

Enterprise Information Management Policy		
EPA Classification No.: CIO 2135.0	CIO Approval Date: 03/03/2015	
CIO Transmittal No.: 15-004	Review Date: 03/03/2018	

Issued by the EPA Chief Information Officer, Pursuant to Delegation 1-19, dated July 7, 2005

# **ENTERPRISE INFORMATION MANAGEMENT POLICY (EIMP)**

## 1. PURPOSE

This policy establishes a standard approach for managing information produced by, funded by, or received per regulated reporting and/or federal-wide requirements and subsequently held or cataloged in information management systems by the Environmental Protection Agency (EPA). This enables the Agency to comply with the E-Government Act, Digital Government Strategy, the Open Government Initiative, and their associated Executive Orders and Office of Management and Budget (OMB) directives. The purpose of the policy is to ensure that information is easy to discover, understand, access, and reuse in a secure manner so it can be used with a broad array of applications and analytics to support the Agency's mission and stakeholder needs.

## 2. SCOPE AND APPLICABILITY

This policy applies to:

- Information, regardless of the format, created, funded or received per regulated reporting and/or federal-wide requirements and subsequently held or cataloged in information management systems by EPA. This includes, but is not limited to, research, programmatic, operational, and administrative information.
- (1) All EPA organizations, officials, and employees engaged in official EPA business, including, but not limited to, those EPA employees who administer contracts or extramural funding agreements (e.g., grants), and (2) individuals or non-EPA organizations who design, develop, compile or maintain information, as defined by this policy, in support of EPA's mission if they use Agency resources and if the requirements set forth in section 6 of this policy are part of a binding contract, an extramural funding agreement, or a regulatory or federal-wide requirement.

### 3. AUDIENCE

The audience for this policy includes all EPA organizations, officials, employees and individuals or non-EPA organizations, if applicable, who create or manage information that supports the Agency's mission.

#### 4. BACKGROUND

EPA and other federal agencies are challenged with managing a broad range of information that is structured, unstructured, or semi-structured; and meeting Federal-wide mandates for opening access to this information in an online, machine-readable and secure manner. Long-standing and recent administrative and legislative initiatives, strategies, and directives serve to guide agencies in

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managing information in this new era, in particular those that fall under the Open Government Initiative and Digital Government Strategy. A few recent examples include:

- OMB Memorandum M-12-18, "Managing Government Records Directive," August 24, 2012
- <u>Executive Order 13642</u>, "Making Open and Machine Readable the New Default for Government Information," May 9, 2013
- OMB Memorandum M-14-06, "Guidance for Providing and Using Administrative Data for Statistical Purposes," February 14, 2014
- OMB Memorandum M-13-13, "Open Data Policy Managing Information as an Asset," May 9, 2013

The Agency and its stakeholders also recognize that EPA's information may meet other organizational and public needs beyond the original intent, further increasing the value of the information. By providing releasable information in open and machine-readable formats, EPA enables the public and other organizations to better leverage the rich wealth of information available.

New technology now supports the ability to gather and integrate large volumes of information from multiple sources and greatly enables information analytics, visualization, and predictive analysis. These advances greatly improve the Agency's ability to explore and address environmental, business and public policy challenges, ask new questions, identify new relationships, discover new information, and ultimately make knowledge-driven decisions. In short they allow EPA to more fully harness the power of information corporately which drives better environmental results.

The products and services that deliver better management and curation of large volumes of data require a life cycle approach to managing information. The information management life cycle begins with planning to obtain information and ends when the information reaches its final disposition (e.g., deleted or archived). An information management life cycle management approach includes collaboration with stakeholders, use of content and metadata standards, cataloguing, implementation of necessary security/access controls, and quality management to optimize our information resources for discovery, access and analysis. These activities are organized according to the defined phases of an information life cycle management process, and documented in an information management plan.

This policy is based upon several guiding principles for strategic information management established by the Agency's Open Government program:

- Provide easy and timely access to quality information
- Publish information in open formats following open standards
- Help stakeholders understand information with descriptive and informative metadata
- Enhance information use by leveraging web services and tools

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- <u>Clinger-Cohen Act</u> (Information Technology Management Reform Act) of 1996, Public Law 104-106, Division E, February 10, 1996
- OMB Circular A-119 Revised, "Federal Participation in the Development and Use of Voluntary Consensus Standards and in Conformity Assessment Activities," February 10, 1998
- OMB Circular A-130 Revised, "Management of Federal Information Resources," November 28, 2000
- <u>Information Quality Act</u>, Section 515 of the Treasury and Government Appropriations Act of 2001 (PL106-554, 31 USC 3516)
- <u>E-Government Act of 2002</u> (Public Law 107-347, 44 U.S.C. Chapter 36), December 17, 2002
- <u>FIPS Publication 200</u>, "Minimum Security Requirements for Federal Information and Information Systems," March 2006
- OMB Memorandum M-06-16, "Protection of Sensitive Agency Information," June 23, 2006
- OMB Memorandum M10-06, "Open Government Directive," December 8, 2009
- <u>Digital Government Strategy</u>, May 23, 2012
- OMB Memorandum M-12-18, "Managing Government Records Directive," August 24, 2012
- OMB Memorandum, "Increasing Access to the Results of Federally Funded Scientific Research," February 22, 2013
- OMB Memorandum M-13-13, "Open Data Policy Managing Information as an Asset," May 9, 2013
- <u>Executive Order 13642</u>, "Making Open and Machine Readable the New Default for Government Information," May 9, 2013
- OMB Memorandum M-14-06, "Guidance for Providing and Using Administrative Data for Statistical Purposes," February 14, 2014

#### 6. POLICY

It is EPA policy to manage information as a strategic asset, consistent with Executive and Legislative acts, orders, directives, strategies, and guidance<sup>1</sup>.

EPA organizations, officials, employees and individuals or non-EPA organizations, if applicable, shall ensure information is:

- Planned and managed according to a defined information life cycle process (appropriate for the information type) and in accordance with enterprise systems and solutions.
- Catalogued and/or labeled with metadata, including geographic references<sup>2</sup>, as appropriate, in EPA and Federal-wide registries, repositories, or other information systems.

<sup>&</sup>lt;sup>1</sup> This requirement includes compliance with the EPA/EN (Exchange Network) Data Standards.

<sup>&</sup>lt;sup>2</sup> To maximize the use of research, operational, assessment, and financial content with spatial base layers, and to enable cross media and program assessments.

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- Developed, maintained, and preserved in open and machine readable formats using established standards that make information discoverable and accessible, where appropriate and feasible.
- Made and maintained to be open and publically accessible, unless there is a documented National Security Information (NSI) or Controlled Unclassified Information (CUI) requirement outlined within a statute/law, regulation, and/or government-wide policy, or unless otherwise protected from disclosure under federal law or EPA regulation. In these cases, internal, external, and associated safeguards must be instituted.

#### 7. RELATED DOCUMENTS

- EPA Web Guide <a href="www.epa.gov/webguide/EPA">www.epa.gov/webguide/EPA</a>, September 7, 2006
- CIO Policy 2106.0, "Quality Policy," October 20, 2008
- <u>CIO Procedure 2180-P-06.0</u>, "Web Content Types and Review Procedure," March 16, 2011
- CIO Policy 2150.3, "EPA Information Security Policy," August 6, 2012
- <u>CIO Policy 2121.1</u>, "EPA System Life Cycle Development Management (SLCM) Policy," September 21, 2012
- CIO Policy 2122.1, "Enterprise Architecture Policy," November 5, 2012
- CIO Policy 2180.1, "Web Governance and Management Policy," May 7, 2013

#### 8. ROLES AND RESPONSIBILITIES

Only the roles and responsibilities directly related to this policy are outlined in this section.

### **Chief Information Officer (CIO):**

- Leads Agency-wide implementation of the EIMP and associated procedures
- Facilitates the process for appropriate business organizations to incorporate the EIMP into their organization and operations through procedures, guidance and outreach
- Manages the Quality Information Council (QIC) process to update the EIMP and associated policies and propose new information policies and procedures
- Authorizes formal information calls for registry/repository maintenance or review as appropriate
- Approves or disapproves waivers to the EIMP and associated procedures, as applicable

## **Quality Information Council (QIC):**

- Advises and assists the CIO in developing and implementing the Agency's quality and information goals and policies, including the EIMP and associated procedures and standards as well as existing EPA policies and procedures that are incorporated by reference into the EPA Information Life Cycle Process
- Reviews and approves the EIMP and associated policies and proposed new information policies and procedures

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- Reviews any progress reports provided and address Agency-wide challenges for the effective implementation of the EIMP
- Endorses enterprise-wide information investments and coordinates with Agency Investment Oversight Boards as appropriate

### EPA Assistant Administrators (AAs) and Regional Administrators (RAs):

- Establish procedures, technical specifications, standards, and guidance appropriate for the development of information inventories and other practices appropriate for management of information within their domain
- Advocate and champion implementation of the EIMP by communicating the importance of this policy to their staff

## Senior Information Officials (SIOs):

- Apprise the QIC of major information management issues within their offices
- Responsible for ensuring compliance with the EIMP and associated procedures for information resources within their offices
- Ensure that the information technology used and managed by their organization supports its business needs and mission and helps to achieve strategic goals
- Ensure solution architectures comply with the Agency Enterprise Architecture
- Advises and concurs on requests for waivers to the EIMP and associated procedures from within their organization, as applicable

#### **Information Management Officers (IMOs):**

- Review, comment, and concur with information management documents, as appropriate
- Responsible for ensuring that staff who manage or create information and/or administer
  contracts or extramural funding agreements that obtain and/or manage information paid for
  with Agency resources are aware of the EIMP and its related documents via training and
  guidance documents either developed in OEI or in their specific programs as applicable.
- Review the completeness and accuracy of metadata for their program's information as outlined in the EIMP and associated procedures, standards or guidance, and obtain SIO certification, as needed, that their program information is catalogued in the appropriate registry or repository as applicable

## **Director of the Office of Acquisition Management (OAM):**

 Responsible for ensuring the incorporation of requirements within the EPA's EIMP and EIMP associated procedures and standards into requests for proposals (RFPs) and contracts if applicable

#### Director of the Office of Grants and Disbarment (OGD):

• Responsible for ensuring the incorporation of requirements within the EPA's EIMP requirements and those within EIMP associated procedures and standards within requests

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for proposals and conditions of grants, interagency agreements, and cooperative agreements if applicable

## **EPA Program Managers:**

- Appoint information managers for information under the purview of the EIMP
- Assure that information resources comply with EIM Metadata Standard and appropriate procedures

### All EPA Organizations, Employees and Individual or non-EPA Organizations:

 Manage information throughout its life cycle in accordance with the EIMP and related procedures and standards

#### 9. **DEFINITIONS**

**Accessible:** Open data are made available in convenient, modifiable, and open formats that can be retrieved, downloaded, indexed, and searched. Formats should be machine-readable (i.e., data are reasonably structured to allow automated processing). Open data structures do not discriminate against any person or group of persons and should be made available to the widest range of users for the widest range of purposes, often by providing the data in multiple formats for consumption. To the extent permitted by law, these formats should be non-proprietary, publicly available, and no restrictions should be placed upon their use. (OMB Memorandum M-13-13, "Open Data Policy - Managing Information as an Asset," May 9, 2013)

**Non-EPA organization:** An entity that has entered into a contract, extramural funding agreement, or a regulatory or federal-wide requirement with EPA, which can include, but is not limited to EPA contractors, grantees, States, Tribes, localities, regulated parties, volunteer organizations, cooperative agreement holders, other federal governmental agencies, intergovernmental organizations, or educational institutions (EPA Quality Policy; EPA Classification Number: CIO 2106; Approval Date: 10/20/08; Review Date 10/11; CIO Transmittal Number:09-001) if the requirements set forth in section 6 of this policy are part of a binding contract or other funding agreement.

Controlled Unclassified Information (CUI): A categorical designation that refers to unclassified information that does not meet the standards for National Security Classification under Executive Order 12958, as amended, but is (i) pertinent to the national interests of the United States or to the important interests of entities outside the Federal Government, and (ii) under law or policy requires protection from unauthorized disclosure, special handling safeguards, or prescribed limits on exchange or dissemination. Henceforth, the designation CUI replaces "Sensitive But Unclassified" (SBU). (http://www.fas.org/sgp/bush/cui.html)

**Enterprise Information Management (EIM)**: An integrative discipline for structuring, describing, and governing information assets across organizational and technological boundaries to improve efficiency, promote transparency, and enable business insight. (<a href="https://www.gartner.com/it-glossary/enterprise-information-management-eim/">https://www.gartner.com/it-glossary/enterprise-information-management-eim/</a>)

**Information**: For purposes of this policy, the term "information" means any communication or representation of knowledge such as facts, data, or opinions in any medium or form, including textual,

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numerical, graphic, cartographic, narrative, or audiovisual forms. (<u>OMB Circular A-130 Revised</u>, "Management of Federal Information Resources," Section 6, November 28, 2000)

**Information Life Cycle**: The term "information life cycle" means the stages through which information passes, typically characterized as creation or collection, processing, dissemination, use, storage, and disposition. (OMB Circular A-130 Revised, "Management of Federal Information Resources," Section 6, November 28, 2000)

**Machine-Readable:** Refers to information or data that is in a format that can be easily processed by a computer without human intervention while ensuring no semantic meaning is lost. (<a href="https://project-open-data.cio.gov/glossary/">https://project-open-data.cio.gov/glossary/</a>)

**Metadata:** The simplest definition of metadata is "structured data about data." Metadata is structured information that describes, explains, locates, or otherwise makes it easier to retrieve, understand, use or manage an information resource. (NISO 2004, ISBN: 1-880124-62-9)

**Open: Use of a** standard developed or adopted by voluntary consensus standards bodies, both domestic and international. These standards include provisions requiring that owners of relevant intellectual property have agreed to make that intellectual property available on a non-discriminatory, royalty-free or reasonable royalty basis to all interested parties. (<a href="https://project-open-data.cio.gov/glossary/">https://project-open-data.cio.gov/glossary/</a>)

### 10. WAIVERS

- Waiver Authority: The Agency's CIO may grant waivers (directly or via delegated authority) to selected provisions of this policy for sufficient cause
- **Application Requirements:** Applications for waivers to specific provisions must be submitted to the CIO and shall contain:
  - o Identification of the policy provision
  - o Detailed justification why the policy cannot be applied or maintained
  - o An assessment of impacts resulting from non-compliance
  - The signature of an Assistant Administrator (AA) or Regional Administrator (RA) responsible for the information in question
- **Notification:** The CIO will notify the requesting office in writing of the disposition of the waiver within 60 days of receipt

## 11. RELATED PROCEDURES, STANDARDS AND GUIDANCE

- CIO Procedure, "Enterprise Information Management Policy (EIMP) Cataloguing Information Resources Procedure" (DRAFT)
- CIO Standard, "Enterprise Information Management Policy (EIMP) Minimum Metadata Standards" (DRAFT)
- CIO Procedure, "Information Life Cycle Management Procedure" (to be developed)
- EPA Controlled Unclassified Information (CUI) Procedure (to be developed)

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The QIC, OEI, and program offices, regional offices, and laboratories will issue required procedures and implementation guidelines for this policy as appropriate for the management of EPA information.

## 12. MATERIAL SUPERSEDED

This policy supersedes the CIO Policy 2131.0 National Geospatial Data Policy.

## 13. ADDITIONAL INFORMATION

For additional information about this policy, please contact the EPA Office of Environmental Information, Office of Information Collection.

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