

2008 National Emissions Inventory

Emissions Inventory System Implementation Plan

Appendix 8 EIS Design and Development Standards

Final

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Appendix 8

EIS Design and Development Standards

This document provides information about standards to be met for the EIS gathered from the EPA Intranet and public websites. These websites and documents identify all relevant standards related to web design and development, application deployment security, accessibility, and data standards that the design, development, and deployment of the EIS will adhere to.

No.	General Area	Name of Document or Website	Document or Website Description	Web Link
1	Web Applications	EPA Web Guide	This document is a good starting point for guidance on developing web applications. EPA refers to this guide as the "authoritative source for policies, practices, and guidance for creating, hosting, deploying, and maintaining websites and applications on the EPA Internet or Intranet."	http://yosemite.epa.gov/oei/webguide.nsf/homepage/
2	Application Development	Policy and Implementation Guide for Communications Product Development and Approval	This document contains general information about planning a web application. The Table of Contents for the Guide contains links to the most helpful sections, which are Product Development and Approval and Appendix 4: Guidance for Web Product Development and Review Resources.	http://www.epa.gov/productreview/guide/index.html
3	Application Deployment	Application Deployment Checklist	All web-based applications hosted at NCC are required to have an Application Deployment Checklist (ADC). This document contains the guidelines for the ADC.	http://intranet.epa.gov/adcc
4	Web Design/ Development	Lessons Learned About Designing, Developing, and Disseminating Environmental Information Products	This report discusses the best practices for designing, developing, and disseminating Environmental Information Products. Section 2, specifically 2.1, Design, and 2.2, Development and Review are the most relevant.	http://www.epa.gov/oei/pdf/OIAA_Lessons-learned.pdf

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5	Web Design/Development	Design Guidelines	This website contains information and links to relevant topics, including EPA Look and Feel, Design Clarifications, Additional Design Requirements and Thirteen Standards. The EPA Look and Feel and Thirteen Standards sections are the most helpful.	http://yosemite.epa.gov/OEI/webguide.nsf/design
6	Web Design/Development	Htmlltip.htm	This website contains a list of tips and tricks for programming in HTML, XHTML, and XML.	http://yosemite.epa.gov/OEI/webguide.nsf/customize/htmlltip
7	Web Design/Development	EPA Web Governance	This website contains a link to the Web Content Management Plan, which discusses standards for web content, as opposed to web design.	http://www.epa.gov/webgovernance/
8	Web Design/Development	Usingxmlresults.htm	This website contains information about programming with XML and WDDX search results.	http://yosemite.epa.gov/OEI/webguide.nsf/searchengine/usingxmlresults
9	Security	ADC Security Plan Requirements	This website contains information on the ADC Security Plan Requirements, including what types of applications require an application security plan. This page also links to the NIST 800-18 Guide for Developing Security Plans for Information Technology Systems, which contains a section on templates for a security plan.	http://intranet.epa.gov/adc/
10	Security	General Information on the Security Plan	This is a PowerPoint file (spp_slide-1.ppt) which contains general information on the Security Plan including Assignment Responsibilities, Reviews, and Authorization.	NA
11	Security	Guidance for Establishing Rules of Behavior for Information Security Plans	The IT Security: Security Plans site has a Q/A section about Security Plans and a Guidance Documents section. The following files seemed the most useful: Information Security Awareness Training Addendum; NIST Special Publication 800-26 Security Self-Assessment Guide for Information Technology Systems.	http://intranet.epa.gov/itsecurity/plans/

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12	Security Standards	IT Security: Security Plans site	This website contains a Q/A section about Security Plans and a Guidance Documents section.	http://intranet.epa.gov/itsecurity/plans/
13	Accessibility	Summary of Section 508 Web Accessibility Requirements	The summary is a one page general description of what Section 508 requires and a list of the 16 technical specifications for 508 compliance.	http://www.section508.gov/index.cfm?FuseAction=Content&ID=11
14	Accessibility	A Plain-Language Overview of the 16 Technical Specifications for Section 508 Accessibility	This website provides information on accessibility guidance.	http://intranet.epa.gov/accessibility/docs/ez508.pdf
15	Accessibility	Web-based Intranet and Internet Information and Applications	This website contains questions and answers about the Section 508 requirements.	http://www.access-board.gov/sec508/guide/1194.22.htm
16	Accessibility	A Guide to Making Documents Accessible to People Who Are Blind or Visually Impaired	This is a general document about PDF accessibility. The most helpful section is Section II, How to Design with Access in Mind.	http://www.acb.org/accessible-formats.html
17	Accessibility	web_lookfor.htm	Materials relevant to the Office of Public Affairs (OPA) for review of web concepts and drafts.	http://www.epa.gov/productreview/guide/web_lookfor.html
18	Data Exchange	Exchange Design Guidance and Best Practices for the Exchange Network	This website contains several PDF files about the use of CDX (xml_drc_prologue.pdf, xml_drc_section1.pdf, xml_drc_section2.pdf), as well as a link to the Exchange Design Guidance and Best Practices for the Exchange Network document (exchange_design_guidance_v1.0.pdf).	http://www.exchangenetwork.net/dev_schema/index.htm
19	Data Exchange	XML Design Rules & Conventions	This document, developed by the Technical Resources Group, provides guidance for drafting an XML Schema for the Exchange Network.	http://www.exchangenetwork.net/dev_schema/xml_drc_prologue.pdf

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20	Data Exchange	Testing XML Schema Compliance	This page contains EPA's automated tool for testing xml schema compliance.	http://www.epa.gov/enviro/html/frs_demo/design_tool.html
21	Data Exchange	Shared Schema Components Usage Guide	This document introduces the Exchange Network shared schema components and provides guidance to XML schema developers on incorporating the SSC into their data flow XML schema.	http://www.exchangenetwork.net/registry/SharedSchemaComponents-UsageGuide.pdf
22	Data Exchange	Shared Schema Components Technical Reference	This document provides a technical representation of the Shared Schema Components.	http://www.exchangenetwork.net/registry/SchemaSchemaComponents-TechnicalReference.pdf
23	Data Exchange	Core Reference Model	This document contains the CRM, an inventory to organize and identify commonalities in the data States and EPA currently and anticipate exchanging.	http://www.exchangenetwork.net/dev_schema/crm_v1_033103.pdf
24	Data Exchange	XML Schema Review Process	This document explains the steps proposed for schema developers or sponsors to take in order to document a schema's compliance with Exchange Network requirements.	http://www.exchangenetwork.net/dev_schema/sprsc_final.pdf
25	Data Exchange	XML Architecture Document	This paper documents architectures for several XML schema designs and is intended as guidance for schema developers.	http://www.exchangenetwork.net/dev_schema/xml_schema_architecture.pdf
26	Data Exchange	Introduction to the Applicable Data Standards for Facility Identification and Using EPA's EDR	This website links to a slide show about data standards and the Environmental Data Registry. The most useful information is the link to the Environmental Data Registry, (http://www.epa.gov/edr/), which contains several links containing information on XML tags registered in the EDR, XML schemas, DETS and supporting files for the Environmental Information Exchange network, final data standards, and a how to section. The final slides include a description of the data for latitude/longitude, SIC/NAICS, Permitting, a link to the Environmental Data Registry, a description of Uses of the EDR and Features and Functions, and related registries.	http://www.epa.gov/enviro/html/frs_demo/EDR_DataStds_071602/index.htm

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27	Data Exchange	Environmental Data Registry	This is the homepage for the Environmental Data Registry (EDR), which a comprehensive, authoritative reference for information about the definition, source, and uses of environmental data. The EDR supports the creation and implementation of data standards that are designed to promote the efficient sharing of environmental information among EPA, States, Tribes, and other information trading partners. The EDR also catalogs data elements in application systems.	http://www.epa.gov/edr/
28	Web Design/ Development	Developers Portal	This website contains guidance and best practices for website development. It includes checklists included in an ADC or security plan review.	http://yosemite.epa.gov/OEI/webguide.nsf/started/webtech
29	Web Design/ Development	FITs II	This document gives the standards for a facility information template.	http://www.epa.gov/enviro/html/frs_demo/presentations/FIPS%20Code%20Standard%20for%20FRS.pdf
30	Web Design/ Development	Facility ID standard	The Facility Site Identification Data Standard consists of core data elements that properly identify the location, the affiliated organizations, individual business activities, and the environmental interest of a facility site.	http://www.epa.gov/edr/FacilitySite_01062006.pdf
31	Web Design/ Development	Latitude/Longitude Standard	This standard provides a set of data elements that can be used for recording horizontal and vertical coordinates and associated metadata that define a point on the earth.	http://www.epa.gov/edr/LatLongStandard_01062006.pdf
32	Web Design/ Development	Chemical ID Standard	This standard defines the required information for identification of chemical substances of interest to EPA.	http://www.epa.gov/edr/ChemID_01062006.pdf
33	Web Design/ Development	Tribal ID Standard	This standard provides data elements for the use of common names and codes to identify federally recognized Tribal entities.	http://www.epa.gov/edr/TribalIden_01062006.pdf
34	Web Design/ Development	Contact Information Standard	The Contact Information Data Standard includes information regarding the source of contact. The standard provides data groupings that are used to describe a point of contact, address, and communication information.	http://www.epa.gov/edr/ContactInfo_01062006.pdf

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No.	General Area	Name of Document or Website	Document or Website Description	Web Link
35	Web Design/ Development	SIC/NAICS Standard	This standard provides data elements for displaying: Standard Industrial Classifications (SIC) - a system for classifying economic activities of a business establishment, and North American Industry Classification System (NAICS) - a system for classifying economic activities of a business establishment, adopted by Canada, Mexico, and the U.S. in 1997.	http://www.epa.gov/edr/SICNAICS_01062006.pdf