**SAFE DRINKING WATER INFORMATION SYSTEM FEDERAL (SDWIS FED) DATA REPORTING REQUIREMENTS (DRAFT)**

Technical Guidance



United States Environmental Protection Agency

Office of Ground Water and Drinking Water

Drinking Water Protection Division

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# Purpose

The purpose of this document is to explain which data are required to be reported from primacy agencies to EPA’s national data system, SDWIS/FED. It explains: 1) the types of data which are required for a water system and related compliance data in EPA’s national database, 2) the cardinality and permitted value options of the individual data elements, and 3) how those data are to be formatted for reporting. While violation reporting details are provided, information concerning rule compliance determination is not included in this document. That information can be found in the Implementation Guidance for each rule published by EPA.

The defined XML schemas v3.6 is used for reporting data to EPA. These schemas are described in the *SDWIS/FedRep 3.5 Requirements Document v2*. While it is the basis for the information contained in this document, the information is presented differently to facilitate data entry instructions as opposed to a systematic view of the logic. In SDWIS/FedRep (EPA’s data validation tool), data are logically grouped into three Subject Areas; Inventory, Actions, and Samples. Within each of the Subject Areas, data are further grouped into 18 separate Business Objects. This document will describe how each EPA reporting requirement can be addressed by formatting the data into the appropriate SDWIS/FedRep Business Object(s).

The pages which follow address each of the EPA Reporting Requirements and the individual data elements contained within the Business Object(s) which is(are) used to report the data to meet that specific Reporting Requirement. The minimum data set can be defined as the objects within a subject area and the elements within an object required for a submission to be complete. Data elements within each object are categorized as either “**required**”, “**conditional**”, or “**optional**”. The elements that are defined as “**required**” must be submitted with each object and are either operationally required by SDWIS/FED to process the data on a public water system (PWS) or are programmatically required by EPA to define each PWS. Those elements defined as “**conditional**” (conditionally required) must be submitted to EPA based on defined business rules. “**Optional**” elements are those which are not required but whose reporting is desired by EPA.

While not all data elements in SDWIS/FED are themselves mandatory reporting requirements, they may be mandatory for the Business Object when reporting optional data. For further details on each field refer to the *SDWIS/FedRep 3.5 Requirements Document v2*.

# Minimum Reporting

The table below lists each ***EPA Reporting Requirement***, which ***Business Object(s)*** are used to submit those data, and the ***Subject Area*** (XML document) in which data should be contained. Optionally, you are encouraged to report additional data over and above the minimum EPA requirements. For example, you may choose to report information concerning other water system facility types, other types of water system contacts, non-primary service areas, or site visits other than sanitary surveys.

| **EPA Reporting Requirement** | **SDWIS/FedRep**  **Subject Area** | **SDWIS/FedRep**  **Business Object(s)** |
| --- | --- | --- |
| **1 -** Basic water system information | **Inventory** | Water System |
| **2 -** One and only one administrative contact required to be reported  **2a** - Optionally additional system contacts can be reported | **Inventory** | Legal Entity **and**  Legal Entity Affiliation |
| **3 -** One primary service area  3a – Optionally additional non-primary service areas | **Inventory** | Service Area |
| **4 -** At least one geographic area served by the water system | **Inventory** | Geographic Area |
| **5 -** All active Source Facilities | **Inventory** | Water System Facility Source |
| **6 -** Latitude/Longitude for each active, non-transient or community Source Facility | **Inventory** | Locational Detail |
| **7 -** All active Treatment Facilities | **Inventory** | Water System Facility Treatment |
| **8 -** A physical address **or**  the Latitude/Longitude for each active Treatment Facility | **Inventory** | Legal Entity **and**  Legal Entity Affiliation |
| **or** Locational Detail |
| **9 -** Each treatment associated with a Treatment Facility | **Inventory** | Treatment Data |
| **10 -** Flow relationship between Sources and Treatment Facilities | **Inventory** | Facility Flow |
| **OPTIONALLY**  **11 -** Report Other Facility Types | **Inventory** | Water System Facility Other |
| **12 -** Lead and Copper 90th Percentile Sample and Results Information | **Samples** | Sample **and**  Sample Result |
| **13 -** Lead & Copper Milestones and RTCR Corrective Actions which were not taken | **Actions** | Event Schedule Activity |
| **14 -** Sanitary Surveys and RTCR Level 1 and 2 Assessments conducted  14a – Optionally additional site visits | Site Visit |
| **15 -** Rule violations | Violation |
| **16 -** Enforcement Actions taken | Enforcement Actions **and**  Assignment Criteria |

# Reporting Basic Water System Information

Every active public water system for which the Primacy Agency has enforcement responsibility must be reported with each submission. Use the SDWIS/FedRep Object **WATER SYSTEM** (FedRep 3.5 Requirements v2, Appendix C) to report this information. Once reported, a water system may not be deleted from the database. If, since the last data submission date, the water system becomes inactive or no longer meets the classification requirements of a public water system, it must be included in the next data submission as “inactive” and must include the deactivation date. In those cases, the Water System Object is the only Inventory object that should be reported. Even though no other inventory data is required, Action and Samples subject area data should continue to be reported for both active and inactive water systems. Additional values not allowed by FedRep are found in the SDWIS Fed Data Warehouse (SFDW) as marked.

|  |  |  |  |
| --- | --- | --- | --- |
| **SDWIS/FedRep Business Object: WATER SYSTEM** (FedRep 3.5 Requirements v2, Appendix C) | | | |
| **REQUIRED DATA** | | | |
| **SDWIS/FedRep**  **Element Name** | **SDWIS/FedRep**  **XML Schema Tags** | **Comments** | **Permitted Values**  **AN - Alpha-numeric**  **N - Numeric**  **A – Alpha**  **(Length/Precision)** |
| **PWS ID** | <InventoryDataFlow>  <WaterSystems>  <WaterSystemDetails>  <PWSIdentifier> | Uniquely identifies a Public Water System. PWS ID is always prefixed with a valid United States Postal Service (USPS) State abbreviation or EPA Region code (excluding Region 03), which is then followed by a 7-character identifier unique for each PWS within that State or Region. | AN(9) |
| **PWS TYPE** | <InventoryDataFlow>  <WaterSystems>  <WaterSystemDetails>  <PWSTypeCode>  <SDWAPWSTypeCode> | A code value which classifies the type of public water system according to federal and state requirements. | **CWS** - Community Water System  **NP** - Non-Public  **NTNCWS** - Non-Transient, Non-Community Water System  **TNCWS** - Transient, Non-Community Water System  Reported in SFDW:  **U** - Unknown |
| **PWS NAME** | <InventoryDataFlow>  <WaterSystems>  <WaterSystemDetails>  <PWSNameText> | The name can be the formal, legal, or common name that is used in referring to the water system. When multiple facilities exist for the water system at different physical locations, the name identifies the means by which the system, as a whole, is generally known. | AN(80) |
| **ACTIVITY STATUS** | <InventoryDataFlow>  <WaterSystems>  <WaterSystemDetails>  <PWSActivityCode>  <SDWAPWSActivityCode> | A code value that categorizes the activity of the water system and the water system facility. | **A** - Active  **N** - Changed from public to non-public  **I** - Inactive  Reported in SFDW:  **M** - Merged with another system  **P** - Potential future system to be regulated |
| **POPULATION SERVED** | <InventoryDataFlow>  <WaterSystems>  <WaterSystemDetails>  <PopulationServedValue> | Total daily retail population served not to exceed 9 million. | N(8/0) |
| **SERVICE CONNECTIONS** | <InventoryDataFlow>  <WaterSystems>  <WaterSystemDetails>  <RetailServiceConnectionsValue> | A value that indicates the number of service connections for a water system for a particular type of service connection. | N(7/0) |
| **OWNER TYPE** | <InventoryDataFlow>  <WaterSystems>  <WaterSystemDetails>  <OwnerTypeCode>  <SDWAOwnerTypeCode> | A code value that identifies the type of owner for a public water system. | **F** - Federal government  **L** - Local government  **N** - Native American  **P** - Private  **M** - Public/Private  **S** - State government |
| **CONDITIONAL DATA** | | | |
| **SDWIS/FedRep**  **Element Name** | **SDWIS/FedRep**  **XML Schema Tags** | **Conditions** | **Permitted Values** |
| **DEACTIVATION DATE** | <InventoryDataFlow>  <WaterSystems>  <WaterSystemDetails>  <PWSDeactivationDate> | May not be future date.  Must be valued if Activity Flag set to I-Inactive. May not be valued if Activity Flag set to A-Active. | DATE(YYYY-MM-DD) |
| **NON-COMMUNITY SEASON BEGIN (MONTH AND DAY)** | <InventoryDataFlow>  <WaterSystems>  <WaterSystemDetails>  <NonCommunitySeason>  <NonCommunitySeasonBegin  MonthDay> | Must be valued for all non-community systems. May not be valued for community systems. | DATE(--MMDD) |
| **NON-COMMUNITY SEASON END (MONTH AND DAY)** | <InventoryDataFlow>  <WaterSystems>  <WaterSystemDetails>  <NonCommunitySeason>  <NonCommunitySeasonEnd  MonthDay> | Must be valued for all non-community systems. May not be valued for community systems. | DATE(--MMDD) |
| **ADDITIONAL PWS REPORTING NAME** | <InventoryDataFlow>  <WaterSystems>  <WaterSystemDetails>  <PWSAdditionalReportingDetails> <PWSAdditionalReportingElementName> | A value that indicates the type of Additional PWS Reporting data submitted | Combined Distribution System Identifier  Long Term 2ESWTR Schedule Category  Outstanding Performer  Reduced RTCR Monitoring  Seasonal Startup System  Stage 2 DBPR Schedule Category  State Source Water Program |
| **ADDITIONAL PWS REPORTING BEGIN DATE VALUE** | <InventoryDataFlow>  <WaterSystems>  <WaterSystemDetails>  <PWSAdditionalReportingDetails>  <PWSAdditionalReportingElement  Name> <PWSAdditionalReportingElement  BeginDate> | The calendar date representing when the water system began to satisfy the additional PWS reporting criteria according to state policy | DATE(YYYY-MM-DD) |
| **ADDITIONAL PWS REPORTING END DATE VALUE** | <InventoryDataFlow>  <WaterSystems>  <WaterSystemDetails>  <PWSAdditionalReportingDetails>  <PWSAdditionalReportingElementName>  <PWSAdditionalReportingElement  EndDate> | The calendar date representing when the water system no longer satisfied the Additional PWS Reporting criteria according to state policy | DATE(YYYY-MM-DD) |
| **OPTIONAL DATA** | | | |
| **Element Name** | **XML Schema Tags** | **Comments** | **Permitted Values** |
| **WHOLESALEROFWATER** | <InventoryDataFlow>  <WaterSystems>  <WaterSystemDetails>  <WaterSystemWholesalerCode> <SDWAWaterSystemWholesaleCode> | Indicates whether the water system is a wholesaler of water. | **N** - No  **Y** - Yes |
| **ADDITIONAL PWS REPORTING TEXT VALUE** | <InventoryDataFlow>  <WaterSystems>  <WaterSystemDetails>  <PWSAdditionalReportingDetails> <PWSAdditionalReportingElementTextValue> | Text value for this Additional PWS Reporting | **1** - Schedule Category 1  **2** - Schedule Category 2  **3** - Schedule Category 3  **4** - Schedule Category 4  **5** - Schedule Category 5  **All Pressurized Including Offseason** -All Pressurized Including Offseason  **Annual** – Annual  **Every 2 Months** - Every 2 Months  **N** - No  **Not Pressurized All Year** - Not Pressurized All Year  **Quarterly** - Quarterly  **Semi-Annual** - Semi-Annual  **Y** - Yes |

# Reporting One and Only One Administrative Contact

Every active public water system must have one and only one Administrative Contact which should be a person. Besides Administrative Contacts, other types of water system contacts may be reported. Use the SDWIS/Fed Object **LEGAL ENTITY** and **LEGAL ENTITY AFFILIATION** to submit this information. Reporting contacts requires the submission of records for two SDWIS/FedRep Objects; **LEGAL ENTITY** (FedRep 3.5 Requirements v2, Appendix D) and **LEGAL ENTITY AFFILIATION** (FedRep 3.5 Requirements v2, Appendix E).

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| --- | --- | --- | --- |
| **SDWIS/FedRep Business Object: LEGAL ENTITY** (FedRep 3.5 Requirements v2, Appendix D) | | | |
| **REQUIRED DATA** | | | |
| **Element Name** | **XML Schema Tags** | **Comments** | **Permitted Values**  **AN - Alpha-numeric**  **N - Numeric**  **A – Alpha**  **(Length/Precision)** |
| **ADDRESS ID** | <InventoryDataFlow>  <LegalEntities>  <LegalEntityDetails>  <LegalEntityAddressIdentifier> | An alpha-numeric value used to uniquely identify a specific addressee of an Administrative Contact or a Treatment Plant Facility. | AN(20) |
| **CITY** | <InventoryDataFlow>  <LegalEntities>  <LegalEntityDetails>  <AddressDetails>   <MailingAddressCityName> | The city in which the legal entity being reported is located. | AN(40) |
| **COUNTRY CODE** | <InventoryDataFlow>  <LegalEntities>  <LegalEntityDetails>  <AddressDetails>   <CountryCode>  <SDWACountryCode> | A two-character alphabetic code that represents the country in which the legal entity being reported is located. | Typically:  **US** - United States  **CA** - Canada |
| **CONDITIONAL DATA** | | | |
| **Element Name** | **XML Schema Tags** | **Conditions** | **Permitted Values** |
| **ORGANIZATION** | <InventoryDataFlow>  <LegalEntities>  <LegalEntityDetails>  <OrganizationNameText> | The legal, formal name of the organization which is being reported as responsible for the water system listed in the Legal Entity Affiliation business object.  **Required if Addressee Name is not reported** | AN(80) |
| **ADDRESSEE NAME** | <InventoryDataFlow>  <LegalEntities>  <LegalEntityDetails>  <AddresseeNameText> | The individual name of a person who is being reported as the Administrative Contact for the water system listed in the Legal Entity Affiliation business object.  **Required if Organization is not reported** | AN(70) |
| **ADDRESS LINE 1** | <InventoryDataFlow>  <LegalEntities>  <LegalEntityDetails>  <AddressDetails>   <MailingAddressText> | The first line of an address applicable to the Legal Entity being reported. | AN(50) |
| **ADDRESS LINE 2** | <InventoryDataFlow>  <LegalEntities>  <LegalEntityDetails>  <AddressDetails>   <SupplementalAddressText> | The second line of an address applicable to the legal entity being reported. | AN(50) |
| **US STATE AND CANADIAN PROVINCE CODE** | <InventoryDataFlow>  <LegalEntities>  <LegalEntityDetails>  <AddressDetails> <SDWAUSStateCanadianProvinceCode> | A coded value that represents the U.S. Postal Service (USPS) State abbreviation or the Canadian  Province State abbreviation in which the legal entity being reported is located.  **Required if Country Code = “US” or “CA”** | A(2) |
| **POSTAL CODE** | <InventoryDataFlow>  <LegalEntities>  <LegalEntityDetails>  <AddressDetails>   <MailingAddressZipCode> | Either the U.S. Postal Service (USPS) ZIP Code or the international postal code in which a legal entity being reported is located.  **Required if Country Code = “US” or “CA”** | AN(14) |
| **OPTIONAL DATA** | | | |
| **Element Name** | **XML Schema Tags** | **Comments** | **Permitted Values** |
| **TELEPHONE NUMBER** | <InventoryDataFlow>  <LegalEntities>  <LegalEntityDetails>  <PhoneFaxEmail>  <TelephoneNumber> | The telephone number of the legal entity being reported. | AN(15) |
| **TELEPHONE EXTENSION NUMBER** | <InventoryDataFlow>  <LegalEntities>  <LegalEntityDetails>  <PhoneFaxEmail>  <TelephoneNumberExtension> | The number assigned within an organization to extend the external telephone-number of the legal entity being reported. | AN(5) |
| **FAX NUMBER** | <InventoryDataFlow>  <LegalEntities>  <LegalEntityDetails>  <PhoneFaxEmail>  <FaxNumber> | The fax number of the legal entity being reported. | AN(15) |
| **ALTERNATE TELEPHONE NUMBER** | <InventoryDataFlow>  <LegalEntities>  <LegalEntityDetails>  <PhoneFaxEmail>  <AlternateTelephoneNumber> | The alternate telephone number of a water system or the system’s primary contact | AN(15) |
| **ELECTRONIC ADDRESS** | <InventoryDataFlow>  <LegalEntities>  <LegalEntityDetails>  <PhoneFaxEmail>  <EmailAddressText> | The e-mail address for the legal entity being reported. | AN(100) |

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| **SDWIS/FedRep Business Object: LEGAL ENTITY AFFILIATION** (FedRep 3.5 Requirements v2, Appendix E) | | | |
| **REQUIRED DATA** | | | |
| **Element Name** | **XML Schema Tags** | **Comments** | **Permitted Values**  **AN - Alpha-numeric**  **N - Numeric**  **A – Alpha**  **(Length/Precision)** |
| **ADDRESS ID** | <InventoryDataFlow>  <LegalEntityAffiliations>  <LegalEntityAffiliationDetails>  <LegalEntityAddressIdentifier> | An alpha-numeric value used to uniquely identify a specific addressee of an Administrative Contact. | AN(20) |
| **PWS ID** | <InventoryDataFlow>  <LegalEntityAffiliations>  <LegalEntityAffiliationDetails>  <PWSIdentifier> | Uniquely identifies the Public Water System for which the association is being made. | AN(9) |
| **AFFILIATION TYPE** | <InventoryDataFlow>  <LegalEntityAffiliations>  <LegalEntityAffiliationDetails>  <AffiliationCode>   <SDWAAffiliationCode> | A coded value which categorizes the reason for associating a legal entity with a public water system.  **Note: only one administrative contact should be identified for each public water system. Other contacts may be reported.** | **Required:**  **AC** - Administrative Contact - Identifies a legal entity as a contact of interest to the water system for potential notification of activities related to a specific water system. An example is identifying an individual that may receive copies of correspondence.  **Optional:**  **BI -** Bureau of Indian Affairs Representative  **DO** - Designated Operator in Direct Charge  **EC -** Emergency Contact  **FC** - Financial Contact  **HC** - Health Clinic Representative  **IE** - Indian Health Service Engineer  **IS** - Indian Health Service Sanitarian  **LC** - Legal Contact  **LE** - Lead Engineer  **MA** - Mailing Address  **OP** - Operator  **OT** - Other  **OW** - Owner  **PC** - Primary Contact  **RC** - Regulatory contact  **SA** - Sampler  **TC** - Tribal Chairman  **TE** - Tribal Environmental Department Representative  **TG** - Tribal Government Representative  **TH** - Tribal Health Department Representative  **TP** - Water Treatment Plant Facility  **UN** - Utility Representative (non-tribal)  **UT** - Utility Representative (tribal) |
| **OPTIONAL DATA** | | | |
| **Element Name** | **XML Schema Tags** | **Comments** | **Permitted Values** |
| **FACILITY ID** | <InventoryDataFlow>  <LegalEntityAffiliations> <LegalEntityAffiliationDetails>  <PWSFacilityIdentifier> | **NOT USED FOR ADMINISTRATIVE CONTACT** | AN(12) |

# Reporting a Primary Service Area

A Service Area describes the primary categorization of the area serviced by the PWS. Each water system shall have one and only one primary service area code. Optionally, other non-primary Service Areas may be reported. Use the SDWIS/FedRep Object **SERVICE AREA** (FedRep 3.5 Requirements v2, Appendix F) to report this information.

|  |  |  |  |
| --- | --- | --- | --- |
| **SDWIS/FedRep Business Object: SERVICE AREA** (FedRep 3.5 Requirements v2, Appendix F) | | | |
| **REQUIRED DATA** | | | |
| **Element Name** | **XML Schema Tags** | **Comments** | **Permitted Values**  **AN - Alpha-numeric**  **N - Numeric**  **A – Alpha**  **(Length/Precision)** |
| **PWS ID** | <InventoryDataFlow>  <ServiceAreas>  <ServiceAreaDetails>  <PWSIdentifier> | Uniquely identifies a Public Water System. PWS ID is always prefixed with a valid United States Postal Service (USPS) State abbreviation or EPA Region code (excluding Region 03), which is then followed by a 7-character identifier unique for each PWS within that State or Region. | AN(9) |
| PRIMARY SERVICE AREA CODE | <InventoryDataFlow>  <ServiceAreas>  <ServiceAreaDetails>  <PrimaryServiceAreaCode>  <SDWAServiceAreaCode> | A coded value that describes the primary categorization of the area serviced by the Public Water  System.  **Each water system shall have one and only one primary service area code** | **DC -** Daycare Center  **DI -** Dispenser  **HA -** Homeowners Association  **HM -** Hotel/Motel  **HR -** Highway Rest Area  **IA -** Industrial/Agricultural  **IC -** Interstate Carrier  **IN -** Institution  **MF -** Medical Facility  **MH -** Mobile Home Park  **MP -** Mobile Home Park,  Principle Residence  **MU -** Municipality  **OA** - Other Area  **ON** - Other Non-Transient Area  **OR -** Other Residential Area  **OT -** Other Transient Area  **PA -** Recreation Area  **RA -** Residential Area  **RE -** Retail Employees  **RS -** Restaurant  **SC -** School  **SI -** Sanitary Improvement District  **SK -** Summer Camp  **SR -** Secondary Residences  **SS -** Service Station  **SU -** Subdivision  **WB -** Water Bottler  **WH -** Wholesaler of Water |
| **OPTIONAL DATA** | | | |
| **SERVICE AREA CODE** | <InventoryDataFlow>  <ServiceAreas>  <ServiceAreaDetails>  <PrimaryServiceAreaCode>  <SDWAServiceAreaCode> | **Note: Other Service Areas may be reported in addition to the primary as non-primary.** | **(Same Values as Primary)** |

# Reporting Geographic Area Served by the Water System

Every active public water system must report at least one geographic area served by the water system. You must report either the 1) City and State, 2) County FIPS Code, or 3) Tribal Code. Use the SDWIS/FedRep Object **GEOGRAPHIC AREA** (FedRep 3.5 Requirements v2, Appendix G) to report this information.

|  |  |  |  |
| --- | --- | --- | --- |
| **SDWIS/FedRep Business Object: GEOGRAPHIC AREA** (FedRep 3.5 Requirements v2, Appendix G) | | | |
| **REQUIRED DATA** | | | |
| **Element Name** | **XML Schema Tags** | **Comments** | **Permitted Values**  **AN - Alpha-numeric**  **N - Numeric**  **A – Alpha**  **(Length/Precision)** |
| **PWS ID** | <InventoryDataFlow>  <GeographicAreas>  <GeographicAreaDetails>  <PWSIdentifier> | Uniquely identifies a Public Water System. PWS ID is always prefixed with a valid United States Postal Service (USPS) State abbreviation or EPA Region code (excluding Region 03), which is then followed by a 7-character identifier unique for each PWS within that State or Region. | AN(9) |
| **CONDITIONAL DATA** | | | |
| **Element Name** | **XML Schema Tags** | **Conditions** | **Permitted Values** |
| **US STATE CODE** | <InventoryDataFlow>  <GeographicAreas>  <GeographicAreaDetails>  <GeographicAreaServedDetails>  <ServedStateCityDetails>  <ServedStateCode>   <SDWAServedStateCode> | Populate if CITY NAME is reported | 2-digit U.S. Postal Service State abbreviation in which the city served by the Water System is located. |
| **CITY NAME** | <InventoryDataFlow>  <GeographicAreas>  <GeographicAreaDetails>  <GeographicAreaServedDetails>  <ServedStateCityDetails>   <ServedCityText> | If COUNTY CODE or TRIBAL CODE is NOT reported | AN(40)  The name of the city served by the Water System. |
| **FIPS COUNTY CODE** | <InventoryDataFlow>  <GeographicAreas>  <GeographicAreaDetails>  <GeographicAreaServedDetails>  <ServedFIPSCountyCode> | If CITY NAME or TRIBAL CODE is NOT reported | AN(5)  The FIPS code representing the state and county served by the Water System. |
| **TRIBAL CODE** | <InventoryDataFlow>  <GeographicAreas>  <GeographicAreaDetails>  <GeographicAreaServedDetails>   <ServedTribalCode>   <SDWATribalCode> | Populate if PWS is Tribal water system | AN(3)  The 3-digit EPA code which represents the Indian reservation or Alaska Remote Village being served by a Water System. |
| **OPTIONAL DATA** | | | |
| **Element Name** | **XML Schema Tags** | **Comments** | **Permitted Values** |
| **SERVED AREA ZIP CODE** | <InventoryDataFlow>  <GeographicAreas>  <GeographicAreaDetails>  <ServedAreaZipCode> | The primary postal zip code of the population served by the water system. | N(5/0) |

# Reporting all Active Source Facilities

Every active public water system must have at least one facility which is recognized as a source of water. Use the SDWIS/FedRep Object **WATER SYSTEM FACILITY SOURCE** (FedRep 3.5 Requirements v2, Appendix H) to report this information.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **SDWIS/FedRep Business Object: WATER SYSTEM FACILITY SOURCE** (FedRep 3.5 Requirements v2, Appendix H) | | | | |
| **REQUIRED DATA** | | | | |
| **Element Name** | **XML Schema Tags** | **Comments** | | **Permitted Values**  **AN - Alpha-numeric**  **N - Numeric**  **A – Alpha**  **(Length/Precision)** |
| **PWS ID** | <InventoryDataFlow>  <WaterSystemFacilities>  <FacilityDetails>  <PWSIdentifier> | This qualifier is used to uniquely identify a Public Water System. PWS ID is always prefixed with a valid United States Postal Service (USPS) State abbreviation or EPA Region code (excluding Region 03), which  is then followed by a 7-character identifier unique for each PWS within that State or Region. | | AN(9) |
| **FACILITY ID** | <InventoryDataFlow>  <WaterSystemFacilities>  <FacilityDetails>  <PWSFacilityIdentifier> | A state-assigned value which identifies the Water System Facility | | AN(12) |
| **ACTIVITY FLAG** | <InventoryDataFlow>  <WaterSystemFacilities>  <FacilityDetails>  <FacilityActivityCode> <SDWAFacilityActivityCode> | A code that categorizes the activity of the water system and/or the water system facility | | **A** - Active  **I** - Inactive |
| **FACILITY NAME** | <InventoryDataFlow>  <WaterSystemFacilities>  <FacilityDetails>  <SourceFacility>  <FacilityNameText> | All alphabetic characters will be in mixed case. | | AN(80) |
| **FACILITY TYPE CODE** | <InventoryDataFlow>  <WaterSystemFacilities>  <FacilityDetails>  <SourceFacility>  <SourceFacilityTypeCode> <SDWASourceFacilityTypeCode> | A coded value which categorizes the water facility. | | **CC** - Consecutive Connection  **IG** - Infiltration Gallery  **IN -** Intake  **NP** - Non-piped  **RC** - Roof Catchment  **RS** - Reservoir  **SP** - Spring  **WL** - Well (Source) |
| **FACILITY WATER TYPE CODE** | <InventoryDataFlow>  <WaterSystemFacilities>  <FacilityDetails>  <SourceFacility>  <SourceFacilityWaterTypeCode> <SDWASourceFacilityWaterTypeCode> | The water type permitted is restricted depending upon the Water System Facility Type  CC=GU, GW, or SW  IG=GU or SW  IN=SW  NP=GU, GW, or SW  RC=GW  RS=SW  SP=GU, GW, or SW  WL=GU or GW  NN=GU, GW, or SW | | **GW** - Ground Water  **SW** - Surface Water  **GU** - Ground water under the influence of surface water |
| **AVAILABILITY** | <InventoryDataFlow>  <WaterSystemFacilities>  <FacilityDetails>  <SourceFacility>  <SourceFacilityAvailabilityCode>  <SDWASourceFacilityAvailability  Code> | Categorizes the circumstances under which a source of water is utilized by a water  system | | **E** - Emergency  **I** - Interim  **O** - Other  **P** - Permanent  **S** - Seasonal  **Reported in SFDW:**  **U** - Unknown |
| **CONDITIONAL DATA** | | | | |
| **Element Name** | **XML Schema Tags** | | **Conditions** | **Permitted Values** |
| **DEACTIVATION DATE FACILITY** | <InventoryDataFlow>  <WaterSystemFacilities>  <FacilityDetails>  <FacilityDeactivationDate> | | If ACTIVITY FLAG = “I” (Inactive Facility) | DATE(YYYY-MM-DD) |
| **SELLER PWS ID** | <InventoryDataFlow>  <WaterSystemFacilities>  <FacilityDetails>  <SourceFacility>   <SourceFacilitySellerPWSIdentifier> | | If source is purchased (Facility Type Code = CC or NP) | AN(9) |
| **SELLER SOURCE TREATMENT CODE** | <InventoryDataFlow>  <WaterSystemFacilities>  <FacilityDetails>  <SourceFacility>   <SourceFacilitySellerTreatmentCode>  <SDWASourceFacilitySellerTreatmentCode> | | If source is purchased (Facility Type Code = CC or NP) | **F** - Filtered  **G** - Treated by seller with 4-log for GWR  **N** - Not treated  **Y** - Partially treated by seller |
| **SOURCE TREATED CODE** | <InventoryDataFlow>  <WaterSystemFacilities>  <FacilityDetails>  <SourceFacility>   <SourceFacilityTreatedCode>  <SDWASourceFacilityTreatedCode> | | If Water System Facility Type =  CC, IG, IN, NP, RC, RS, SP, WL, or NN | **N** - Not treated  **Y** - Treated |
| **REPORTED FILTRATION STATUS CODE** | <InventoryDataFlow>  <WaterSystemFacilities>  <FacilityDetails>  <SourceFacility>   <SourceFacilityReportedFiltrationStatusCode>  <SDWASourceFacilityReportedFiltration  StatusCode> | | If Facility Water Type Code = GU or SW | **FIL** – Filtration Already in Place  **MIF** - Must Install Filtration  **SAF** - Successfully Avoiding Filtration |
| **OPTIONAL DATA** | | | | |
| **STATE DATABASE FACILITY ID** | <InventoryDataFlow>  <WaterSystemFacilities>  <FacilityDetails>  <SourceFacility>   <FacilityStateDatabaseIdentifier> | | The ID that a state uses to identify a facility in their own state system database. | AN(40) |

# Reporting the Lat/Long for Each Active, Non-Transient or Community Source Facility

Each active source facility serving a public water system must have latitude and longitude coordinates according to EPA’s Locational Policy. Consecutive Connections (CC) must also report locations under this guidance and should adhere to the requirements outlined in this section. Use the SDWIS/FedRep Object **LOCATIONAL DETAIL** (FedRep 3.5 Requirements v2, Appendix K) to report this information.

|  |  |  |  |
| --- | --- | --- | --- |
| **SDWIS/FedRep Business Object: LOCATIONAL DETAIL** | | | |
| **REQUIRED DATA** | | | |
| **Element Name** | **XML Schema Tags** | **Comments** | **Permitted Values**  **AN - Alpha-numeric**  **N - Numeric**  **A – Alpha**  **(Length/Precision)** |
| **PWS ID** | <InventoryDataFlow>  <Locations>  <LocationDetails>  <PWSIdentifier> | This qualifier is used to uniquely identify a Public Water System. PWS ID is always prefixed with a valid United States Postal Service (USPS) State abbreviation or EPA Region code (excluding Region 03), which is then followed by a 7-character identifier unique for each PWS within that State or Region. | AN(9) |
| **FACILITY ID** | <InventoryDataFlow>  <Locations>  <LocationDetails>  <PWSFacilityIdentifier> | The state-assigned value which identifies the Water System Facility for which the reported locational data applies. | AN(12) |
| **HORIZONTAL COLLECTION METHOD CODE** | <InventoryDataFlow>  <Locations>  <LocationDetails>  <HorizontalCollectionMethodCode>  <SDWAHorizontalCollectionMethod  Code> | Method used to determine the latitude/longitude, represents the primary source of the data | **001 -** Address Matching - House Number  **002** **-** Address Matching - Block Face  **003** **-** Address Matching - Street Centerline  **004** **-** Address Matching - Nearest Intersection  **005** **-** Address Matching - Primary Name  **006** **-** Address Matching - Digitized  **007** **-** Address Matching - Other  **008** **-** Census Block - 1990 - Centroid  **009** **-** Census Block/Group - 1990 - Centroid  **010** **-** Census Block Tract - 1990 - Centroid  **011** **-** Census - Other  **012** **-** Global Positioning System (GPS) Carrier Phase Static  Relative Positioning  **013** **-** GPS Carrier Phase Kinematic Relative Positioning  Technique  **014** **-** GPS Code Measurements (Pseudo Range) Differentially  Corrected  **015** **-** GPS Code Measurements (Pseudo Range) Precise  Positioning Service  **016** **-** GPS Code Measurements (Pseudo Range) Standard  Positioning Service SA Off  **017** **-** GPS Code Measurements (Pseudo Range) Standard  Positioning Service SA On  **018** **-** Interpolation - Map  **019** **-** Interpolation - Photo  **020** **-** Interpolation - Satellite  **021** **-** Interpolation - Other  **022** **-** Loran C  **023** **-** Public Land Survey - Quarter Section  **024** **-** Public Land Survey - Section  **025** **-** Classical Surveying Techniques  **026** **-** ZIP Code - Centroid  **027** **-** Unknown  **028** **-** GPS - Unspecified  **029** **-** GPS Code Measurements (Pseudo Range) Standard  Positioning Service Corrected  **030** **-** Interpolation - Digital Map Source (Tiger)  **031** **-** Interpolation - Spot  **032** **-** Interpolation - MSS (Multi-Spectral Scanner)  **033** **-** Interpolation - TM (Thematic Mapper)  **034** **-** Public Land Survey - Eighth Section  **035** **-** Public Land Survey - Sixteenth Section  **036** **-** Public Land Survey - Footing  **037** **-** ZIP+4 Code - Centroid  **038** **-** ZIP+2 Code - Centroid |
| **HORIZONTAL ACCURACY MEASURE** | <InventoryDataFlow>  <Locations>  <LocationDetails>  <HorizontalAccuracyMeasure> | Describes the correctness of the latitude/longitude measurement, in meters. | N(7/2) |
| **REFERENCE POINT CODE** | <InventoryDataFlow>  <Locations>  <LocationDetails>  <ReferencePointAlternateCode>  <SDWAReferencePointAlternateCode> | Category of the feature referenced by the latitude and longitude. | **002** - Plant Entrance (General)  **003** - Other  **004** - Plant Entrance (Personnel)  **005** - Plant Entrance (Freight)  **006** - Air Release Stack  **007** - Air Release Vent  **008** - Storage Tank  **009** - Pipe Release To Water  **010** - Lagoon or Settling Pond  **011** - Liquid Waste Treatment Unit  **012** - Atmospheric Emissions Treatment Unit  **013** - Solid Waste Treatment/ Disposal Unit  **014** - Solid Waste Storage Area  **015** - Loading Facility  **016** - Loading Area Centroid  **017** - Process Unit  **018** - Process Unit Area Centroid  **019** - Administrative Building  **020** - Facility Centroid  **021** - NE Corner of Land Parcel  **022** - SE Corner of Land Parcel  **023** - NW Corner of Land Parcel  **024** - SW Corner of Land Parcel  **025** - Center of Facility  **026** - Well  **027** - Well Protection Area  **028** - Water Monitoring Station  **029** - Air Monitoring Station  **030** -Intake Pipe  **101** - Entrance point of a facility or station  **102** - Center of a facility or station  **103** - Facility/monitoring site boundary point  **104** - Point where substance enters facility/monitoring site (can be inside or outside of a facility/site)  **105** - Point where substance is processed, treated, settled, or stored  **106** - Point where a substance is released  **107** - Point where a substance is monitored.  **108** - Points not represented by 101-107  **Reported in SFDW:**  **001** - Unknown |
| **HORIZONTAL REFERENCE DATUM CODE** | <InventoryDataFlow>  <Locations>  <LocationDetails>  <HorizontalReferenceDatumCode>  <SDWAHorizontalReferenceDatumCode> | Reference standard for three dimensional and horizontal positioning established by the U.S. National Geodetic Survey (NGS) and other bodies | **001** - NAD 27  **002** - NAD 83  **003** - WGS 84  **Reported in SFDW:**  **004** - Unknown |
| **SOURCE MAP SCALE** | <InventoryDataFlow>  <Locations>  <LocationDetails>  <SourceMapScaleCode>  <SDWASourceMapScaleCode> | Scale of the map used to determine the latitude and longitude coordinates | **1** - >= 1:500  **2** - BETWEEN 1:500 AND 1:5,000  **3** - BETWEEN 1:5,000 AND 1:10,000  **4** - BETWEEN 1:10,000 AND 1:15,000  **5** - BETWEEN 1:15,000 AND 1:20,000  **6** - BETWEEN 1:20,000 AND 1:25,000  **7** - BETWEEN 1:25,000 AND 1:50,000  **8** - BETWEEN 1:50,000 AND 1:100,000  **9** - <1:100,000  **A** - 1:10,000  **B** - 1:12,000  **C** - 1:15,840  **D** - 1:20,000  **E** - 1:24,000  **F** - 1:25,000  **G** - 1:50,000  **H** - 1:62,500  **I** - 1:63,360  **J** - 1:100,000  **K** - 1:125,000  **L** - 1:250,000  **M** - 1:500,000  **NA** - SCALE NOT APPLICABLE TO COLLECTION METHOD |
| **CONDITIONAL DATA** | | | |
| **Element Name** | **XML Schema Tags** | **Conditions** | **Permitted Values** |
| **LATITUDE DEG:MINS:SECS** | <InventoryDataFlow>  <Locations>  <LocationDetails>  <LatitudeLongitude>   <LatitudeLongitudeDegMinSec>   <LatitudeDegMinSec> | If LONGITUDE DEG:MINS:SECS is reported | Latitude format: **SDDMMSS.SSSS**  S is the meridian sign (+ -)  DD is the degrees  MM is the minutes  SS is the seconds  SSSS is the microseconds |
| **LONGITUDE DEG:MINS:SECS** | <InventoryDataFlow>  <Locations>  <LocationDetails>  <LatitudeLongitude>   <LatitudeLongitudeDegMinSec>  <LongitudeDegMinSec> | If LATITUDE DEG:MINS:SECS is reported | Longitude format: **SDDDMMSS.SSSS**  S is the meridian sign (+ -)  DDD is the degrees  MM is the minutes  SS is the seconds  SSSS is the microseconds |
| **LATITUDE MEASURE** | <InventoryDataFlow>  <Locations>  <LocationDetails>  <LatitudeLongitude>  <LatitudeLongitudeMeasure>   <LatitudeMeasure> | If LONGITUDE MEASURE is reported | Latitude format: **SDD.DDDDDD**  S is the meridian sign (+ -)  DD.DDDDDD is the latitude in decimal degrees format |
| **LONGITUDE MEASURE** | <InventoryDataFlow>  <Locations>  <LocationDetails>  <LatitudeLongitude>   <LatitudeLongitudeMeasure>   <LongitudeMeasure> | If LATITUDE MEASURE is reported | Longitude format: **SDDD.DDDDDD**  S is the meridian sign (+ -)  DDD.DDDDDD is the longitude in decimal degrees format |
| **VERTICAL MEASURE** | <InventoryDataFlow>  <Locations>  <LocationDetails>  <VerticalMeasureDetails>   <VerticalMeasure> | Vertical distance from the vertical datum to the land surface or other measuring point, in meters. | N(7/2) |
| **OPTIONAL DATA** | | | |
| **Element Name** | **XML Schema Tags** | **Comments** | **Permitted Values** |
| **GEOMETRIC TYPE CODE (Required element for any release prior to FedRep 3.0)** | <InventoryDataFlow>  <Locations>  <LocationDetails>  <GeometricTypeCode> <SDWAGeometricTypeCode> | Value indicating whether the latitude and longitude coordinates represent a point, multiple points on a line, or an area. | **001** - Point (Default)  **002** - Line  **003** - Area  **004** - Region  **005** - Route |
| **DATA COLLECTION DATE** | <InventoryDataFlow>  <Locations>  <LocationDetails>  <DataCollectionDate> | Date when the latitude and longitude coordinates were determined. | Date (YYYY-MM-DD) |
| **COORDINATE DATA SOURCE CODE** | <InventoryDataFlow>  <Locations>  <LocationDetails> <CoordinateDataSourceCode> <SDWACoordinateDataSourceCode> | Party responsible for collecting or otherwise providing the latitude and longitude. Please note that code “NN” refers to Navajo Nation. If the coordinates are unknown, please use code 087. | **001** - ALABAMA  **002** - ALASKA  **004** - ARIZONA  **005** - ARKANSAS  **006** - CALIFORNIA  **008** - COLORADO  **009** - CONNECTICUT  **010** - DELAWARE  **011** - DISTRICT OF COLUMBIA  **012** - FLORIDA  **013** - GEORGIA  **015** - HAWAII  **016** - IDAHO  **017** - ILLINOIS  **018** - INDIANA  **019** - IOWA  **020** - KANSAS  **021** - KENTUCKY  **022** - LOUISIANA  **023** - MAINE  **024** - MARYLAND  **025** - MASSACHUSETTS  **026** - MICHIGAN  **027** - MINNESOTA  **028** - MISSISSIPPI  **029** - MISSOURI  **030** - MONTANA  **031** - NEBRASKA  **032** - NEVADA  **033** - NEW HAMPSHIRE  **034** - NEW JERSEY  **035** - NEW MEXICO  **036** - NEW YORK  **037** - NORTH CAROLINA  **038** - NORTH DAKOTA  **039** - OHIO  **040** - OKLAHOMA  **041** - OREGON  **042** - PENNSYLVANIA  **044** - RHODE ISLAND  **045** - SOUTH CAROLINA  **046** - SOUTH DAKOTA  **047** - TENNESSEE  **048** - TEXAS  **049** - UTAH  **050** - VERMONT  **051** - VIRGINIA  **053** - WASHINGTON  **054** - WEST VIRGINIA  **055** - WISCONSIN  **056** - WYOMING  **060** - AMERICAN SAMOA  **064** - FEDERATED STATES OF MICRONESIA  **066** - GUAM  **068** - MARSHALL ISLANDS  **069** - NORTHERN MARIANA ISLANDS  **070** - PALAU  **072** - PUERTO RICO  **074** - U.S. MINOR OUTLYING ISLANDS  **078** - VIRGIN ISLANDS OF THE UNITED STATES  **080** - CONTRACTOR  **081** - DUNN & BRADSTREET  **082** - EPA HEADQUARTERS  **083** - OTHER  **084** - OTHER FEDERAL AGENCY  **085** - PRIVATE  **086** - TRIBE  **087** - UNKNOWN  **088** - EPA REGION 1  **089** - EPA REGION 10  **090** - EPA REGION 2  **091** - EPA REGION 3  **092** - EPA REGION 4  **093** - EPA REGION 5  **094** - EPA REGION 6  **095** - EPA REGION 7  **096** - EPA REGION 8  **097** - EPA REGION 9  **098** - REGULATED ENTITY  **NN** - NAVAJO NATION |
| **VERIFICATION METHOD CODE** | <InventoryDataFlow>  <Locations>  <LocationDetails>  <VerificationMethodCode>  <SDWAVerificationMethodCode> | A code representing the process by which the latitude and longitude coordinates have been verified by  EPA, grantees, or contractors. | **001** - Proximity to Polygon Centroid (County)  **002** - Proximity to Alternative Facility Coordinate  **003** - Proximity to Polygon Centroid (Other)  **004** - Point in Polygon (Other)  **005** - Point in Polygon (County)  **006** - Point in Polygon (ZIP)  **007** - Verified Relative to Map Features (1:24,000)  **008** - Verified Relative to Map Features (1:100,000 OR Tiger)  **009** - Verified Relative to Map Features (Other)  **010** - Verified, Unknown Method  **011** - Ground Truth Conducted  **012** - Proximity to Polygon Centroid (ZIP Code)  **013** - Point in Bounding Box (ZIP)  **014** - Point in Bounding Box (County) |
| **VERTICAL COLLECTION METHOD CODE** | <InventoryDataFlow>  <Locations>  <LocationDetails>  <VerticalMeasureDetails>  <VerticalCollectionMethodCode>  <SDWAVerticalCollectionMethodCode> | Code representing the method used to determine the vertical measure. | **001** - GPS Carrier Phase Static Relative Positioning Technique  **002** - GPS Carrier Phase Kinematic Relative Positioning Technique  **003** - GPS Code Measurements (Pseudo Range) Differentially Corrected  **004** - GPS Code Measurements (Pseudo Range) Precise  Positioning Service  **005** - GPS Code Measurements (Pseudo Range) Standard Positioning Service (SA Off)  **006** - GPS Code Measurements (Pseudo Range) Standard  Positioning Service (SA On)  **007** - Classical Surveying Techniques  **008** - Other, Unspecified  **009** - Altimetry  **010** - Precise Leveling from a Benchmark  **011** - Leveling Between Non Benchmark Control Points  **012** - Trigonometric Leveling  **013** - Photogrammetric  **014** - Topographic Map Interpolation |
| **VERTICAL ACCURACY MEASURE** | <InventoryDataFlow>  <Locations>  <LocationDetails>  <VerticalMeasureDetails> <VerticalAccuracyMeasure> | Quantitative measurement of the amount of deviation from true value in the vertical measure (estimate of error). It describes the correctness of the vertical measure, in meters. | N(7/2) |
| **VERTICAL REFERENCE DATUM CODE** | <InventoryDataFlow>  <Locations>  <LocationDetails>  <VerticalMeasureDetails>  <VerticalReferenceDatumCode>  <SDWAVerticalReferenceDatumCode> | Code representing which national reference standard for vertical control established by the U.S. National Geodetic Survey (NGS) is used to determine the vertical measure. | **001** - NAVD 88  **002** - NGVD 29  **003** - Elevation from mean sea-level  **004** - Local Tidal Datum |
| **LOCATION COMMENT TEXT** | <InventoryDataFlow>  <Locations>  <LocationDetails>  <LocationCommentsText> | Comments further describing the collection, processing, or interpretation of the latitude, longitude and/or vertical data. | AN(2000) |

# Reporting All Active Treatment Facilities

Any and all water treatment facilities must be reported. Use the SDWIS/FedRep Object **WATER SYSTEM FACILITY TREATMENT PLANT** (FedRep 3.5 Requirements v2, Appendix I) to report this information.

|  |  |  |  |
| --- | --- | --- | --- |
| **SDWIS/FedRep Business Object: WATER SYSTEM FACILITY TREATMENT PLANT** (FedRep 3.5 Requirements v2, Appendix I) | | | |
| **REQUIRED DATA** | | | |
| **Element Name** | **XML Schema Tags** | **Comments** | **Permitted Values**  **AN - Alpha-numeric**  **N - Numeric**  **A – Alpha**  **(Length/Precision)** |
| **PWS ID** | <InventoryDataFlow>  <WaterSystemFacilities>  <FacilityDetails>  <PWSIdentifier> | Uniquely identifies a Public Water System. PWS ID is always prefixed with a valid United States Postal Service (USPS) State abbreviation or EPA Region code (excluding Region 03), which is then followed by a 7-character identifier unique for each PWS within that State or Region. | AN(9) |
| **FACILITY ID** | <InventoryDataFlow>  <WaterSystemFacilities>  <FacilityDetails>  <PWSFacilityIdentifier> | Uniquely identifies the Public Water System for which the facility being reported applies. | AN(12) |
| **ACTIVITY FLAG** | <InventoryDataFlow>  <WaterSystemFacilities>  <FacilityDetails>  <FacilityActivityCode>  <SDWAFacilityActivityCode> | A code value that categorizes the activity of the water system and the water system facility | **A** - Active  **I** - Inactive  **N** - PWS now non-public  **Reported in SFDW:**  **M** – Merged with another system |
| **FACILITY NAME** | <InventoryDataFlow>  <WaterSystemFacilities>  <FacilityDetails>  <TreatmentPlantFacility>   <FacilityNameText> | All alphabetic characters will be in mixed case. | AN(80) |
| **FACILITY TYPE CODE** | <InventoryDataFlow>  <WaterSystemFacilities>  <FacilityDetails>  <TreatmentPlantFacility>  <TreatmentFacilityTypeCode> <SDWATreatmentFacilityTypeCode> | Note: Only type “TP” can be reported on this object. | **TP** - Treatment Plant |
| **CONDITIONAL DATA** | | | |
| **Element Name** | **XML Schema Tags** | **Conditions** | **Permitted Values** |
| **DEACTIVATION DATE FACILITY** | <InventoryDataFlow>  <WaterSystemFacilities>  <FacilityDetails>  <FacilityDeactivationDate> | If ACTIVITY FLAG = “I” (Inactive Facility) | DATE(YYYY-MM-DD) |
| **OPTIONAL DATA** | | | |
| **Element Name** | **XML Schema Tags** | **Conditions** | **Permitted Values** |
| **STATE DATABASE FACILITY ID** | <InventoryDataFlow>  <WaterSystemFacilities>  <FacilityDetails>  <TreatmentPlantFacility>  <FacilityStateDatabaseIdentifier> | The ID that a state uses to identify a facility in their own state system database | AN(40) |

# A Physical Address or Latitude/Longitude for Each Active Treatment Facility

All treatment facilities must have either a physical address **OR** its latitude and longitude coordinates. To report a physical address, use the SDWIS/FedRep Objects **LEGAL ENTITY** (FedRep 3.5 Requirements v2, Appendix D) and **LEGAL ENTITY AFFILIATION** (FedRep 3.5 Requirements v2, Appendix E). To report the latitude and longitude coordinates, use the same SDWIS/FedRep Object **LOCATIONAL DETAIL** (FedRep 3.5 Requirements v2, Appendix K) used to report the locational data for sources.

|  |  |  |  |
| --- | --- | --- | --- |
| **SDWIS/FedRep Business Object: LEGAL ENTITY AFFILIATION**(FedRep 3.5 Requirements v2, Appendix E)  **Specific for Treatment Facility Physical Address Requirements** | | | |
| **REQUIRED DATA** | | | |
| **Element Name** | **XML Schema Tags** | **Comments** | **Permitted Values**  **AN - Alpha-numeric**  **N - Numeric**  **A – Alpha**  **(Length/Precision)** |
| **ADDRESS ID** | <InventoryDataFlow>  <LegalEntities>  <LegalEntityDetails>  <LegalEntityAddressIdentifier> | An alpha-numeric value used to uniquely identify a specific addressee of an Administrative Contact or a Treatment Plant Facility. | AN(20) |
| **ADDRESS LINE 1** | <InventoryDataFlow>  <LegalEntities>  <LegalEntityDetails>  <AddressDetails>   <MailingAddressText> | The first line of an address applicable to the Legal Entity being reported. | AN(50) |
| **CITY** | <InventoryDataFlow>  <LegalEntities>  <LegalEntityDetails>  <AddressDetails>   <MailingAddressCityName> | The city in which the legal entity being reported is located. | AN(40) |
| **COUNTRY CODE** | <InventoryDataFlow>  <LegalEntities>  <LegalEntityDetails>  <AddressDetails>   <CountryCode>  <SDWACountryCode> | A two-character alphabetic code that represents the country in which the legal entity being reported is located. | Typically:  **US** - United States  **CA** - Canada |
| **CONDITIONAL DATA** | | | |
| **Element Name** | **XML Schema Tags** | **Conditions** | **Permitted Values** |
| **ORGANIZATION** | <InventoryDataFlow>  <LegalEntities>  <LegalEntityDetails>  <OrganizationNameText> | The legal, formal name of the organization which is being reported as responsible for the water system listed in the Legal Entity Affiliation business object.  **Required if Addressee Name is not reported** | AN(80) |
| **ADDRESSEE NAME** | <InventoryDataFlow>  <LegalEntities>  <LegalEntityDetails>  <AddresseeNameText> | The individual name of a person who is being reported as the Administrative Contact for the water system listed n the Legal Entity Affiliation business object.  **Required if Organization is not reported** | AN(70) |
| **US STATE AND CANADIAN PROVINCE CODE** | <InventoryDataFlow>  <LegalEntities>  <LegalEntityDetails>  <AddressDetails>  <SDWAUSStateCanadianProvince  Code> | A coded value that represents the U.S. Postal Service (USPS) State abbreviation or the Canadian  Province State abbreviation in which the legal entity being reported is located.  **Required if Country Code = “US” or “CA”** | A(2) |
| **POSTAL CODE** | <InventoryDataFlow>  <LegalEntities>  <LegalEntityDetails>  <AddressDetails>   <MailingAddressZipCode> | Either the U.S. Postal Service (USPS) ZIP Code or the international postal code in which a legal entity being reported is located.  **Required if Country Code = “US” or “CA”** | AN(14) |
| **OPTIONAL DATA** | | | |
| **Element Name** | **XML Schema Tags** | **Comments** | **Permitted Values** |
| **ADDRESS LINE 2** | <InventoryDataFlow>  <LegalEntities>  <LegalEntityDetails>  <AddressDetails>   <SupplementalAddressText> | The second line of an address applicable to the legal entity being reported. | AN(50) |
| **TELEPHONE NUMBER** | <InventoryDataFlow>  <LegalEntities>  <LegalEntityDetails>  <PhoneFaxEmail>  <TelephoneNumber> | The telephone number of the legal entity being reported. | AN(15) |
| **TELEPHONE EXTENSION NUMBER** | <InventoryDataFlow>  <LegalEntities>  <LegalEntityDetails>  <PhoneFaxEmail>  <TelephoneNumberExtension> | The number assigned within an organization to extend the external telephone-number of the legal entity being reported. | AN(5) |
| **FAX NUMBER** | <InventoryDataFlow>  <LegalEntities>  <LegalEntityDetails>  <PhoneFaxEmail>  <FaxNumber> | The fax number of the legal entity being reported. | AN(15) |
| **ELECTRONIC ADDRESS** | <InventoryDataFlow>  <LegalEntities>  <LegalEntityDetails>  <PhoneFaxEmail>  <EmailAddressText> | The e-mail address for the legal entity being reported. | AN(100) |
| **SDWIS/FedRep Business Object: LEGAL ENTITY AFFILIATION** | | | |
| **REQUIRED DATA** | | | |
| **Element Name** | **XML Schema Tags** | **Comments** | **Permitted Values** |
| **ADDRESS ID** | <InventoryDataFlow>  <LegalEntityAffiliations>  <LegalEntityAffiliationDetails>  <LegalEntityAddressIdentifier> | An alpha-numeric value used to uniquely identify a specific legal entity. | AN(20) |
| **PWS ID** | <InventoryDataFlow>  <LegalEntityAffiliations>  <LegalEntityAffiliationDetails>  <PWSIdentifier> | Uniquely identifies the Public Water System for which the address being reported applies. | AN(9) |
| **AFFILIATION TYPE** | <InventoryDataFlow>  <LegalEntityAffiliations>  <LegalEntityAffiliationDetails>  <AffiliationCode>   <SDWAAffiliationCode> | The coded value which categorizes that the associated a legal entity is a physical address for a treatment plant. | **TP** - Water Treatment Plant Facility |
| **OPTIONAL DATA** | | | |
| **Element Name** | **XML Schema Tags** | **Comments** | **Permitted Values** |
| **FACILITY ID** | <InventoryDataFlow>  <LegalEntityAffiliations>  <LegalEntityAffiliationDetails>  <PWSFacilityIdentifier> | Uniquely identifies the Treatment Plant for which the address being reported applies. | AN(12) |

# Each Treatment Associated with a Treatment Facility

Each **active** treatment plant facility must report at least one treatment objective and process for treating water intended for safe public consumption. Use the SDWIS/FedRep Object **TREATMENT DATA** (FedRep 3.5 Requirements v2, Appendix L) to submit this data.

|  |  |  |  |
| --- | --- | --- | --- |
| **SDWIS/FedRep Business Object: TREATMENT DATA** (FedRep 3.5 Requirements v2, Appendix L) | | | |
| **Element Name** | **XML Schema Tags** | **Comments** | **Permitted Values**  **AN - Alpha-numeric**  **N - Numeric**  **A – Alpha**  **(Length/Precision)** |
| **REQUIRED DATA** | | | |
| **PWS ID** | <InventoryDataFlow>  <TreatmentData>  <TreatmentDetails>  <PWSIdentifier> | The PWS ID for which the reported treatment applies. | AN(9) |
| **FACILITY ID** | <InventoryDataFlow>  <TreatmentData>  <TreatmentDetails>  <PWSFacilityIdentifier> | A state-assigned value which identifies the Water System Facility for which the reported treatment applies. | AN(12) |
| **TREATMENT ID** | <InventoryDataFlow>  <TreatmentData>  <TreatmentDetails>  <TreatmentIdentifier> | A numeric value used to uniquely identify a specific treatment applied to a source of water for a public  water system. | AN(20) |
| **TREATMENT OBJECTIVE** | <InventoryDataFlow>  <TreatmentData>  <TreatmentDetails>  <TreatmentObjectiveCode> <SDWATreatmentObjectiveCode> | A coded value that categorizes the treatment objective to be attained through treatment of a source of water. Examples include objectives such as disinfection, particulate removal, corrosion control, softening, etc. | **B** - DISINFECTION BY-PRODUCTS CONTROL  **C** - CORROSION CONTROL  **D** - DISINFECTION  **E** - DE-CHLORINATION  **F** - IRON REMOVAL  **I** - INORGANICS REMOVAL  **M** - MANGANESE REMOVAL  **O** - ORGANICS REMOVAL  **P** - PARTICULATE REMOVAL  **R** - RADIONUCLIDES REMOVAL  **S** - SOFTENING (HARDNESS REMOVAL)  **T** - TASTE / ODOR CONTROL  **Z** - OTHER |
| **TREATMENT PROCESS** | <InventoryDataFlow>  <TreatmentData>  <TreatmentDetails>  <TreatmentProcessCode> <SDWATreatmentProcessCode> | A coded value that categorizes the treatment process to be applied to a source of water for a PWS. | **100 -** ACTIVATED ALUMINA  **121 -** ACTIVATED CARBON, GRANULAR  **125 -** ACTIVATED CARBON, POWDERED  **141 -** AERATION, CASCADE  **143 -** AERATION, DIFFUSED  **145 -** AERATION, PACKED TOWER  **147 -** AERATION, SLAT TRAY  **149 -** AERATION, SPRAY  **160 -** ALGAE CONTROL  **180** BONE CHAR  **190** BROMINIZATION (SPECIAL USE)  **200 -** CHLORAMINES  **220 -** CHLORINE DIOXIDE  **240 -** COAGULATION  **300 -** DISTILLATION  **320 -** ELECTRODIALYSIS  **341 -** FILTRATION, CARTRIDGE  **342 -** FILTRATION, DIATOMACEOUS EARTH  **343 -** FILTRATION, GREENSAND  **344 -** FILTRATION, PRESSURE SAND  **345** FILTRATION, RAPID SAND  **346** FILTRATION, SLOW SAND  **347 -** FILTRATION, ULTRAFILTRATION  **348 -** FILTERED  **360 -** FLOCCULATION  **361 -** 4-Log Treatment of viruses  **362 -** 3-Log Remove/Inactive G Lamblia  **363 -** 4-Log Remove/Inactive Viruses  **364 -** 2-Log Remove Crypto  **365 -** 1-LOG TREATMENT OF CRYPTO  **366 -** 1.5-LOG TREATMENT OF CRYPTO  **367 -** 2-LOG TREATMENT OF CRYPTO  **368 -** 2.5-LOG TREATMENT OF CRYPTO  **369 -** 3-LOG TREATMENT OF CRYPTO  **370 -** 4-LOG REMOVE/INACTIVATE CRYPTO  **371 -** 5.0-LOG REMOVE/INACTIV CRYPTO  **372 -** 5.5-LOG REMOVE/INACTIV CRYPTO  **380 -** FLUORIDATION  **401 -** GASEOUS CHLORINATION, POST  **403 -** GASEOUS CHLORINATION, PRE  **421 -** HYPOCHLORINATION, POST  **423 -** HYPOCHLORINATION, PRE  **441** INHIBITOR, BIMETALLIC PHOSPHATE  **443 -** INHIBITOR, HEXAMETAPHOSPHATE  **445 -** INHIBITOR, ORTHOPHOSPHATE  **447 -** INHIBITOR, POLYPHOSPHATE  **449 -** INHIBITOR, SILICATE  **455 -** IODINE  **460 -** ION EXCHANGE  **461 -** CHLORINATION (FRDS-1.5)  **473 -** CONVERTED (FRDS-1.5)  **500 -** LIME - SODA ASH ADDITION  **520 -** MICROSCREENING  **541 -** OZONATION, POST  **543 -** OZONATION, PRE  **560 -** PERMANGANATE  **580 -** PEROXIDE  **600 -** RAPID MIX  **620 -** REDUCING AGENTS  **623 -** REDUCING AGENT, SODIUM BISULFATE  **625 -** REDUCING AGENT, SODIUM SULFITE  **627 -** REDUCING AGENT, SULFUR DIOXIDE  **640 -** REVERSE OSMOSIS  **660 -** SEDIMENTATION  **680 -** SEQUESTRATION  **700 -** SLUDGE TREATMENT  **720 -** ULTRAVIOLET RADIATION  **740 -** PH ADJUSTMENT  **741 -** PH ADJUSTMENT, POST  **742 -** PH ADJUSTMENT, PRE  **999 -** INNOVATIVE |
| **CONDITIONAL DATA** | | | |
| **Element Name** | **XML Schema Tags** | **Conditions** | **Permitted Values** |
| **TREATMENT COMMENT** | <InventoryDataFlow>  <TreatmentData>  <TreatmentDetails>  <TreatmentCommentText> | If the reported treatment is an innovative treatment (Treatment Process = "999")  **Describes/details innovative treatment process** | AN(2000) |

# Flow Relationship Between Sources and Treatment Facilities

The relationship or connection between source and treatment facilities with a water system must be reported. Facilities are required to submit at least one treatment process and objective. Use the SDWIS/FedRep Object **WATER SYSTEM FACILITY FLOW** to submit this data.

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| --- | --- | --- | --- |
| **SDWIS/FedRep Business Object:** **WATER SYSTEM FACILITY FLOW** | | | |
| **REQUIRED DATA** | | | |
| **Element Name** | **XML Schema Tags** | **Comments** | **Permitted Values**  **AN - Alpha-numeric**  **N - Numeric**  **A – Alpha**  **(Length/Precision)** |
| **PWS ID** | <InventoryDataFlow>  <FacilityFlowData>  <FacilityFlowDetails>  <PWSIdentifier> | This qualifier is used to uniquely identify a Public Water System. PWS ID is always prefixed with a valid United States Postal Service (USPS) State abbreviation or EPA Region code (excluding Region 03), which is then followed by a 7-character identifier unique for each PWS within that State or Region. | AN(9) |
| **FACILITY ID FLOW FROM** | <InventoryDataFlow>  <FacilityFlowData>  <FacilityFlowDetails>  <FacilityFromToDetails>   <FacilityFromIdentifier> | A state-assigned value which identifies the water system facility **from** which water flows. | AN(12) |
| **FACILITY ID FLOW TO** | <InventoryDataFlow>  <FacilityFlowData>  <FacilityFlowDetails>  <FacilityFromToDetails> | A state-assigned value which identifies the water system facility **to** which the water flows. | AN(12) |

# Reporting Other Water System Facility Types (Optional)

Water System Facilities of types other than sources or treatment plants may be reported. Use the SDWIS/FedRep Object **WATER SYSTEM FACILITY OTHER**  to submit this data.

|  |  |  |  |
| --- | --- | --- | --- |
| **SDWIS/FedRep Business Object: WATER SYSTEM FACILITY OTHER** | | | |
| **REQUIRED DATA** | | | |
| **Element Name** | **XML Schema Tags** | **Comments** | **Permitted Values** |
| **PWS ID** | <InventoryDataFlow>  <WaterSystemFacilities>  <FacilityDetails>  <PWSIdentifier> | This qualifier is used to uniquely identify a Public Water System. PWS ID is always prefixed with a valid United States Postal Service (USPS) State abbreviation or EPA Region code (excluding Region 03), which is then followed by a 7-character identifier unique for each PWS within that State or Region. | AN(9) |
| **FACILITY ID** | <InventoryDataFlow>  <WaterSystemFacilities>  <FacilityDetails>  <PWSFacilityIdentifier> | A state-assigned value which identifies the Water System Facility | AN(12) |
| **ACTIVITY FLAG** | <InventoryDataFlow>  <WaterSystemFacilities>  <FacilityDetails>  <FacilityActivityCode>  <SDWAFacilityActivityCode> | A code value that categorizes the activity of the water system and the water system facility | **A** - Active  **I** - Inactive  **N** - PWS now non-public  **Reported in SFDW:**  **P** - Potential future system to be regulated  **M** – Merged with another system |
| **FACILITY NAME** | <InventoryDataFlow>  <WaterSystemFacilities>  <FacilityDetails>  <OtherFacility>   <FacilityNameText> | All alphabetic characters will be in mixed case. | AN(80) |
| **FACILITY TYPE CODE** | <InventoryDataFlow>  <WaterSystemFacilities>  <FacilityDetails>  <OtherFacility>  <OtherFacilityTypeCode>  <SDWAOtherFacilityTypeCode> | A coded value which categorizes the water facility. The code specifies the type of source, plant, or entry  point facility (e.g., WL is a well which is a type of source). | **CH** - Common Headers  **CS** - Cistern  **CW** - Clear Well  **DS** - Distribution System/Zone  **NN** - Non-piped, non-purchased  **OT** - Other  **PC** - Pressure Control  **PF** - Pump Facility  Impoundment  **SS** - Sampling Station  **ST** - Storage  **TM** - Transmission Main (Manifold)  **WH** - Well Head |
| **CONDITIONAL DATA** | | | |
| **Element Name** | **XML Schema Tags** | **Conditions** | **Permitted Values** |
| **DEACTIVATION DATE FACILITY** | <InventoryDataFlow>  <WaterSystemFacilities>  <FacilityDetails>  <FacilityDeactivationDate> | If ACTIVITY FLAG = “I” (Inactive Facility) | DATE(YYYY-MM-DD) |
| **OPTIONAL DATA** | | | |
| **Element Name** | **XML Schema Tags** | **Comments** | **Permitted Values** |
| **STATE DATABASE FACILITY ID** | <InventoryDataFlow>  <WaterSystemFacilities>  <FacilityDetails>  <OtherFacility>  <FacilityStateDatabaseIdentifier> | The ID that a state uses to identify a facility in their own state system database. | AN(40) |

# Reporting Lead and Copper Samples’ 90th Percentiles

All 90th Percentile calculations for Lead and Copper monitoring which exceed the Action Level for any sized water systems AND All 90th Percentile calculations for Lead and Copper monitoring for all water systems serving over 3300 people. However, it is encouraged for you to submit All 90th percentile calculations (exceedances and non-exceedances) for all systems. Use the SDWIS/FedRep Objects **SAMPLE (FedRep 3.5 Requirements v2, Appendix S) and SAMPLE RESULT (FedRep 3.5 Requirements v2, Appendix T)** to submit this data.

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| --- | --- | --- | --- |
| SDWIS/FedRep Business Object: **SAMPLE** (FedRep 3.5 Requirements v2, Appendix S)  (LCR SAMPLE SUMMARY) | | | |
| **REQUIRED DATA** | | | |
| **Element Name** | **XML Schema Tags** | **Comments** | **Permitted Values** |
| **PWS ID** | <SamplesDataFlow>  <Samples>  <SampleDetails>  <PWSIdentifier> | This qualifier is used to uniquely identify a Public Water System. PWS ID is always prefixed with a valid United States Postal Service (USPS) State abbreviation or EPA Region code (excluding Region 03), which  is then followed by a 7-character identifier unique for each PWS within that State or Region. | AN(9) |
| **SAMPLE ID** | <SamplesDataFlow>  <Samples>  <SampleDetails>  <SampleIdentifier> | A qualifier used to uniquely identify a specific sampling occurrence related to a PWS. | AN(20) |
| **CONDITIONAL DATA** | | | |
| **Element Name** | **XML Schema Tags** | **Conditions** | **Permitted Values** |
| **FACILITY ID** | <SamplesDataFlow>  <Samples>  <SampleDetails>  <PWSFacilityIdentifier> | **NOT PERMITTED FOR PB90 or CU90** | **NOT PERMITTED FOR PB90 or CU90** |
| **SAMPLE BEGIN DATE** | <SamplesDataFlow>  <Samples>  <SampleDetails>  <SampleDateDetails>   <MonitoringPeriodDetails>   <MonitorPeriodBeginDate> | If the results for this sample include the Sample Contaminants PB90 or CU90, the  Sample Begin Date shall be required. | DATE(YYYY-MM-DD) |
| **SAMPLE END DATE** | <SamplesDataFlow>  <Samples>  <SampleDetails>  <SampleDateDetails>   <MonitoringPeriodDetails>   <MonitorPeriodEndDate> | If the results for this sample include the Sample Contaminants PB90 or CU90, the  Sample End Date shall be required. | DATE(YYYY-MM-DD) |
| **SAMPLE COLLECTION DATE** | <SamplesDataFlow>  <Samples>  <SampleDetails>  <SampleDateDetails>   <CollectionDate> | **NOT PERMITTED FOR PB90 or CU90** | **NOT PERMITTED FOR PB90 or CU90** |
| **SOURCE TYPE** | <SamplesDataFlow>  <Samples>  <SampleDetails>  <SampleFacilityWaterTypeCode>  <SDWASampleFacilityWater  TypeCode> | **NOT PERMITTED FOR PB90 or CU90** | **NOT PERMITTED FOR PB90 or CU90** |
| **SAMPLE TYPE** | <SamplesDataFlow>  <Samples>  <SampleDetails>  <SampleWaterTreatmentCode>  <SDWASampleWaterTreatment  Code> | **NOT PERMITTED FOR PB90 or CU90** | **NOT PERMITTED FOR PB90 or CU90** |
| **OPTIONAL DATA** | | | |
| **Element Name** | **XML Schema Tags** | **Comments** | **Permitted Values** |
| **QTY COMPOSITED** | <SamplesDataFlow>  <Samples>  <SampleDetails>  <SampleQuantityComposited  Value> | **NOT PERMITTED FOR PB90 or CU90** | **NOT PERMITTED FOR PB90 or CU90** |
| **SAMPLING RECONCILIATION ID** | <SamplesDataFlow>  <Samples>  <SampleDetails>  <SampleReconciliationIdentifier> | An identifier used for reconciliation with the state data system or LAB assigned identifiers. | AN(40) |

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| SDWIS/FedRep Business Object: **SAMPLE RESULT** (FedRep 3.5 Requirements v2, Appendix T)  (LCR SAMPLE SUMMARY RESULT) | | | |
| **REQUIRED DATA** | | | |
| **Element Name** | **XML Schema Tags** | **Comments** | **Permitted Values** |
| **SAMPLE CONTAMINANT** | <SamplesDataFlow>  <Samples>  <SampleDetails>  <SampleResults>  <SampleResultDetails>  <SampleAnalyteCode>  <SDWASampleAnalyteCode> | The identification number of the contaminant for which sample data have been reported for a public water system. | **CU90** - Copper Action Level Exceedance  **PB90** - Lead 90th Percentile Value |
| **SAMPLE ANALYSIS RESULT** | <SamplesDataFlow>  <Samples>  <SampleDetails>  <SampleResults>  <SampleResultDetails>  <SampleAnalysisResultValue> | A numeric value that represents the result obtained from a sample's analysis. | N(15/9) |
| **CONDITIONAL DATA** | | | |
| **Element Name** | **XML Schema Tags** | **Conditions** | **Permitted Values** |
| **SAMPLE RESULT SIGN** | <SamplesDataFlow>  <Samples>  <SampleDetails>  <SampleResults>  <SampleResultDetails>  <SampleResultSignCode>  <SDWASampleResultSign  Code> | **NOT PERMITTED FOR PB90 or CU90** | **NOT PERMITTED FOR PB90 or CU90** |
| **UNIT OF MEASURE** | <SamplesDataFlow>  <Samples>  <SampleDetails>  <SampleResults>  <SampleResultDetails>  <SampleUnitMeasureCode>  <SDWASampleUnitMeasure  Code> | **NOT PERMITTED FOR PB90 or CU90** | **NOT PERMITTED FOR PB90 or CU90** |
| **OPTIONAL DATA** | | | |
| **Element Name** | **XML Schema Tags** | **Comments** | **Permitted Values** |
| **SAMPLE ANALYSIS METHOD** | <SamplesDataFlow>  <Samples>  <SampleDetails>  <SampleResults>  <SampleResultDetails>  <SampleAnalysisMethodCode>  <SDWASampleAnalysisMethod  Code> | A code value that represents the analysis technique or method that was used to obtain an analytical result. | AN(5) |

# Reporting Lead and Copper Milestones and Corrective Actions Which Were Not Taken

Describes actions taken with respect to LCR milestones, GWR/RTCR corrective actions or Treatment Technique Triggers. Use the SDWIS/FedRep Object **EVENT SCHEDULE ACTIVITY** (FedRep 3.5 Requirements v2, Appendix R) to submit this data.

|  |  |  |  |
| --- | --- | --- | --- |
| SDWIS/FedRep Business Object: **EVENT SCHEDULE ACTIVITY** (FedRep 3.5 Requirements v2, Appendix R) | | | |
| **REQUIRED DATA** | | | |
| **Element Name** | **XML Schema Tags** | **Comments** | **Permitted Values** |
| **PWS ID** | <ActionsDataFlow>  <EventScheduleActivities> <EventScheduleActivityDetails>  <PWSIdentifier> | This qualifier is used to uniquely identify a Public Water System. PWS ID is always prefixed with a valid United States Postal Service (USPS) State abbreviation or EPA Region code (excluding Region 03), which  is then followed by a 7-character identifier unique for each PWS within that State or Region. | AN(9) |
| **EVENT ACTIVITY ID** | <ActionsDataFlow>  <EventScheduleActivities> <EventScheduleActivityDetails>  <EventActivityIdentifier> | Value used to uniquely identify an event schedule activity for a water system | A(20) |
| **ACTIVITY TYPE CODE** | <ActionsDataFlow>  <EventScheduleActivities> <EventScheduleActivityDetails>  <EventActivityCode>  <SDWAEventActivityCode> | Describes the activity associated with the schedule. | **DEEM** - System deemed optimized w/o OCCT  **DONE** - System done with OCCT  **FICF** - Fecal Indicator Contamination Action  **FICI -** Fecal Indicator Interim Step  **LSLR** - Lead service line replacement required  **RTL1** -RTCR Level 1 Treatment Technique Trigger  **RTL2** - RTCR Level 2 Treatment Technique Trigger  **SDFF** - Significant Deficiency/Sanitary Defect Corrective Action  **SDFI** - Significant Deficiency/Sanitary Defect Interim Step |
| **ACTIVITY ACTUAL/DUE DATE** | <ActionsDataFlow>  <EventScheduleActivities> <EventScheduleActivityDetails>  <EventActivityActualDate> | The calendar date by which the activity must be successfully completed. | DATE(YYYY-MM-DD) |
| **CONDITIONAL DATA** | | | |
| **Element Name** | **XML Schema Tags** | **Conditions** | **Permitted Values** |
| **ACTIVITY END/ACHIEVED DATE** | <ActionsDataFlow>  <EventScheduleActivities> <EventScheduleActivityDetails>  <EventActivityEndDate> | Date is prohibited for Activity Type Codes DEEM and LSLR. It is optional for all others. | DATE(YYYY-MM-DD) |
| **REASON CODE** | <ActionsDataFlow>  <EventScheduleActivities> <EventScheduleActivityDetails>  <EventActivityReasonCode> <SDWAEventActivityReason Code> | Required if   * Activity Type Code is equal to "Deem" and Reason Code MUST be B1, B3, or WQP * Activity Type Code is equal to SDFF or SDFI and Reason Code MUST be GW, SH, or RTCR * Activity Type Code is equal to FICF, or FICI and Reason Code MUST be GW, or SH * Activity Type Code is equal to RTL1 and Reason Code MUST be either L1TC or L1TD * Activity Type Code is equal to RTL2 Reason Code MUST be either L2TA or L2TB   Prohibited if   * Activity Type Code is LSLR   Optional if   * Activity Type Code is equal to "DONE” and Reason Code MUST be B1, B3, or WQP if reported | **B1** - Serving fewer than 50,000.  **B3** - Serving greater than 50,000; met action levels  **GW** - Ground Water Rule (GWR)  **L1TC** - Level 1Coliform Positive Insufficient Repeat TTT  **L1TD** - Level 1 Multiple Total Coliform Positive TTT  **L2TA** - MCL TTT  **L2TB** - Second Level 1 TTT  **RTCR** - Revised TCR  **SH** - Subpart H  **WQP** - Water Quality Parameters |
| **OPTIONAL DATA** | | | |
| **Element Name** | **XML Schema Tags** | **Comments** | **Permitted Values** |
| **ACTIVITY COMMENT** | <ActionsDataFlow>  <EventScheduleActivities>  <EventScheduleActivityDetails>  <EventActivityCommentText> | An alphanumeric value that represents any description, characteristic, or attribute that the State or EPA  region wants to record for the schedule activity. | AN(2000) |

# Reporting Site Visits Conducted

Characterizes a call conducted by a representative of a regulatory agency for the purpose of compliance inspection, technical support, or complaint investigation. The results of the site visit are documented and can result in violations. For the purposes of Minimum Reporting Requirements, Sanitary Surveys and RTCR Level 1 and Level 2 Assessments conducted must be reported. Use the SDWIS/FedRep Object **SITE VISIT** (FedRep 3.5 Requirements v2, Appendix P) to submit this data.

**All eight essential elements (Management and Operations, Source, Pumps, Operator Compliance, Monitoring Reporting Data Verification, Treatment, Finished Water Storage, and Distribution) must have a value reported but CANNOT have all eight reported as X, Z, or blank or a combination of these three.**

|  |  |  |  |
| --- | --- | --- | --- |
| SDWIS/FedRep Business Object: **SITE VISIT**  (FedRep 3.5 Requirements v2, Appendix P) | | | |
| **REQUIRED DATA** | | | |
| **Element Name** | **XML Schema Tags** | **Comments** | **Permitted Values** |
| **PWS ID** | <ActionsDataFlow>  <SiteVisits>  <SiteVisitDetails>  <PWSIdentifier> | This qualifier is used to uniquely identify a Public Water System. PWS ID is always prefixed with a valid  United States Postal Service (USPS) State abbreviation or EPA Region code (excluding Region 03), which  is then followed by a 7-character identifier unique for each PWS within that State or Region. | AN(9) |
| **VISIT ID** | <ActionsDataFlow>  <SiteVisits>  <SiteVisitDetails>  <VisitIdentifier> | A value used to uniquely identify a specific on-site visit made to a PWS. | AN(20) |
| **VISIT DATE** | <ActionsDataFlow>  <SiteVisits>  <SiteVisitDetails>  <VisitDate> | A value that represents the calendar date on which a visit was made to a PWS. | DATE(YYYY-MM-DD) |
| **VISIT REASON** | <ActionsDataFlow>  <SiteVisits>  <SiteVisitDetails>  <VisitReasonCode>  <SDWAVisitReasonCode> | A code value representing the reason a visit was made to a PWS. | **Required:**  **L1PS** - Level 1 Assessment and Partial Sanitary Survey  **L1SS** - Level 1 Assessment and Sanitary Survey  **LV1A** - Level 1 Assessment revised Total Coliform Rule (RTCR)  **L2PS** - Level 2 Assessment and Partial Sanitary Survey  **L2SS** - Level 2 Assessment and Sanitary Survey  **LV2A** - Level 2 Assessment revised Total Coliform Rule (RTCR)  **SNSP** - Sanitary Survey, Partial  **SNSV** - Sanitary Survey, Complete  **SSVF** - Sanitary Survey Follow-up  **Optional:**  **CAPD** - Capacity Development Assessment  **CMPA** - Compliance Assistance  **CNST** - Construction Inspection  **CPEV** - Comprehensive Performance Evaluation (CPE)  **EMRG** - Emergency Assistance  **ENGR** - Engineering Determination/Advice/Plan Review  **FENF** - Formal Enforcement  **FUFE** - Follow-up to Formal Enforcement  **IENF** - Informal Enforcement  **INFI** - Informal System Inspection  **INVG** - Investigation (Complaint/Violation/etc.)  **LABC** - Laboratory Certification  **LABI** - Laboratory Inspection  **LOCD** - Locational Data Collection  **NEED** - Needs Survey  **OM** - Operation and Maintenance  **OTHR** - Other  **PRMT** - Permit (Qualification/Review/Compliance)  **PUBH** - Public Hearing  **RCDR** - Record Review  **RSCH** - Regularly Scheduled  **SHAZ** - Sanitary Hazards Investigation  **SITE** - Site Inspection  **SMPL** - Sample Collection  **SRCE** - Source Water Inspection  **SRF** - State Revolving Fund  **TECH** - Technical Assistance (Non-Specific)  **TRNG** - Training  **TRTP** - Water Treatment Plant Site Visit  **VAEX** - Variance/Exemption related  **WHPP** - Wellhead Protection Program  **WSHD** - Watershed Evaluation  **XCON** - Cross Connection Inspection/Investigation |
| **VISIT AGENCY TYPE** | <ActionsDataFlow>  <SiteVisits>  <SiteVisitDetails>  <VisitAgencyCode>  <SDWAVisitAgencyCode> | A coded value that represents the type of agency that conducted the Site Visit. | **AR** - Alaskan Remote Village  **AT** - Authority  **BR** - Borough  **CM** - Commission  **CN** - County  **CT** - City  **DS** - District  **FD** - Federal  **MN** - Municipality  **NA** - Native American Tribe  **PR** - Parish  **RG** - Region  **SA** - State Administrative District  **SC** - State Contractor  **SD** - School District  **SR** - State Administrative Region  **ST** - State  **TA** - Non-State Provider Eng/Tech Assist Firm  **TW** - Town  **WD** - Water District  **WS** - Water System |
| **CONDITIONAL DATA** | | | |
| **Element Name** | **XML Schema Tags** | **Comments** | **Permitted Values** |
| **CATEGORY EVALUATION MANAGEMENT AND OPERATIONS** | <ActionsDataFlow>  <SiteVisits>  <SiteVisitDetails>  <VisitCategoryEvaluationDetails>  <VisitManagementOperations  EvaluationCode>  <SDWAVisitCategory  EvaluationCode> | A coded value that describes in summary, the outcome of evaluating this category during the site visit or RTCR L1/L2 Assessments. This is one of the elements set out in EPA/State Joint Guidance on Sanitary Surveys and required reporting for sanitary surveys, RTCR Level 1 and Level 2 assessments | **D -** Sanitary Defect  **M** **-** Minor deficiencies  **N -** No deficiencies or recommendations  **R** **-** Recommendations made  **S** **-** Significant deficiencies  **X -** Not evaluated  **Z** **-** Not applicable |
| **CATEGORY EVALUATION SOURCE** | <ActionsDataFlow>  <SiteVisits>  <SiteVisitDetails>  <VisitCategoryEvaluationDetails>  <VisitSourceEvaluationCode>  <SDWAVisitCategoryEvaluation  Code> | A coded value that describes in summary, the outcome of evaluating this category during the site visit or RTCR L1/L2 Assessments. This is one of the elements set out in EPA/State Joint Guidance on Sanitary Surveys and required reporting for sanitary surveys, RTCR Level 1 and Level 2 assessments | **D -** Sanitary Defect  **M** **-** Minor deficiencies  **N -** No deficiencies or recommendations  **R** **-** Recommendations made  **S** **-** Significant deficiencies  **X -** Not evaluated  **Z** **-** Not applicable |
| **CATEGORY EVALUATION PUMPS** | <ActionsDataFlow>  <SiteVisits>  <SiteVisitDetails>  <VisitCategoryEvaluationDetails>  <VisitPumpsEvaluationCode>  <SDWAVisitCategoryEvaluation  Code> | A coded value that describes in summary, the outcome of evaluating this category during the site visit or RTCR L1/L2 Assessments. This is one of the elements set out in EPA/State Joint Guidance on Sanitary Surveys and required reporting for sanitary surveys, RTCR Level 1 and Level 2 assessments | **D -** Sanitary Defect  **M** **-** Minor deficiencies  **N -** No deficiencies or recommendations  **R** **-** Recommendations made  **S** **-** Significant deficiencies  **X -** Not evaluated  **Z** **-** Not applicable |
| **CATEGORY EVALUATION OPERATOR COMPLIANCE** | <ActionsDataFlow>  <SiteVisits>  <SiteVisitDetails>  <VisitCategoryEvaluationDetails>  <VisitOperatorComplianceEvaluation  Code>  <SDWAVisitCategoryEvaluation  Code> | A coded value that describes in summary, the outcome of evaluating this category during the site visit or RTCR L1/L2 Assessments. This is one of the elements set out in EPA/State Joint Guidance on Sanitary Surveys and required reporting for sanitary surveys, RTCR Level 1 and Level 2 assessments | **D -** Sanitary Defect  **M** **-** Minor deficiencies  **N -** No deficiencies or recommendations  **R** **-** Recommendations made  **S** **-** Significant deficiencies  **X -** Not evaluated  **Z** **-** Not applicable |
| **CATEGORY EVALUATION MONITORING REPORTING DATA VERIFICATION** | <ActionsDataFlow>  <SiteVisits>  <SiteVisitDetails>  <VisitCategoryEvaluationDetails>  <VisitDataVerificationEvaluation  Code> <SDWAVisitCategoryEvaluation  Code> | A coded value that describes in summary, the outcome of evaluating this category during the site visit or RTCR L1/L2 Assessments. This is one of the elements set out in EPA/State Joint Guidance on Sanitary Surveys and required reporting for sanitary surveys, RTCR Level 1 and Level 2 assessmentsLevel 1 and Level 2 assessments | **D -** Sanitary Defect  **M** **-** Minor deficiencies  **N -** No deficiencies or recommendations  **R** **-** Recommendations made  **S** **-** Significant deficiencies  **X-** Not evaluated  **Z** **-** Not applicable |
| **CATEGORY EVALUATION TREATMENT** | <ActionsDataFlow>  <SiteVisits>  <SiteVisitDetails>  <VisitCategoryEvaluationDetails>  <VisitTreatmentEvaluation  Code>  <SDWAVisitCategoryEvaluation  Code> | A coded value that describes in summary, the outcome of evaluating this category during the site visit or RTCR L1/L2 Assessments. This is one of the elements set out in EPA/State Joint Guidance on Sanitary Surveys and required reporting for sanitary surveys, RTCR Level 1 and Level 2 assessments | **D -** Sanitary Defect  **M** **-** Minor deficiencies  **N -** No deficiencies or recommendations  **R** **-** Recommendations made  **S** **-** Significant deficiencies  **X -** Not evaluated  **Z** **-** Not applicable |
| **CATEGORY EVALUATION FINISHED WATER STORAGE** | <ActionsDataFlow>  <SiteVisits>  <SiteVisitDetails>  <VisitCategoryEvaluationDetails>  <VisitFinishedWaterStorageEvaluation  Code>  <SDWAVisitCategoryEvaluation  Code> | A coded value that describes in summary, the outcome of evaluating this category during the site visit or RTCR L1/L2 Assessments. This is one of the elements set out in EPA/State Joint Guidance on Sanitary Surveys and required reporting for sanitary surveys, RTCR Level 1 and Level 2 assessments | **D -** Sanitary Defect  **M** **-** Minor deficiencies  **N -** No deficiencies or recommendations  **R** **-** Recommendations made  **S** **-** Significant deficiencies  **X -** Not evaluated  **Z** **-** Not applicable |
| **CATEGORY EVALUATION DISTRIBUTION** | <ActionsDataFlow>  <SiteVisits>  <SiteVisitDetails>  <VisitCategoryEvaluationDetails>  <VisitDistributionEvaluation  Code>  <SDWAVisitCategoryEvaluation  Code> | A coded value that describes in summary, the outcome of evaluating this category during the site visit or RTCR L1/L2 Assessments. This is one of the elements set out in EPA/State Joint Guidance on Sanitary Surveys and required reporting for sanitary surveys, RTCR Level 1 and Level 2 assessments | **D -** Sanitary Defect  **M** **-** Minor deficiencies  **N -** No deficiencies or recommendations  **R** **-** Recommendations made  **S** **-** Significant deficiencies  **X -** Not evaluated  **Z** **-** Not applicable |
| **OPTIONAL DATA** | | | |
| **Element Name** | **XML Schema Tags** | **Comments** | **Permitted Values** |
| **CATEGORY EVALUATION SECURITY** | <ActionsDataFlow>  <SiteVisits>  <SiteVisitDetails>  <VisitCategoryEvaluationDetails>  <VisitSecurityEvaluationCode>  <SDWAVisitCategoryEvaluation  Code> | A coded value that describes in summary, the outcome of  evaluating this category during the site visit. This category represents the review of the security and  preparedness of the water system to respond to emergencies.  This is **NOT** one of the elements set out in EPA/State Joint Guidance on Sanitary Surveys. | **D -** Sanitary Defect  **M** **-** Minor deficiencies  **N -** No deficiencies or recommendations  **R** **-** Recommendations made  **S** **-** Significant deficiencies  **X -** Not evaluated  **Z** **-** Not applicable |
| **CATEGORY EVALUATION**  **OTHER** | <ActionsDataFlow>  <SiteVisits>  <SiteVisitDetails>  <VisitCategoryEvaluationDetails> <VisitOtherEvaluationCode> <SDWAVisitCategoryEvaluationCode> | A coded value that describes in summary, the outcome of  evaluating this category during the site visit. This category represents the review of the security and  preparedness of the water system to respond to emergencies.  This is **NOT** one of the elements set out in EPA/State Joint Guidance on Sanitary Surveys. | **D -** Sanitary Defect  **M** **-** Minor deficiencies  **N -** No deficiencies or recommendations  **R** **-** Recommendations made  **S** **-** Significant deficiencies  **X -** Not evaluated  **Z** **-** Not applicable |
| **CATEGORY EVALUATION FINANCIAL** | <ActionsDataFlow>  <SiteVisits>  <SiteVisitDetails>  <VisitCategoryEvaluationDetails> <VisitFinancialEvaluationCode> <SDWAVisitCategoryEvaluationCode> | A coded value that describes in summary, the outcome of  evaluating this category during the site visit. This category represents the review of the security and  preparedness of the water system to respond to emergencies.  This is **NOT** one of the elements set out in EPA/State Joint Guidance on Sanitary Surveys. | **D -** Sanitary Defect  **M** **-** Minor deficiencies  **N -** No deficiencies or recommendations  **R** **-** Recommendations made  **S** **-** Significant deficiencies  **X -** Not evaluated  **Z** **-** Not applicable |
| **SITE VISIT COMMENT** | <ActionsDataFlow>  <SiteVisits>  <SiteVisitDetails>  <VisitCommentText> | A value that represents any description, characteristic, or attribute that the State or EPA  region wants to record for the site visit. | AN(2000) |

# Reporting Rule Violations

Describes violations issued against a public water system when there is a failure to meet certain state/region or federal drinking water regulations. Violations are detected by assessment of sample results or reviews (including on-site visits) and may lead to legal actions or compliance orders. Violations are publicized, when required, by public notification and may be remedied by enforcement (e.g., by improved filtration techniques or changes in procedures). Use the SDWIS/FedRep Object V**IOLATIONS** (FedRep 3.5 Requirements v2, Appendix N) to submit this data.

| SDWIS/FedRep Business Object: **VIOLATIONS** (FedRep 3.5 Requirements v2, Appendix N) | | | |
| --- | --- | --- | --- |
| **REQUIRED DATA** | | | |
| **Element Name** | **XML Schema Tags** | **Comments** | **Permitted Values** |
| **PWS ID** | <ActionsDataFlow>  <Violations>  <ViolationDetails>  <PWSIdentifier> | This qualifier is used to uniquely identify a Public Water System. PWS ID is always prefixed with a valid  United States Postal Service (USPS) State abbreviation or EPA Region code (excluding Region 03), which  is then followed by a 7-character identifier unique for each PWS within that State or Region. | AN(9) |
| **VIOLATION ID** | <ActionsDataFlow>  <Violations>  <ViolationDetails>  <ViolationIdentifier> | An alphanumeric value used to uniquely identify a specific violation of a primary drinking water regulation  incurred by a public water system | AN(20) |
| **VIOLATION TYPE** | <ActionsDataFlow>  <Violations>  <ViolationDetails>  <ViolationTypeCode>  <SDWAViolationTypeCode> |  | **Current Violation Codes:**  **01** - MCL, Single Sample  **02** - MCL, Average  **03** - Monitoring, Regular  **04** - Monitoring, Check/Repeat/Confirmation  **05** - Notification, State  **07** - Treatment Techniques  **08** - Variance/Exemption/Other Compliance  **09** - Record Keeping  **11** - Non-Acute MRDL  **12** - Qualified Operator Failure  **13** - Acute MRDL  **19** - Monitoring, GWR Assessment Source Water  **1A** - MCL, E. coli (RTCR)  **20** - Failure to Consult/Respond  **27** - Monitoring, Routine (DBP)  **28** - Sanitary Survey Cooperation Failure  **29** - Failure Submit Filter Profile/CPE Report  **2A** - TT, Level 1 Assessment (RTCR)  **2B** - TT, Level 2 Assessment (RTCR)  **2C** - TT, Corrective/Expedited Actions (RTCR)  **2D** - Treatment Technique Startup Procedures  **30** - Monitoring/Submit Plan (IDSE)  31 - Monitoring Treatment (SWTR-Unfilt/GWR)  **32** – Reporting and Source Monitoring LT2  **33** - Failure Submit Treatment Requirement Rpt  **34** - Monitoring, GWR Triggered/Additional  **35** - Failure Submit Stage 2 DBPR Report  **36** - Monitoring Treatment (Surface Filter)  **37** - Treatment Tech. No Prior State Approval  **38** - M&R Filter Turbidity Reporting  **39** - Monitoring and Reporting (FBR)  **3A** - Monitoring, Routine (RTCR)  **3B** - Monitoring, Additional Routine (RTCR)  3C - Monitor Coliform Turbidity Trigger (RTCR)  **3D** - Monitoring, Lab Cert/Method Error (RTCR)  **40** - Treatment Technique (FBR)  **41** - Failure to Maintain Microbial Treatment  **42** - Failure to Provide Treatment  **43** - Single Turbidity Exceed (Enhanced SWTR)  **44** - Treatment Technique Exceeds Turb 0.3 NTU  **45** - Failure Address a Deficiency  **46** - Treatment Technique Precursor Removal  **47** - Treatment Technique Uncovered Reservoir  **48** - Failure To Address Contamination  **4A** - Reporting, Assessment Forms (RTCR)  **4B** - Report Sample Result/Fail Monitor (RTCR)  **4C** - Report Startup Procedures Cert Form (RTCR)  **4D** - Notification, E Coli Positive (RTCR)  **4E** - Notification, E. coli MCL (RTCR)  **4F** - Notify L1/L2 TT Vio, Correct Action RTCR  **51** - Initial LCR Tap Sampling  **52** - Follow-up and Routine Tap Sampling  **53** - Water Quality Parameter M & R  **56** - Initial, Follow-up, or Routine SOWT M&R  **57** - OCCT/SOWT Recommendation  **58** - OCCT/SOWT Installation  **59** - Water Quality Parameter Non-Compliance  **5A** - Sample Siting Plan Errors (RTCR)  **5B** - Recordkeeping Violations (RTCR)  **63** - MPL Non-Compliance  **64** - Lead Service Line Replacement (LSLR)  **65** - Public Education  **66** - Lead Consumer Notice  **71** - CCR Complete Failure to Report  **72** - CCR Inadequate Reporting  **73** - Failure to Notify Other PWS  **75** - PN Violation for an NPDWR Violation  **76** - PN Violation without NPDWR Violation  **Historical Codes – only to be used if reporting historical data.**  06 - Notification, Public  10 - Operations Report  21 - MCL, Acute (TCR)  22 - MCL, Monthly (TCR)  23 - Monitoring, Routine Major (TCR)  24 - Monitoring, Routine Minor (TCR)  25 - Monitoring, Repeat Major (TCR)  26 - Monitoring, Repeat Minor (TCR) |
| **COMPLIANCE PERIOD BEGIN DATE** | <ActionsDataFlow>  <Violations>  <ViolationDetails>  <CompliancePeriodDetails>  <CompliancePeriodBeginDate> | The calendar date of the beginning of a period in which a Public water system was determined to be in violation of a primary drinking water regulation | DATE(YYYY-MM-DD) |
| **CONDITIONAL DATA** | | | |
| **NOTE:**  **The business rules for these elements are dependent upon the violation type. See the table below for specific requirements.** | | | |
| **Element Name** | **XML Schema Tags** | **Comments** | **Permitted Values** |
| **CONTAMINANT CODE** | <ActionsDataFlow>  <Violations>  <ViolationDetails>  <ViolationAnalyteCode>  <SDWAViolationAnalyteCode> | A code value that represents a contaminant for which a public water system has incurred a violation of a  primary drinking water regulation | AN(4) |
| **COMPLIANCE PERIOD END DATE** | <ActionsDataFlow>  <Violations>  <ViolationDetails>  <CompliancePeriodDetails>  <CompliancePeriodEndDate> | The calendar date of the end of a monitoring period in which a public water system was in violation of a  primary drinking water regulation | Date (YYYY-MM-DD) |
| **ANALYSIS RESULT** | <ActionsDataFlow>  <Violations>  <ViolationDetails>  <AnalysisResultValue> | A numeric value that represents the result obtained from a single analysis, or the average result obtained from multiple analyses, that led to the identification of an MCL violation for a public water system | AN(15/9) |
| **VIOLATION UNIT OF MEASURE** | <ActionsDataFlow>  <Violations>  <ViolationDetails>  <ViolationUnitMeasure> | The unit of measure associated with the value reported for ANALYSIS RESULT for violations | **%LUM** - Percent Luminance  **%PUR** - Percent Purity  **ADMIU** - ADMI Color Value  **AGGR** - Aggressive Index  **C** - Degrees Celsius  **CM-1** - Per Centimeter  **CT** - Contact Time  **CU** - Color Units  **F** - Degrees Fahrenheit  **FTU** - Flavor Threshold Units  **L/MG-CM -** Liter per Milligram-Centimeter  **L/MG-M** - Liter per Milligram-Meter  **LANG** - Langlier Index  **LBS/CFT** - Pounds per Cubic Foot  **LBS/GAL** - LBS/GAL  **MFL** - Million Fibers per Liter  **MG/L** - Milligrams per Liter  **MREM** - Millirems  **MREM**Y - Millirems per Year  **NG/L** - Nanogram per Liter  **NM** - Nanometer  **NTU** - Nephelometric Units  **OBSVNS** - Observations/field at 100 Power  **PCI/L** - Picocuries per Liter  **PH** - pH  **RATIO** - Ratio of Actual/Required TOC removal  **SU** - Standard Units  **TON** - Threshold Odor Number  **UG/L** - Micrograms per Liter  **UMHO/CM** - Micromhos per Centimeter  **UNITS** - Units |
| **UNDERLYING OBJECT ID** | <Violations>  <ViolationDetails>  <RequiredReportingDetails>  <UnderlyingObjectIdentifier> | This field contains the unique identifier for the underlying object which in combination with the PWS ID, Violation Type, Contaminant, Compliance Period Begin Date, Facility ID, and Public Notice Underlying Violation ID makes a unique violation | AN(20) |
| **UNDERLYING OBJECT DATA TYPE** | <Violations>  <ViolationDetails>  <RequiredReportingDetails>  <UnderlyingObjectDataType> | A code value that indicates the type of UNDERLYING OBJECT submitted | **CORACTION** - Corrective Action Event Schedule Activity ID  **PNORIGVIOL -** Underlying PN Violation ID  **SMPLRESULT -** Precipitating Sample Analytical Result ID |
| **PUBLIC NOTICE UNDERLYING VIOLATION ID** | <ActionsDataFlow>  <Violations>  <ViolationDetails>  <PublicNoticeUnderlying  ViolationIdentifier> | For a public notice violation, this field contains the violation ID of the underlying violation | AN(20) |
| **LEVEL VIOLATED** | <ActionsDataFlow>  <Violations>  <ViolationDetails>  <LevelViolatedValue> | A numeric value that represents the maximum contaminant level which was exceeded that led to the identification of an MCL violation for a public water system. **Only reported when the State MCL is more**  **stringent than the Federal MCL** | N(15/9) |
| **MAJOR VIOLATION INDICATOR** | <ActionsDataFlow>  <Violations>  <ViolationDetails>  <MajorViolationIndicator>  <SDWAMajorViolation  Indicator> | A code value that indicates the severity of a Monitoring and Reporting (M&R) violation, major or minor. The major versus minor designation does not apply to a sanitary survey M&R violation | **N -** No  **Y -** Yes |
| **SEVERITY INDICATOR COUNT** | <ActionsDataFlow>  <Violations>  <ViolationDetails>  <SeverityIndicatoryCount> | A count indicating the severity of certain DBPR and IESWTR violations.  27/2456 (DBPR) or 27/2950 (DPBR): Specifies the number of missing samples for DBP2 monitoring violations. | N(3/0) |
| **OPTIONAL DATA** | | | |
| **Element Name** | **XML Schema Tags** | **Comments** | **Permitted Values** |
| **FACILITY ID** | <ActionsDataFlow>  <Violations>  <ViolationDetails>  <PWSFacilityIdentifier> | State assigned value which identifies a specific water system facility the violation occurred at. | AN(12) |

# Reporting Enforcement Actions Taken

Describes enforcement actions taken against a public water system usually in response to rule violations. Normally, these actions are linked to one or more rule violations. Use the SDWIS/FedRep Object **ENFORCEMENT ACTION** (FedRep 3.5 Requirements v2, Appendix O) to report this information.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| SDWIS/FedRep Business Object: **ENFORCEMENT ACTION** (FedRep 3.5 Requirements v2, Appendix O) **&**  **ASSIGNMENT CRITERIA OBJECT** (FedRep 3.5 Requirements v2, Appendix Q) | | | | |
| **REQUIRED DATA** | | | | |
| **Element Name** | | **XML Schema Tags** | **Comments** | **Permitted Values** |
| **PWS ID** | | <ActionsDataFlow>  <Enforcements>  <EnforcementDetails>  <PWSIdentifier> | This qualifier is used to uniquely identify a Public Water System. PWS ID is always prefixed with a valid  United States Postal Service (USPS) State abbreviation or EPA Region code (excluding Region 03), which is then followed by a 7-character identifier unique for each PWS within that State or Region. | AN(9) |
| **ENFORCEMENT ID** | | <ActionsDataFlow>  <Enforcements>  <EnforcementDetails>  <EnforcementIdentifier> | An alphanumeric value used to uniquely identify a specific enforcement action taken against a public water system. It is unique for each public water system. | AN(20) |
| **ENFORCEMENT DATE** | | <ActionsDataFlow>  <Enforcements>  <EnforcementDetails>  <EnforcementDate> | A value that represents the calendar date on which an enforcement action was taken against a public water system. | DATE(YYYY-MM-DD) |
| **ACTION CODE** | | <ActionsDataFlow>  <Enforcements>  <EnforcementDetails>  <EnforcementActionCode> <SDWAEnforcementActionCode> | Specifies a code value representing the specific type of the enforcement action taken.  NOTE: Primacy Agencies must use the Action Codes which start with “S”. Only EPA may enter Action Codes which start with “E” | **EF!** - Federal Proposed Administrative Order Issued  **EF%** - Federal Civil Case concluded  **EF&** - Federal Criminal Case referred to US Department of Justice  **EF-** - Federal Complaint for Penalty Consent Order or Consent Decree  **EF/** - Federal SDWA Section 1431 (Emergency) Order  **EF2** - Referred for Higher Federal Level Review  **EF9** - Federal Civil Case referred to US Department of Justice  **EF<** - Federal Complaint for Penalty issued  **EF=** - Federal Complaint for Penalty Default Judgement  **EFG** - Federal Public Notification issued  **EFH** - Federal issued Boil Water Order  **EFJ** - Federal issued Formal Notice of Violation  **EFK** - Federal Bilateral Compliance Agreement signed  **EFL** - Federal Final Administrative Order issued  **EFN** - Federal Show-Cause Hearing  **EFQ** - Federal Civil Case filed  **EFR** - Federal Consent Decree/Judgement  **EFS** - Federal Default Judgement  **EFT** - Federal Injunction  **EFU** - Federal Temporary Restraining Order/Preliminary Injunction  **EFV** - Federal Criminal Case filed  **EFW** - Federal Criminal Case concluded  **EIA** - Federal Violation/Reminder Notice  **EIB** - Federal Compliance Meeting conducted  **EIC** - Federal Technical Assistance Visit  **EID** - Federal Site Visit for Enforcement purposes  **EIE** - Federal Public Notification requested  **EIF** - Federal Public Notification received from PWS  **EII** - Federal Consumer Confidence Report Follow-up Notice  **EO+** - Federal no additional Formal Action needed  **EO0** - Federal no longer subject to Rule  **EO6** - Federal Intentional no-action  **EO7** - Federal Unresolved  **EO8** - Federal Other  **EOX** - Federal Compliance achieved  **EOY** - Federal Variance/Exemption issued  **EOZ** - Federal Turbidity Waiver issued  **ESX** - Implicit SWTR RTC (EPA Generated -- Cannot be reported)  **ETX** - Implicit TCR RTC (EPA Generated -- Cannot be reported)  **NULL** - Unknown Enforcement Action Type  **SF%** - State Civil Case concluded  **SF&** - State Criminal Case referred to State Attorney General  **SF2** - Referred for Higher State Level Review  **SF3** - State Case appealed  **SF4** - State Case dropped  **SF5** - State Hook-up/Extension Ban  **SF9** - State Civil Case referred to State Attorney General  **SFG** - State Public Notif issued  **SFH** - State Boil Water Order  **SFJ** - State Formal Notice of Violation issued  **SFK** - State Bilateral Compliance Agreement signed  **SFL** - State Administrative/Compliance Order without penalty issued  **SFM** - State Administrative Penalty assessed  **SFN** - State Show-Cause hearing  **SFO** - State Administrative/Compliance Order with penalty issued  **SFP** - State Civil Case under development  **SFQ** - State Civil Case filed in State court  **SFR** - State Consent Decree/Judgement  **SFS** - State Default Judgement  **SFT** - State Injunction  **SFU** - State Temporary Restraining Order/Preliminary Injunction  **SFV** - State Criminal Case filed  **SFW** - State Criminal Case concluded  **SIA** - State Violation/Reminder Notice  **SIB** - State Compliance Meeting conducted  **SIC** - State Technical Assistance Visit  **SID** - State Site Visit for enforcement purposes  **SIE** - State Public Notification requested  **SIF** - State Public Notification received  **SII** - State Consumer Confidence Report Follow-up Notice  **SO+** - State no additional Formal Action needed  **SO0** - State no longer subject to Rule  **SO6** - State Intentional no-action  **SO7** - State Unresolved  **SO8** - State Other  **SOX** - State Compliance achieved  **SOY** - State Variance/Exemption issued  **SOZ** – State Turbidity Waiver issued |
| **OPTIONAL DATA** | | | | |
| **Element Name** | **XML Schema Tags** | | **Comments** | **Permitted Values** |
| **ENFORCEMENT COMMENT** | <ActionsDataFlow>  <Enforcements>  <EnforcementDetails>  <EnforcementCommentText> | | An alphanumeric value that represents any description, characteristic, or attribute that the State or EPA region wants to record for the associated enforcement action data base record. | AN(2000) |
| **ASSOCIATED VIOLATION IDS (Y5000)** | <ActionsDataFlow>  <Enforcements>  <EnforcementAssignments>  <EnforcementAssignmentDetails>  <EnforcementAssociationDetails>  <AssociatedViolationIdentifier>  <EnforcementDetails> | | One or more Violation IDs that are associated to an Enforcement Action. | AN(12) |