



MassDEP

Massachusetts Department of Environmental Protection Division of Watershed Management

STANDARD OPERATING PROCEDURE

Corrective Action Procedures

CN 005.1

July 15, 2025

July 2025-July 2027

Prepared by:

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Date: 7/15/25

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Date: 7/18/25

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List of Revisions

<u>Revision Date</u>	<u>Revision</u>	<u>Pages #s</u>	<u>CN/ (Old CN if applicable)</u>	<u>Initials</u>
8/2003	Original		005.0	
7/2025	New template, clerical updates	All	005.1	JS



Scope and Application:

The occurrence of incidences or practices that are inconsistent with the established quality assurance and quality control procedures of the Watershed Planning Program must be addressed by initiating a Corrective Action as outlined in this SOP.

(Appendix A contains a Corrective Action Form, which may or may not be needed, depending on the nature and extent of the inconsistency. WPP staff are encouraged to use the Corrective Action Form when necessary).

1.0 SITUATIONS REQUIRING CORRECTIVE ACTION

The following situations are *examples* of where a Corrective Action is required:

- The use of an un-approved modification to a WPP sampling and analytical standard operating procedure or a WES Laboratory analytical method.
- An error in calculation, transcription, rounding, or use of significant figures that cannot be immediately corrected at WPP or WES laboratory, that results in reporting inconsistencies, that has occurred repeatedly or that is part of data reducing software. See Section 4 for procedures for issuance of Errata.
- Any sampling or laboratory health and safety policy or procedure that is not being followed or incorporated into the daily routine at WPP.
- Mishandling of a sample or its associated documentation during collection, preservation, storage, transport, transfer and analysis that was not immediately corrected and that could adversely affect the sample's integrity and the final analysis results.
- The reporting of data that has not met the required data quality objectives which has not been explained by a data qualifier.
- The use of reporting or detection limits that have not been established in advance by the WPP monitoring coordinator and WES laboratory.
- Frequent omissions or erroneously entered information on WPP field sheets, laboratory chain of custody forms and laboratory logbooks required for traceability and defensibility of data.
- The development of unfavorable trends discovered during review of laboratory data.
- Unacceptable results on performance evaluation samples.
- Deficiencies discovered during the course of an internal audit.

2.0 CORRECTIVE ACTION PROCEDURES



Regardless of the type of situation warranting a corrective action, the following generalized steps should be followed to ensure a complete and systematic response to each inconsistency. (The Corrective Action Initiation Form found in the appendix of this document can be used to document the nature of the problem and its resolution, if needed.)

- a) **IDENTIFY AND DOCUMENT PROBLEM** in a timely fashion via direct communication with WPP Quality Control staff (pers. comm., e-mail or corrective action form, as applicable)
- b) **COORDINATE AND COMMUNICATE WITH ALL PARTIES:** WPP QC staff will direct requests/discussion to the appropriate contacts (e.g., monitoring coordinator, WES, etc.) and work to develop a corrective action.
- c) **DEVELOP A CORRECTIVE ACTION APPROACH/PLAN:** WPP QC staff shall take responsibility for development and approval (concurrence from all involved parties) of an appropriate corrective action plan.
- d) **IMPLEMENT CORRECTIVE ACTION(S):** In concert with involved parties, WPP QC staff shall implement (and direct staff tasks, as appropriate) agreed-on corrective action(s). Ensure that there are no un-resolved issues, and that the action(s) has resulted in a complete resolution.
- e) **DOCUMENT CORRECTIVE ACTION TAKEN:** When the required action(s) has been performed, WPP QC staff shall use the CA form or other mechanism to record the results of the corrective action and identify any data that has been changed. Ensure that no inconsistencies remain (e.g., database and paper records are identical, appropriate errata have been issued, auditing reveals SOP-related issues have been rectified, etc.). This documentation will be placed in the appropriate permanent file.

3.0 PROCEDURES FOR ISSUANCE OF ERRATA

- a) Generate a complete list of required “red line” changes to final documents, in order to make the document more accurate/complete.
- b) Take Steps 3a-c, as outlined above, to generate a draft Errata sheet(s) for recommended changes to reported documents.
- c) Upon concurrence of all involved parties re: recommended changes, print out final errata sheet(s) for insertion into printed in-house copies of the document.
- d) Then, make all necessary changes to the final copy of the document in question using “strikethrough and replace” and “colored text” techniques. Save the new document (as revised) and errata sheet(s) in the appropriate W/WPP directory.
- e) When all changes based on the approved errata sheet(s) have been made to the final document, forward the new hard copy document and errata sheet(s) to



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appropriate parties, such as known old-copy holders, State libraries, regional offices, etc.

- f) Send the new (revised) document to BRP/DEP staff for replacement of the internet web version.



Appendix-A

CORRECTIVE ACTION INITIATION FORM

(front page)

(To be completed by Originator)

Initiator: _____ Date: _____ CAI#: _____

Description of the problem:

Pertinent Information/data:

(To be completed by Monitoring Coordinator/QA/QC Officer)

Operations/data affected:

Corrective Action Plan:

Estimated Corrective Action Completion Date: _____

Approval of the Corrective Action Plan:

Initiator (date): _____



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Monitoring Coordinator (date): _____

QA/QC Officer (date): _____

CORRECTIVE ACTION INITIATION FORM

(back page)

Results of the Corrective Action:

Data Corrected:

Date Corrected: _____

Acceptance of the Corrective Action:

Monitoring Coordinator (date): _____

QA/QC Officer (date): _____



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