

elementFormDefault=
version="3.0">
<xsd:include schemaL
- <!--
Start of Schema Header
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<xsd:annotation>
<xsd:documentation>
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<xsd:documentation>
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encoding="UTF-8" ?
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ace="http://www.e
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<http://www.
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Schema Name: NEI
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Description: The NEI
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ding="UTF-8" ?>
http://www.epa.gov/exchangenetw
/www.w3.org/2001/XMLSchema"
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t="qualified" attributeFormDefault="unq
aLocation="EN_NEI_Common_v3_0.xsd
ion>
Schema Name: NEI XML 3.0
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Current Version
/www.epa.gov/exchangenetwork<
>
Description: The NEI XML 3.0 Poin
t:documentation>
Application: Varies by
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Water Quality Exchange

Flow Configuration Document

Version 2.1

August 3, 2010

Developed for:

United States Environmental Protection Agency
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- 1) Resubmit the entire dataset again (after correcting the data that originally failed). In this case, any data that originally loaded successfully will now be treated as an "Update". Any data that originally failed will be treated as an "Insert".
- 2) Submit a new, corrected, dataset that only includes the components that originally failed. This new file will be more efficient to process because it is likely much smaller than the complete data set.

4.1.1 Data Rules

The following is a summary of the data validation rules enforced on the XML submission document.

1. When ElectronicAddressText or ElectronicAddressTypeName is reported, both must be reported.
2. When TelephoneNumberText or TelephoneNumberTypeName is reported, both must be reported.
3. When AddressText or AddressTypeName is reported, both must be reported.
4. When HorizontalCollectionMethodName is "Interpolation-Map", SourceMapScaleNumeric must be reported.
5. When VerticalMeasure's MeasureValue is reported, the following also must be reported:
VerticalMeasure's MeasureUnitCode,
VerticalCollectionMethodName,
VerticalCoordinateReferenceSystemDatumName.
6. Either ProjectDescriptionText or Project's AttachedBinaryObject must be reported.
7. Activity Depth/Height can be reported in only one of the following two ways (but not both):
 - a. Specific depth using ActivityDepthHeightMeasure's MeasureValue.
 - b. Depth Range using ActivityTopDepthHeightMeasure's MeasureValue and ActivityBottomDepthHeightMeasure's MeasureValue.
 - i. This method must be used when ActivityTypeCode is "Sample-Integrated Vertical Profile".
8. When ActivityTypeCode contains the word 'Logger', DataLoggerLineName must be reported.
9. When ActivityTypeCode contains the word 'Sample', SampleCollectionMethod must be reported.
10. When ActivityMediaName is "Tissue" then BiologicalIntentName must also be "Tissue" (and visa-versa)
11. When ActivityMediaName (or BiologicalIntentName) is "Tissue", then SampleTissueAnatomyName must be reported.
12. When ActivityMediaName is "Biological" then AssemblageSampledName must be reported
13. When ResultDetectionConditionText is 'Not Detected', 'Present Above Quantification Limit' or 'Present Below Quantification Limit', then DetectionQuantitationLimitTypeName and DetectionQuantitationLimitMeasure must be reported.
14. Either ResultMeasure's ResultMeasureValue or ResultDetectionConditionText must be reported, but not both.
15. When ResultMeasure's ResultMeasureValue is reported, CharacteristicName and ResultStatusIdentifier must be reported.
16. When DetectionQuantitationLimit's MeasureValue is reported, DetectionQuantitationLimit's MeasureUnitCode must be reported.
17. ActivityDescription's MonitoringLocationIdentifier may be required depending on the value provided for ActivityTypeCode. See the domain value list for ActivityTypeCode for more information.
18. ResultAnalyticalMethod may be required depending on the value provided for ActivityTypeCode. See the domain value list for ActivityTypeCode for more information.
 - a. However, ResultAnalyticalMethod is never required if BiologicalIntentName is "Individual", "Population Census", "Frequency Class", or "Group Summary"
19. ResultSampleFractionText may be required depending on the value provided for CharacteristicName. See the domain value list for CharacteristicName for more information.
20. ResultAnalyticalMethod's MethodIdentifierContext must either match a value from the AnalyticalMethodContext domain list or it must be the same as the value for the OrganizationIdentifier provided in the submission file.
 - a. If the MethodIdentifierContext matches a value from the domain list, then the MethodIdentifier must also match a value from the AnalyticalMethod domain list (for that Context). Furthermore, MethodName,

MethodQualifierTypeName, and MethodDescriptionText are not required and will be ignored (since only the Identifier and IdentifierContext are needed to uniquely identify the Analytical Method).

- b. If the MethodIdentifierContext matches your OrganizationIdentifier (indicating your own method), then MethodIdentifier and MethodName are both required, but do not need to match a value from the domain list (since they are your own). Additionally, MethodQualifierTypeName and MethodDescriptionText can be provided, but are optional, to further describe the Analytical Method used.
21. ProjectIdentifier, MonitoringLocationIdentifier, ActivityIdentifier, IndexIdentifier and ActivityGroupIdentifier must be unique within an Organization. The value for each of these identifiers may occur only once in a submission file.
 - a. Unique identifiers are treated as case-insensitive by WQX. For example, the following three identifiers would be treated as identical: "Mx571", "mx571", "MX571".
22. If Sample Preparation block is reported, then either ChemicalPreservativeUsedName or ThermalPreservativeUsedName must be reported.
23. ResultMeasure's ResultMeasureValue may be constrained to a list of domain values depending on the value provided for CharacteristicName. See the domain value list for CharacteristicName for more information.
24. If a numeric value is reported for ResultMeasureValue, then ResultMeasure's MeasureUnitCode and ResultValueTypeName are required.
 - a. The exception to this is when the ResultMeasureValue is a Characteristic Pick List Value. These do not have units.
25. If a CountyCode is reported then a StateCode must also be reported.
26. If NetTypeName = "Net/Horizontal Tow" then BoatSpeedMeasure is required.
27. If NetTypeName is reported then the SampleCollectionEquipmentName must be one that relates to that type of equipment.
28. ActivityMetric's MetricTypeIdentifierContext must either match a value from the MetricTypeContext domain list or it must be the same as the value for the OrganizationIdentifier provided in the submission file.
 - a. If the MetricTypeIdentifierContext matches a value from the domain list, then the MetricTypeIdentifier must also match a value from the MetricType domain list (for that Context). Furthermore, MetricTypeName, MetricTypeCitation, MetricTypeScaleText, and FormulaDescriptionText are not required and will be ignored (since only the Identifier and IdentifierContext are needed to uniquely identify the MetricType).
 - b. If the MetricTypeIdentifierContext matches your OrganizationIdentifier (indicating your own metric), then MetricTypeIdentifier and MetricTypeName are both required, but do not need to match a value from the domain list (since they are your own). Additionally, MetricTypeCitation, MetricTypeScaleText, and FormulaDescriptionText can be provided, but are optional, to further describe the Metric Type used.
29. If BiologicalIntentName is "Group Summary" then GroupSummaryCountWeight must be reported.
30. If BiologicalIntentName is "Frequency Class" then Result's CharacteristicName must be "Count"
31. If BiologicalIntentName is "Population Census" then Result's CharacteristicName must be "Count" or "Total Sample Weight"
32. FrequencyClassDescriptorUnitCode may be required depending on the value provided for FrequencyClassDescriptorCode. See the domain value list for FrequencyClassType for more information.
33. FrequencyClassInformation's LowerClassBoundValue and UpperClassBoundValue may be required depending on the value provided for FrequencyClassDescriptorCode. See the domain value list for FrequencyClassType for more information

