Data Upload & Evaluation Tool

NTWG – 20 February 2013

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Schedule

- 19 February 2013
  - DUET to Production Mode
  - http://duet.chesapeakebay.net/
- 15 March 2013
  - WY2012 NTN initial data submittals uploaded to DUET
- 31 March 2013
  - WY2012 NTN data submittals accepted via DUET and imported into CBP WQ database
- 15 April 2013
  - WY2012 NTN data provided to USGS for analyses

2012 Data Upload Guidance

- Submittal Templates
- DUET Data Submittal Lookup Tables
  - Dec. 14, 2012 document
- DUET Users Guide
- MDL / RL Tables
- Consistency Check Table

DUET Users Guide

- Data Upload and Evaluation Tool (DUET) User Guide
  - Version 1.2
  - Prepared by Vistronix, Inc.
- This guide provides DUET background, user login information, and interface navigation instructions for NTN data providers/submitters.
  - System Tabs (upload file, reload file, view status, and admin) functionality discussed.

MDL and PQL Tables

SOURCE	LAB	PARAM-ETER	CIMS METHOD CODE	LAB METHOD	FILTER	MDL	Units	MDL START_ DATE	MDL END_ DATE	Report-ing Level	RL START_ DATE	RL END_ DATE
USGSWV WSC	**USGSNWQL**	TN	L01	USGS (2003). NWQL Method I-4650-03, Methods of Analysis by the U.S. Geological Survey National Water Quality Laboratory— Evaluation of Alkaline Persulfate Digestion as an Alternative to Kjeldahl Digestion for Determination of Total and Dissolved Nitrogen and Phosphorus in Water.	---		mg N/L	TBP	TBP	TBP	TBP	TBP
USGSWV WSC	**USGSNWQL**	NH4F	L02	USGS (1993). Method I-2522-90. Fishman, M.J., ed., 1993, Methods of analysis by the U.S. Geological Survey National Water Quality Laboratory--Determination of inorganic and organic constituents in water and fluvial sediments: U.S. Geological Survey Open-File Report 93-125, 217 p.			mg N/L	TBP	TBP	TBP	TBP	TBP
USGSWV WSC	**USGSNWQL**	NO2F	L01	USGS (1993). Method I-2540-90. Fishman, M.J., ed., 1993, Methods of analysis by the U.S. Geological Survey National Water Quality Laboratory--Determination of inorganic and organic constituents in water and fluvial sediments: U.S. Geological Survey Open-File Report 93-125, 217 p.			mg N/L	TBP	TBP	TBP	TBP	TBP
USGSWV WSC	**USGSNWQL**	NO23F	L01	USGS (1993). Method I-2545-90. Fishman, M.J., ed., 1993, Methods of analysis by the U.S. Geological Survey National Water Quality Laboratory--Determination of inorganic and organic constituents in water and fluvial sediments: U.S. Geological Survey Open-File Report 93-125, 217 p.			mg N/L	TBP	TBP	TBP	TBP	TBP
USGSWV WSC	**USGSNWQL**	TP	L04	EPA Method 365.1, Rev. 2.0 (1993). Determination of Phosphorus by Semi-Automated Colorimetry, in Methods for the Determination of Inorganic Substances in Environmental Samples. EPA 600/R-93/100.	---		mg P/L	TBP	TBP	TBP	TBP	TBP

Consistency Checks

- Parameter Consistency
  - Agency checks for parameter agreement
  - Customized for each data collector: 19 sets
  - Inconsistent results not reported, only "NQ" problem code
    - NQ ⟶ Difference not within analytical precision
  - Exceptions:
    1. Not applied to lab results between MDL and PQL/RL ["G"]
    2. Need to report all duplicate results even if inconsistent

Parameter Consistency Checks

AGENCY	SOURCE	STATION_ TYPE	EVENT_ TYPE	STATION	CONSISTENCY CHECKS		
DEDNREC	DEDNREC	Primary	R, RSI, S, ONS or OS	304191, 302031	[NH4W] + [NO23W] ≤ [TN]	[PO4F] ≤ [TP]	[DOC] ≤ [TOC]
					[NH4W] ≤ [TN]	[NO23W] ≤ [TN]	
USGSWV	USGSWV	Primary	R, RSI, S, ONS or OS	01604500, 01608500, 01616500, 01613030, 01616400, 01611500, 01618100	[NH4F] + [NO23F] ≤ [TN]	[NH4F] ≤ [TN]	[NO23F] ≤ [TN]
					[PO4F] ≤ [TP]	[NO2F] ≤ [NO23F]	
USGSWV	USGSWV	Primary	R, RSI, S, ONS or OS	01595300, 01614000, 01636500	[NH4F] + [NO23F] ≤ [TDN]	[NO2F] ≤ [NO23F]	[PO4F] ≤ [TDP]
					[TDP] ≤ [TP]		
					[NH4F] ≤ [TDN]	[NO23F] ≤ [TDN]	
SRBC	SRBC	Primary	R, RSI, S, ONS or OS	01502500, 01503000, 01529500, 01511500	[NH4W] ≤ [TKNW]	[NH4F] ≤ [TKNF]	[PO4F] ≤ [TDP]
					[TKNF] ≤ [TKNW]	[TDP] ≤ [TP]	
					[NO23F] ≤ [NO23W]	[NH4F] ≤ [NH4W]	
SRBC	SRBC or NYSDEC	Primary	R, RSI, S, ONS or OS	01515000, 01531000	[NH4W] ≤ [TKNW]	[NH4F] ≤ [TKNF]	[PO4F] ≤ [TDP]
					[TKNF] ≤ [TKNW]	[TDP] ≤ [TP]	
					[NO23F] ≤ [NO23W]	[NH4F] ≤ [NH4W]	
MDDNR	MDDNR	Primary	R, RSI, S, ONS or OS	TUK0181, BEL0053, DER0015, GUN0258, NPA0165, GWN0115, PXT0972, TF1.2, GEO0009, WIL0013, ANT0047, CAC0148, MON0546, LXT0200, MGN0062, NWA0016, WCK0001, MKB0016, CVA0046, WIL0065	[NH4F] + [NO23F] ≤ [TDN]	[PO4F] ≤ [TDP]	[NO2F] ≤ [NO23F]
					[NH4F] ≤ [TDN]	[NO23F] ≤ [TDN]	
MDDNR	USGSMD	Primary_RIM	R, RSI, S, ONS or OS	01491000, 01578310, 01594440, 01646580	[NH4F] + [NO23F] ≤ [TDN]	[TDP] ≤ [TP]	[PO4F] ≤ [TDP]
					[NO2F] ≤ [NO23F]	[VSS] ≤ [TSS]	[HPO4F] ≤ [TDP]
					[PIC] ≤ [PC]	[NO23F] ≤ [TDN]	[NH4F] ≤ [TDN]

Issues for 2013 Data Collection

- Changes in:
  - Stations : New, upgraded or discontinued
  - Parameters Analyzed
  - Lab Methods, Detection limits

  - Necessary for DUET *completeness* & *calculated parameter* routines

- Implement 2013 QC Sampling Design
  - Blanks: 1 field blank/station/year
  - Duplicates: 2 duplicate pairs/station/year, up to 24 pairs

QC Sample Guidance

- Drafted & Reviewed by Action Team
- Final Draft – Feb. 20, 2013