Notes – CEDEN User Group Meeting

Date: February 17, 2022

Note: Most of the meeting was recorded and is available on <u>YouTube</u>.

- 1. Chemistry and field data submitted through ceden.org that have not yet been loaded to CEDEN have been made available on the state's <u>Open Data Portal</u>.
- 2. The group discussed the proposal of adding an analyte business rule for requesting new analytes related to microbial source tracking (MST). It was suggested that the primer sequence be recorded in the analyte description field. Accordingly, the business rule to be added to the Analyte Business Rules tab of the Vocabulary Request Template is as follows:

Microbial source tracking (MST) analytes will be Name	formatted in the following manner Description
[Target microbial population], [Host of target microbial population] ([Assay name or primer set])	[Host of target microbial population] [Target microbial population], Assay Name: [Assay Name], [forward primer sequence],[reverse primer sequence]
Example: Name	Description
Bacteroidales, Porcine (Pig2Bac)	<i>Porcine Bacteroidales, Assay name: Pig2Bac,</i> 5' GCATGAATTTAGCTTGCTAAATTTGAT 3', 5' ACCTCATACGGTATTAATCCGC 3'

- Isotope Dilution Analysis vocabulary business rules will be added to the Vocabulary Request Template. The data entry portion of the business rules will be added to the data entry guidance. See below for the rules.
- The group furthered the discussion on passive sampler business rules. The rules focus on recording mass per sorbent but have been expanded to describe recording of aqueous concentrations for those using semipermeable membrane devices (SPMDs) and the <u>USGS</u> <u>calculator</u>.
- 5. The next meeting is scheduled for March 17.

CEDEN Business Rules: Isotope Dilution Analyses

This document provides business rules for recording analytical results in CEDEN derived from methods that use isotope dilution analysis (Isotope Dilution methods). Isotope dilution methods use signal ratios of added isotopically-labelled analyte (isotope dilution analogues) to unknown target analyte to measure analyte concentrations.

Naming Conventions for Isotope Dilution Analogues

The proposed naming conventions are similar to those for surrogates. The isotopically-labelled analyte name shall include the parenthetical abbreviation for isotope dilution analogue: (IsoDilAnalogue). The description shall include the phrase "Isotope Dilution Analogue" with a colon at the beginning of the description.

Example:

Analyte Name: Perfluorooctanesulfonic acid-13C8 (IsoDilAnalogue) Analyte Description: Isotope Dilution Analogue: Perfluorooctanesulfonic acid-13C8

Results Entry

- For analytes quantified via a signal ratio to an Isotope Dilution Analogue, add the QA Code of IDA
- For analytes that were not quantified using a signal ratio to an Isotope Dilution Analogue but were analyzed via an Isotope Dilution Method, no QA Code is needed to indicate that it was quantified using the calibration curve
- Isotope Dilution Analogue results must be reported with units of % recovery.
- If the isotopically-labelled analyte is used as a traditional internal standard (not correcting target analyte results), then the internal standard results should not be reported. Only the % recovery results of the IDA should be reported.
- Use the QA Code GIDA when the recovery was not within control limits on both the Isotope Dilution Analogue and the target analyte(s) that were quantified with that IDA.

QA Code

QA Code	QA Name
IDA	Isotope Dilution Analogue corrected
GIDA	Isotope Dilution Analogue recovery not within control limits