



Approved Data Standards at the Environmental Protection Agency

Data standards are documented agreements on the representation, format, and definition of data that are shared by organizations. Implementing data standards improves the quality of EPA’s data and enhances the Agency’s ability to exchange data with partner states and tribes. The following standards have been created as a result of collaborative efforts between EPA, states, and tribes.

Accessing Data Standards

Data Standards on Internet:
www.epa.gov/datastandards

For More Information

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Approved Data Standards	
Data Standard	Description
Attached Binary Object	Digital items (e.g. pictures, documents) that are attached to the transmitted data
Bibliographic Reference	Library cataloging descriptors for identifying material referenced in data transmission (e.g. reference for a published report). Adopted from the international standard
Biological Taxonomy	Data elements for identification of biological organisms or groups
Chemical Identification	Common identifiers for chemical substances regulated or monitored by programs
Compositing	The combining of several sample results or units to produce a single entity
Contact Information	Data groupings used to describe a point of contact, address, and communication information
Enforcement/ Compliance	Commonly used data elements for enforcement and compliance related information subject to U.S. EPA/state/tribal exchange



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Data Standard	Description
ESAR: Analysis and Results	Environmental Sampling, Analysis Results (ESAR): elements required for describing analysis and results information
ESAR: Field Activity	The collection of a physical sample, measurement, and/or observation where one or more of the results will be described or quantified
ESAR: Monitoring Location	Identifiable location where an environmental sample, onsite measurement, and/or observation is determined
ESAR: Overview	Context and relationship between the ESAR primary and supporting data standards
ESAR: Project	Information about identification, contacts, dates, study areas, reasons, and quality constraints of project data
Quality Assurance and Quality Control	Quantitative statistics and qualitative descriptors used to interpret the degree of acceptability or utility of data acquired during field or laboratory analysis
Sampling and Handling	The standard characteristics associated with sample preservation, handling, and treatment in the laboratory and/or field activities
Equipment	Equipment or instruments used in the field or laboratory and activities associated with calibration information
Facility Site Identification	Common and consistent way to identify facilities
Institutional Control	Non-engineered instruments (e.g. administrative and/or legal controls) to minimize the potential for human exposure to contamination by limiting land or resource use
Latitude/Longitude	Data elements used for recording horizontal and vertical coordinates and associated metadata that define a point on the earth
Measurement	The values and associated units of measure for measuring the observation or analytical result value
Method	The procedures/processes used or references standard methodologies used to obtain the result



Permitting Information	Data elements for identification and tracking data pertaining to portions of most programs that have a permitting process or are interested in permit-related information
Representation of Date and Time	Representation of dates in the Gregorian calendar and times and representations of periods of time; adds Coordinated Universal Time (UTC) data elements to the existing Date data standard and is adopted from an international standard
SIC/NAICS	Data elements for classifying economic activities of business establishments; supports conversion of the 1987 Standard Industrial Classifications (SIC) to the North American Industry Classification System (NAICS) Canada, Mexico and the U.S. in 1997
Tribal Identifier	Data elements for the use of common names and codes to identify federally-recognized tribal entities
Well Identification	Data elements and data groupings used to exchange information about wells