

**Proposal for user feedback on Detection Limits and Project IDs handling in the STORET Warehouse:**

**Detection Limits:**

- An issue with detection limits that must be addressed in order to properly serve out the data from the STORET Warehouse is that per the WQX data submission rules multiple detection, quantification and thresholds limits may be associated with one result record.
- To avoid duplicating results with multiple detection limit values, EPA is recommending that a new column be added to the STORET Warehouse that will be available for download. This will **not** change the way data submissions occur. The new column will be called “All Result Detections/Thresholds”, and will include a concatenated string of all result detection limits, quantification limits and thresholds that users provide. The string will include all of the different detection limits, quantification limits or thresholds, separated by semicolons, with the limit description, value and unit delimited with the ‘~’ (tilde) symbol. The example below shows the various combinations of limits that might occur and how they would be served out:

Detection Limit	Detection Limit Unit	Detection Limit Descript	Lower Quantification Limit	Upper Quantification Limit	All Result Detections/Thresholds
0.002	mg/l	Method Detection Level			Method Detection Level~0.002~mg/l;Drinking Water Maximum~.038~mg/l;Sample-specific min detect conc~0.002~mg/l
0.003	mg/l	Instrument Detection Level			Instrument Detection Level~0.003~mg/l
0.006	mg/l	Method Detection Level	0.005 mg/l		Method Detection Level~0.006~mg/l;Lower Quantitation Limit~0.005~mg/l
			0.047 mg/l	0.013 mg/l	Lower Quantitation Limit~0.047~mg/l;Upper Quantitation Limit~0.013~mg/l
0.014	mg/l	Upper Reporting Limit			Upper Reporting Limit~0.014~mg/l;Lower Reporting Limit~0.048~mg/l

- The STORET Warehouse will still make use of the existing detection limit columns in addition to the new “All Result Detections/Thresholds” column. The rationale for this is that older data submitted via distributed STORET will also still be output in these columns. The following rules will dictate how these columns will get populated with WQX data submissions:
  - STORET Warehouse will output the WQX Detection Quantitation Limit Type with the lowest unique identifier within the STORET Warehouse “Detection Limit”, “Detection Limit Unit” and “Detection Limit Description” fields. The unique identifiers are available via the publically available WQX domain values service: [http://www.epa.gov/storet/wqx/wqx\\_getdomainvalueswebservice.html](http://www.epa.gov/storet/wqx/wqx_getdomainvalueswebservice.html). For example, if “Method Detection

Level” as well as “Sample-specific min detect concentration”, “Method Detection Level” are provided, they will be output in the fields since it has a lower unique identifier (Method Detection Limit UID=2 vs. Sample-specific min detect concentration UID=11)

- Limits associated with “Lower Quantitation Limit” and “Upper Quantitation Limits” as the WQX Detection Quantitation Limit Type will be output of the STORET Warehouse only under the fields “Lower Quantification Limit” and “Upper Quantification Limit”, without a description given that the columns are self identifying.

**Project IDs:**

- An issue with Project IDs that must be addressed in order to properly serve out the data from the STORET Warehouse is that per the WQX data submission rules, multiple Projects may be associated with an Activity and the Activity’s associated Results.
- In order to handle this issue, EPA proposes that when a result is associated to more than one project, the Project IDs are concatenated within the “Beach ID/Project ID” column within the STORET Warehouse output file. The delimiter between Project IDs will be a semicolon. The example below provides a snapshot of what this would look like:

Org ID	Beach ID/Project ID	Org Name
WQXTEST	PROJECT1;PROJECT2;PROJECT3	TEST Account for USEPA STORET Help Desk Support
WQXTEST	PROJECT1;PROJECT2;PROJECT3	TEST Account for USEPA STORET Help Desk Support
WQXTEST	PROJECT1;PROJECT2;PROJECT3	TEST Account for USEPA STORET Help Desk Support
WQXTEST	PROJECT1;PROJECT2;PROJECT3	TEST Account for USEPA STORET Help Desk Support
WQXTEST	PROJECT1;PROJECT2;PROJECT3	TEST Account for USEPA STORET Help Desk Support
WQXTEST	PROJECT1	TEST Account for USEPA STORET Help Desk Support
WQXTEST	PROJECT1	TEST Account for USEPA STORET Help Desk Support
WQXTEST	PROJECT1	TEST Account for USEPA STORET Help Desk Support
WQXTEST	PROJECT1	TEST Account for USEPA STORET Help Desk Support
NARSTEST	PROJECT1	TEST Account for USEPA STORET Help Desk Support
NARSTEST	PROJECT1	TEST Account for USEPA STORET Help Desk Support