

Region 4
U.S. Environmental Protection Agency
Science and Ecosystem Support Division
Athens, Georgia

OPERATING PROCEDURE


Title: Logbooks

Effective Date: May 30, 2013

Number: SESDPROC-010-R5

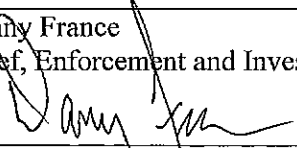
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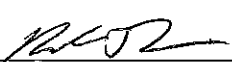
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Revision History

The top row of this table shows the most recent changes to this controlled document. For previous revision history information, archived versions of this document are maintained by the SESD Document Control Coordinator on the SESD local area network (LAN).

History	Effective Date
<p>SESDPROC-010-R5, <i>Logbooks</i>, replaces SESDPROC-010-R4</p> <p>General: Corrected any typographical, grammatical and/or editorial errors.</p> <p>Title Page: Changed author from Liza Montalvo to Hunter Johnson. Changed Enforcement and Investigation Branch Chief from Archie Lee to Danny France. Changed Ecological Assessment Branch Chief from Bill Cosgrove to John Deatruck. Changed Field Quality Manager from Liza Montalvo to Bobby Lewis.</p> <p>Revision History: Changes were made to reflect the current practice of only including the most recent changes in the revision history</p> <p>Section 1.2: Added the following statement: “Requirements for SESD records, which include field logbooks, are outlined in the SESD Operating Procedure for Control of Records (SESDPROC-002).”</p> <p>Section 1.4: Updated references</p> <p>Section 2.1: Added “bound” to the first sentence.</p> <p>Replaced the last sentence of the first paragraph with the following language: “All pertinent field activity information will be recorded contemporaneously when observed or collected to prevent a loss of information.”</p> <p>Added the second paragraph partially comprised of language from the omitted paragraph from Section 2.2.</p> <p>Section2.2: Omitted the first paragraph.</p> <p>Added the following language to the first line (formerly the second paragraph): “The following requirements apply to all logbooks:”</p> <p>Added Items 1 and 2 and omitted Item 4. Renumbered items as appropriate.</p> <p>Added “End of Notes” to the second sentence in item 6 (formerly item 5). Also added the last sentence which states: “Field investigators will draw a diagonal line through blank or unused portions of pages/forms</p>	<p>May 30, 2013</p>

that are located prior to the “End of Notes” entry and initial them.” Added “and SESD-generated forms” to Item 7 (formerly item 6).	
SESCPROC-010-R4, <i>Logbooks</i> , replaces SESDPROC-010-R3	October 8, 2010
SESCPROC-010-R3, <i>Logbooks</i> , replaces SESDPROC-010-R2	November 1, 2007
SESCPROC-010-R2, <i>Logbooks</i> , Replaces SESDPROC-010-R1	September 25, 2007
SESDPROC-010-R1, <i>Logbooks</i> , Replaces <i>Field Records (Logbooks)</i> SESDPROC-010-R0	August 10, 2007
SESDPROC-010-R0, <i>Field Records (Logbooks)</i> , Original Issue	February 5, 2007

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1 General Information

1.1 Purpose

This procedure is to be used by field investigators when documenting pertinent and factual information in logbooks related to field investigations involving sampling and measurement procedures and/or other data collection events.

1.2 Scope/Application

This document describes the various types of information that should be included in the field logbooks used to document field investigations conducted by SESD. Requirements for SESD records, which include field logbooks, are outlined in the SESD Operating Procedure for Control of Records (SESDPROC-002). Mention of trade names or commercial products does not constitute endorsement or recommendation for use.

1.3 Documentation/Verification

The procedures found within this document were prepared by persons deemed technically competent by SESD management, based on their knowledge, skills and abilities. The official copy of this procedure resides on the SESD local area network (LAN). The Document Control Coordinator is responsible for ensuring the most recent version of the procedure is placed on the LAN and for maintaining records of review conducted prior to its issuance.

1.4 References

SESD Operating Procedure for Control of Records, SESDPROC-002, Most Recent Version

SESD Field Branches Quality Management Plan, SESDPLAN-001, Most Recent Version

2 Field Records and Documentation Procedures

2.1 General

Dedicated bound logbooks will be used for field data collection including but not limited to sampling, measurements and observations. Logbook entries should be objective, factual, and free of personal feelings or other terminology which might prove inappropriate. All pertinent field activity information will be recorded contemporaneously when observed or collected to prevent a loss of information.

To facilitate accurate and complete documentation of field sampling and measurement activities, SESD-generated forms may be used. In order to be utilized, SESD-generated forms must be bound prior to use and adhere to all requirements outlined in this procedure. In cases where unbound pages/forms are necessary due to project requirements or practicality, approval must be obtained from both the Field Quality Manager and Management. In these cases, the Field Quality Manager and Management will dictate the steps that will be taken to ensure credibility, traceability and defensibility of information collected.

Any deviations from the quality assurance project plan that occur while in the field will be noted in the logbook(s). Logbook entries that may be considered privileged or confidential information will be handled in accordance with the relevant sections of SESD Operating Procedure for Control of Records (SESDPROC-002). The logbooks will be placed in the SESD project file upon transmittal of the final report to the project requestor.

2.2 Field Data Integrity and Accountability

The following requirements apply to **all logbooks**:

1. The project's unique identifier (unique identification number(s)) will be included on each page.
2. Field personnel will date and number each page. Numbering will be conducted by utilizing a format that incorporates both the current page number and the total number of pages (e.g. "page x of y" or "x/y", where "x" is the current page number and "y" is the total number of pages).
3. Observations, data and calculations will be recorded at the time they are made.
4. Unless prohibited by environmental conditions, pens with permanent ink will be used to record all data. When environmental conditions do not make it feasible to use permanent ink, entries should be made using a non-smear lead pencil (e.g., 2H or 3H). Upon returning from the field, the project leader will photocopy the penciled section of the logbook and certify, in writing, that the photocopied record is a true copy of the original logbook entry. The photocopy will be included in the project file.

5. Entries will be legible and contain pertinent, accurate and inclusive documentation of project activities.
6. Upon completion of the field investigation, the end of project entries in the logbook and/or bound forms will be clearly indicated. This may be accomplished by noting “End” or “End of Notes” on the last page of notes and dating and initialing the notation. Field investigators will draw a diagonal line through blank or unused portions of pages/forms that are located prior to the “End of Notes” entry and initial them.
7. In order to demonstrate continuity of the project and to preclude questioning of the integrity of the data collection process, pages and SESD-generated forms should not be removed from bound logbooks under any circumstances.
8. Data or other information that has been entered incorrectly will be corrected by drawing a line through the incorrect entry and **initialing and dating** the lined-through entry. Under no circumstances should the incorrect material be erased, made illegible or obscured so that it cannot be read.
9. If pre-printed adhesive labels are used in logbooks or bound forms to facilitate organization of information entry, the field investigator who is responsible for taking notes will sign the label with the signature beginning on the label and ending on the page of the logbook such that the label cannot be removed without detection.

2.3 Logbook Entry Information

2.3.1 General Information Required in All Logbooks

The following information will be included either on the front cover or the first page of **all logbooks**:

1. Project name
2. Project location
3. Project identification number
4. Project leader (full name)
5. Sample team leader (full name) and initials
6. Sample team member(s) (full name) and initials

2.3.2 Information Required for Sample Collection

In addition to the information listed in Section 2.3.1, the following information will be included in all logbooks when **samples** are collected:

1. Applicable SESD Operating Procedures for field sampling
2. Date and time of collection
3. Station identification
4. Sample identification

5. Method of collection
6. Number and type of containers
7. Sample collection equipment
8. SESD equipment identification number, if applicable
9. Physical description of sample
10. Matrix sampled
11. Sample team member duties (calibration, collection, deployment, etc.)
12. Sample preservation (including ice), if applicable
13. Conditions that may adversely impact quality of samples, if applicable (rain, wind, smoke, dust, extreme temperature, etc.)
14. GPS coordinates (Non-logging GPS units), if applicable
15. Location of electronic data file backups, if applicable

16. Monitoring of condition of ice in coolers or sampler
17. Other pertinent information.

2.3.3 Information Required for Field Measurements

In addition to the information listed in Section 2.3.1, the following information will be included in all logbooks when **measurements** are conducted:

1. Applicable SESD Operating Procedures for field measurement
2. Date and time of measurement or deployment
3. Sample identification, if appropriate
4. Station identification
5. Sample measurement equipment
6. SESD sample measurement equipment identification number
7. Manufacturer name, lot number and expiration date of all buffers and standards*
8. Calibration information, including before and after calibration readings*
9. Meter end check information
10. Deployment depth and total depth, if applicable
11. Pinger identification number and frequency for deployed equipment, if applicable
12. Time of retrieval for deployed equipment, if applicable
13. Physical description of matrix
14. Sample team member duties (calibration, collection, deployment, etc.)
15. Measurement values for non-logging equipment
16. GPS coordinates (non-logging GPS units), if applicable
17. Location of electronic data file backups, if applicable
18. Ambient air temperature, where applicable
19. Conditions that may adversely impact quality of measurement (Ex. temperature extremes)
20. Maintenance performed, if applicable

21. Meter malfunctions, if applicable
22. Other pertinent information

* Entry of calibration information in logbooks is only required for calibrations conducted in the field. All calibrations conducted at the Field Equipment Center or SESD laboratory will be recorded in the appropriate equipment tracking logbook.

2.3.4 Additional Information for Inclusion

The following information may be included in logbooks as appropriate:

1. Maps/sketches
2. Photographic or videographic log
3. Process diagrams