround time, additional analyses requested from that bottle, any special **conditions/hazards** of the sample to include, but not limited to, potential expected high concentrations of specific analytes, etc.).

5.3 Sample Collection and Documentation (continued)

- [8] **RECORD** all sample field data required by the sampling procedure on the sample collection log. (This may include silica gel weights, silica gel bound water, and other parameters required by the sampling procedure.)
- [9] **IF** a sample was planned and not collected,
THEN:
- [A] **MARK** the sample collection log/field chain of custody form with the words “not collected” across the forms and **DRAW** a diagonal line across the form.
- [B] **RECORD** the reason for not collecting the sample, and initial and date the form.
- [10] **ENSURE** that sample collector and coworker (who participated in the sample collection and can verify the accuracy of the data) have reviewed and signed the appropriate lines so that if corrections are needed the sampler can be identified for future contact.
- [11] **SUBMIT** the Sample Collection Log/Field Chain of Custody Forms to SMO staff when the samples are submitted.
- [12] **PHOTOCOPY** the Sample Collection Log/Field Chain of Custody Form for the project records, as appropriate.

5.4 Delivery of Samples to the SMO

Field Team Member

NOTE *When transporting sample to the SMO from the field all the requirements of ER-SOP-10094, Handling, Packaging, and Transporting Field Samples must be followed. These requirements include proper packing and any required radiation screening PRIOR to sample submission to SMO.*

- [1] **ENSURE** that all Sample Collection Log/Field Chain of Custody Form accompany the sample(s) when samples are delivered to the SMO.
- [2] **PRINT** name and **SIGN** the Sample Collection Log/Field Chain of Custody Form in the “Relinquished by” block.

SMO Staff

- [3] **PRINT** name and **SIGN** the Sample Collection Log/Field Chain of Custody Form in the “Received by” block.

5.4 Delivery of Samples to the SMO (continued)

Field Team Member/SMO Staff

- [4] **DOCUMENT** the date and time of the transfer on the Sample Collection Log/Field Chain of Custody Form. The date and time of field team sample delivery must exactly match the date and time for sample receipt by the SMO.

5.5 Sample Collection Log Updates after Sample Submission

Field Team Leader/Member

- [1] **IF** situations are found after sample submission, **THEN RETURN** to the SMO and **UPDATE** the original Sample Collection Log/Field Chain of Custody Form.
- [2] **INITIAL** and **DATE** the Sample Collection Log change.
- [3] **PHOTOCOPY** the changed Sample Collection Log for the project files as required.

6. POST-PERFORMANCE ACTIVITY

6.1 Records Processing

Records generated while performing this procedure must be processed and maintained in accordance with EP-AP-10003, Records Management.

Record Name	QA Record	Non-QA Record
Attachment 1, Sample Collection Log/Field Chain of Custody Form	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Sample Control and Field Documentation

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Revision: 1

Effective Date: 9/13/17

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Reference

7. REFERENCES

EP-AP-10003, Records Management

ER-SOP-10094, Handling, Packaging, and Transporting Field Samples

8. ATTACHMENTS

Attachment 1: Sample Collection Log/Field Chain of Custody Form

