

Changes to Emissions XML Schema Version 1.7 Updated for the 2021 Q3 Release

The purpose of this document is to list the changes that have been made for Version 1.7 of the Emissions XML Schema. The document is organized in the following order:

- Changes to complex elements.
- Changes to validation types listed in alphabetic order.

I. Complex Data Element

The following elements were added:

- Added the element NSPS4TSummaryData as a child of Emissions. This new complex element includes the following elements:

Element	Validation Type
StackPipeID	RequiredStackPipeType
UnitID	RequiredUnitType
CO2EmissionStandardCode	NSPS4TEmissionStandardCodeType
MODUSValue	NSPS4TEmissionRateValueType
MODUSUOMCode	NSPS4TMODUSUOMCodeType
ElectricalLoadCode	NSPS4TElectricalLoadCodeType
NoCompliancePeriodEndedIndicator	IndicatorType
NoCompliancePeriodEndedComment	CommentType

- Added the complex data element NSPS4TCompliancePeriodData as a child of NSPS4TSummaryData. This new complex element includes the following elements:

Element	Validation Type
BeginYear	OptionalReportingYearType
BeginMonth	MonthType
EndYear	OptionalReportingYearType
EndMonth	MonthType
AverageCO2EmissionRate	NSPS4TEmissionRateValueType
CO2EmissionRateUOMCode	NSPS4TCO2EmissionRateUOMCodeType
PercentValidOpHours	StrictPercentType
ViolationOfCO2StandardIndicator	IndicatorType
ViolationOfCO2StandardComment	CommentType

- Added the complex data element NSPS4TFourthQuarterData as a child of NSPS4TSummaryData. This new complex element includes the following elements:

Element	Validation Type
AnnualEnergySold	NSPS4TEnergyValueType
AnnualEnergySoldTypeCode	NSPS4TElectricalLoadCodeType
AnnualPotentialElectricOutput	NSPS4TEnergyValueType

II. Validation Types

The following simple type was added:

- Added simple type CommentType which is used to validate NoCompliancePeriodEndedComment in NSPS4TSummaryData, and ViolationOfCO2StandardComment in NSPS4TCompliancePeriodData. Validation is a 3500-character string.
- Added enumeration values of 46, 47, 48 to MODCCodeType which is used to validate MODCCode in MonitorHourlyValueData.
- Added enumeration values of 43 and 44 to MODCCodeType which is used to validate MODCCode in SorbentTrapData.
- Added simple type MonthType which is used to validate BeginMonth and EndMonth in NSPS4TCompliancePeriodData. Enumeration values are 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12.
- Added simple type NSPS4TCO2EmissionRateUOMCodeType which is used to validate CO2EmissionRateUOMCode in NSPS4TCompliancePeriodData. Enumeration values are KGMWH, LBMMBTU, LBMWH.
- Added simple type NSPS4TElectricalLoadCodeType which is used to validate ElectricalLoadCode in NSPS4TSummaryData, and AnnualEnergySoldTypeCode in NSPS4TFourthQuarterData. Enumeration values are GROSS, NET.
- Added simple type NSPS4TEmissionRateValueType which is used to validate MODUSValue in NSPS4TSummaryData, and AverageCO2EmissionRate in NSPS4TCompliancePeriodData. Validation is an integer, 0- 99999.
- Added simple type NSPS4TEmissionStandardCodeType which is used to validate CO2EmissionStandardCode in NSPS4TSummaryData. Enumeration values are CTHIMF, CTHING, CTOLB, CTOLBNT, CTOUT, CTOUTNT, MODUS, NEW640, RCON820, RCON910.

- Added simple type NSPS4TEnergyValueType which is used to validate AnnualEnergySold and AnnualPotentialElectricOutput in NSPS4TFourthQuarterData. Validation is an integer, 0- 99999999.
- Added simple type NSPS4TMODUSUOMCodeType which is used to validate MODUSUOMCode in NSPS4TSummaryData. Enumeration values are KGMWH, LBMMBTU, LBMWH.
- Added simple type OptionalReportingYearType which is used to validate BeginYear and EndYear in NSPS4TCompliancePeriodData. Validation is a year (20)\d\d.
- Added simple type StrictPercentType which is used to validate PercentValidOpHours in NSPS4TCompliancePeriodData. Validation is a decimal (4, 1).