Clarification of Requirements for Documentation Deliverables as a Result of Maintenance at CO-OPS Measurement System Stations

Procedure Number: SOP 6.3.3.1
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1. **Title:** Clarification of Requirements for Documentation Deliverables as a Result of Maintenance at CO-OPS Measurement System Stations

2. **Purpose**

This SOP addresses the deliverables and handling of the general documentation and metadata requirements for activities of installation, upgrade, maintenance, and/or removal of CO-OPS field systems. A site report is required for any change at a CO-OPS field station that results in a change in the metadata to be stored in the database.

3. **Background/History**

ED/COET is the steward of the documentation describing the all components and work performed at water level, meteorological/ancillary stations, and current meters for the CO-OPS DMS metadata database. It is their responsibility to ensure the documentation is complete and of a high quality. Metadata is required to completely describe the data used for all of CO-OPS products, and field submitted documentation is the source of all this metadata. These procedures are designed to ensure that proper station documentation is being performed during each type of maintenance event and being submitted to ED/COET by field parties and contractors. This will ensure that the CO-OPS DMS metadata database is complete and supported by the latest, highest quality documentation provided by field personnel and contractors.

4. **Scope/Applicability**

All CO-OPS personnel and CO-OPS contracted personnel are required to provide documentation that will be entered into the OceanMD database. This documentation requirement provides that the most accurate metadata is being applied to all CO-OPS sensors entered into the DMS database. Ensuring that the highest quality data is collected and producing a high quality product for the CO-OPS users.

5. Main Processes

24 Hour Notification: A one day site report, one day eSite report, or email stating the critical information required to configure sensors installed at water level, currents, or meteorological stations. A level abstract must be submitted if levels were run.

Preliminary Documentation: This includes all the required documentation that needs to be submitted to CO-OPS within 30 days or as stipulated in the contract from the completion of the annual maintenance, installation, removal, routine or emergency maintenance.

For current meter stations, this includes all the required documentation that needs to be submitted to CO-OPS within five (5) working days of or as stipulated in the contract from the completion of the annual maintenance, installation, removal, routine or emergency maintenance.

Revised Final Documentation: This includes all the required documentation that has been revised after OET and the Task Manager provide comments and the deficiencies in the 30-day preliminary documentation have been corrected and resolved. If there are no deficiencies in the 30-day preliminary documentation, then that documentation can be designated as 30-day final documentation. Revised final documentation must be submitted to CO-OPS within 10 days of notification of deficiencies.

For current meter stations, this includes all the required documentation that has been revised after COET and Task Manager provide comments and the deficiencies in the 5-day preliminary documentation have been corrected and resolved. If there are no deficiencies in the 5-day preliminary documentation, then that documentation can be designated as the final documentation.

These procedures are subjected to the ***CO-OPS Evaluation Criteria for Water Level Station Documentation*** detailed in SOP 6.3.3.3 ***and the CO-OPS Evaluation Criteria for Real Time Current Meter Documentation*** detailed in SOP 6.3.3.4 The procedures are repeated during each revision of the documentation received after each type of maintenance event.

6. Detailed Sub-Processes/Checklists

Maintenance Events Requiring Submission of a Site/Station Report:

- Station installations and removals
- Annual inspections: A complete inspection or any portion which is conducted separately, e.g. diving trip or stability check leveling only
- On-site station repairs or upgrades
  - Equipment or Infrastructure upgrades of any type
  - Cleaning or repair of sensors, wells, brackets, sumps, orifices (apart from an annual inspection)
  - Replacement of any DCP, sensor, batteries, or ancillary equipment (anything with serial numbers)
  - Addition of redundant DCP,sensor or component
  - Change of critical metadata such as contact information, security clearances, etc.
- Minor repairs to non-sensor components
- Remote station repairs via phone or IP
  - Upload of new code, change in GOES parameters or offsets, etc. Use comments field to document changes to setups which do not have specific fields in the site report.

Maintenance Events Reported to CO-OPS via Monthly Activity Log to Task Manager (no site report required):

- Remote login in via phone or IP solely to check status

7. Quality Assurance/Control

ED/COET and Task Managers are responsible for the quality assurance of the documentation.

8. Management/Responsibility

ED/COET and Task Managers are responsible for maintaining and updating this SOP.