\\Ares\Environmental Data Validation\Turbidity\Turbidity (ISO)\

Logsheet Loader

Processing Period and Batch Number

Check Hydrometric and Provisional Archive

Chits: Last inspection previous batch – latest inspection

Check all chits present/correct

Batch folder: Copy in Docs and label batch #

Create new Hilltop file (*batch#.hts*) in batch folder

Hilltop <SiteName>_Raw file \\ares\Original\...\<SiteCode>.hts

Raw Turbidity (ISO)
Site Code_Raw

Check data from: 1) Archive: Water Quality (keep QC) 2) Archive: Sampler Provisional and QC these inspections as 200

Collate the Processing Information

Load Inspections Check data, "Null" for inspections with no check data (main inspection time); load any comments applicable to the data source.
Non-detect inspections used to indicate when staff are on site (and potential changes made to code/logger, the data source… etc)

WL and flow from Hydrometric Archive then Provisional Archive

Turbidity Backup: only located for some sites

Logger code and Signature

Turbidity and Sediment from Archive:
Water Quality (should have a QC),
Archive: Sampler Provisional (QC 200)

Logsheet Loader
Check any Non-Conformance for any pertinent information to the site and attach to the processing batch

Field Inspections
- Photocopy Inspection Chits
- Check Logsheet Loader and field inspection chits are correct
- Verify WQ samples and times (esp AS Runs and remove DI)

Copy raw Turbidity (ISO) and Turbidity Backup to **Working** file

Run spike/gap filter – Hidden Gap Marker

Load check data from Logsheet Loader into Turb ISO

Clean Turbidity Backup, QC all data as 350 (cautionary/unverified)

Run Virtual Measurements and transform into different sites (therefore always copying in original as VMs adjust with as you adjust your data)

1hr median filter – transform and QC 600

3hr minima VM – transform and QC 500 → Working_min3hr

6hr minima VM – transform and QC 400 → Working_min6hr

12hr minima VM – transform and QC 300 → Working_min12hr

Editing the data

Copy good information to **Corrected** → Comment in Audit Trail/Comment Sheet all adjustments as made

Copy to **Ramped** ← Ramped is where synthetic: backup data (Turbidity EPA) is transformed to ISO, QC 350.
Cleaning at inspection, is ramped down due to bio-fouling QC 400.

Copy to **Synthetic** → Comment in Synthetic gaps/why where applicable – QC 100 any gaps which cannot be filled

Is there synthetic data?

Yes

Copy in Synthetic Data and QC

No

Leave gaps and file ready to fill when synthetic record has been generated → This leaves gaps to fill for Synthetic record when it has been generated from the clean data

Copy data to final file
Site Code

Quality Code data (including check data)

Copy to the **Provisional Archive**

Update Logsheet Loader/CDT

Update Master spreadsheet and sensor performance

Finish paper work and submit for Review

Print off to hand in:
1. URF
2. FDT
3. Processing Register
4. Batch Comments
5. Final Plot + QC
6. Raw/Final/Audit

Also to be included:
7. Turbidity and Sediment samples list from WQ archive
8. Chits with any corrections made on them (and noted on the original chits as well as the logsheet loader)
9. Any relevant non-conformances

Quality Code NEMS - Deviation from validation:

The check/validation samples are indicative of the quality of the data.
From the Register (comparison of point /lab verified samples and in stream continuous data)

Below 20FNU the Absolute Difference between validation and continuous record:
600 < 1 FNU,
1 ≥ 500 < 3 FNU,
400 ≥ 3 FNU

Above 20FNU –the Relative Difference between validation and continuous record:
600 ≤ 5% ,
5% > 500 < 15%
400 ≥ 15%

550 Adjustments used to less 3 hours
500 3hr min low pass filter, 1hr median filter (less 750 FNU on a recession
400 6hr min low pass filter, Ramp correction for upward biofouling
350 Synthetic: Backup – Turbidity
300 12hr min low pass filter, Synthetic Record
200 Synthetic – gaps awaiting insert when synthetic record generated (3years continuous record to generate)
100 Missing Record