Reclamation Manual
Directives and Standards

Subject:	Personal Computer (PC) Life Cycle Management
Purpose:	To establish a 4-year refresh cycle for replacing PCs in order to reduce the impact of the Bureau of Reclamation's electronics disposal on the environment. The benefits of this Directive and Standard (D&S) are to reduce the environmental and energy impacts of its electronic equipment purchase, use, and disposal through continual improvements to the acquisition, design, specifications, material choices, distribution, and use of new electronic equipment, and the reuse, de-manufacturing, and recycling of surplus electronic equipment.
Authority:	Clinger-Cohen Act of 1996 (40 U.S.C. 1401(3)); Executive Order (EO) 13423, *Strengthening Federal Environmental, Energy and Transportation Management;* Office of Management and Budget (OMB) Circular A-130, *Management of Federal Information Resources;* Office of the Secretary Order 3244 - *Standardization of Information Technology Functions and Establishment of Funding Authorities;* Department of the Interior Departmental Manual, (375 DM 7, and 376 DM 4); Reclamation Manual (RM) Policy, *Reclamation Information Technology Management Program,* IRM P03.
Approving Official:	Chief Information Officer (CIO)
Contact:	Information Technology (IT) Policy and Security Division, 84-21200

1. **Introduction.**

   A. Electronics are the fastest growing portion of the municipal waste stream. The Federal Government disposes approximately 10,000 computers every week. EO 13423 requires all Federal agencies to take steps to limit the impact on the environment of the electronics that they use. One means of limiting the electronic waste stream is to establish standards for refresh of electronics. While limiting the waste stream is an important objective, it must be balanced with ensuring that Reclamation employees have access to appropriate technology.

   B. This D&S establishes Reclamation-wide minimum requirements for a systematic approach to retiring and replacing PCs that balance the need to keep technology current with the need to protect the environment. This D&S provides requirements for Reclamation supervisors for replacing individual PCs in their inventory according to the Department's required PC refresh cycle. Additionally, by requiring that PCs have a useful life of at least 4 years, Reclamation will reduce the impact of its electronics disposal on the environment.

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2. **Applicability.** All Reclamation employees are subject to the requirements contained in this D&S. This D&S does not supersede any existing Department, OMB, or other legal requirements regarding PC life cycle management.

3. **Definitions.**

    A. **Electronics Stewardship Program.** A program that addresses the life cycle management of electronics from procurement to disposal, in accordance with EO 13423, Section 2(h).

    B. **PC.** A microcomputer designed for individual use by any Reclamation employee in the workplace or at home.

    C. **PC Life Cycle.** PC life cycles reflect the entire cost of owning a desktop or laptop computer, from decisions and negotiations regarding purchases through management (including maintenance) of the resources and disposal of obsolete equipment. The life cycle quantifies costs beyond the purchase price of hardware and software.

    D. **PC Life Cycle Management.** The activity of determining how long a PC is useful and cost effective to an organization based on a complete understanding of overall processes and agency needs.

4. **Responsibilities.**

    A. **CIO.** The CIO is responsible and accountable for leading the Electronics Stewardship Program.

    B. **Information Resource Management (IRM) Council (IRMC)/Reclamation Electronics Stewardship Task Force (Task Force).** The Task Force is responsible for implementing and maintaining Reclamation's Electronics Stewardship Plan as required by EO 13423, Section 2(h). Task Force duties will be performed by the IRMC members. The Task Force will meet all goals and requirements of EO 13423. The Task Force will consider life cycle costs and savings in making determinations about all electronic equipment investments with regard to capital assets, services, and procurements; decreasing government's life-cycle costs; achieving sustainable design principles; reducing energy and water consumption; and reducing the environmental impact/footprint of the government's operations as it implements its primary mission and improves the quality of service and effectiveness of government.

    C. **Reclamation IT/IRM Organizations.** Reclamation IT/IRM organizations are responsible for obtaining the necessary equipment and software to assist Reclamation asset owners in complying with this D&S. Designated IT/IRM personnel are also responsible for sanitizing the equipment and signing certification forms 7-2538 and 7-2538a. The IT/IRM organization will provide, to the servicing property office, a list

of those individuals authorized to sign the certification forms. See RM D&S, *Reclamation Information Technology (IT) Security Program (ITSP): IT Asset Disposal – Information Sanitization* (IRM-08-13).

D. **Servicing Property Office.** The Servicing Property Office is responsible for the tracking and disposal of IT equipment. Property will not be transferred, donated, recycled, sold, or scrapped without properly signed certification forms 7-2538 and 7-2538a. See IRM-08-13.

E. **Supervisors.** Supervisors are responsible for supporting the acquisition, maintenance, and disposal of IT systems in order to meet the requirements in this D&S. They also are responsible for effectively managing supporting resources (funding and personnel) essential to the acquisition, maintenance, and disposal of IT systems.

5. **Procedures.**

A. The following steps are required for the management of hardware assets. PCs at Reclamation will follow a standard refresh life cycle including procurement, deployment, maintenance, and retirement. Each of these life cycle stages has its own unique considerations.

(1) **Procure.**

(a) Confirm that new PCs are purchased through the Department's mandatory contracts. These contracts can be found on the Department's IT Storefront and include the minimum PC configurations based on usage categories.

(b) Select a configuration that can reasonably be anticipated to meet needs for a minimum of 4 years.

(c) Purchase PCs.

(2) **Deploy.**

(a) Upon delivery, all PCs shall receive a property tag and be entered into an asset management database.

(b) Ensure that new PCs are configured per Reclamation requirements as outlined in the Reclamation Security Technical Implementation Guide, which can be accessed on the IT Security intranet website.

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(3) **Maintain.**

    (a)   Implement supported mechanisms (e.g., service provider, service-level agreement, call center) to ensure that PCs are updated to current approved configurations.

    (b)   Produce a Quarterly Assessment Report, which displays inventory status on a quarterly basis for management of the replacement process. This report will be provided by the CIO and will include all systems that are domain attached. Reports will be distributed to appropriate directorates for life cycle planning purposes.

(4) **Retire.**

    (a)   Perform a quarterly assessment to identify candidate PCs for retirement.

    (b)   Coordinate simultaneous procurement of new PCs and retirement of outdated PCs.

    (c)   Dispose of the outdated PC in accordance with IRM-08-13.

B.   The following diagram represents appropriate checkpoints and relative timeframes for managing the PC refresh cycle. It is not intended to limit procurement to the end of the fiscal year but instead represents a full 4-year timeframe in 4 complete fiscal years. As shown in the figure below, the process for replacing a PC at the end of its 4-year life cycle begins at the start of Q2 of the PC's fourth year. At this point, the process steps outlined above begin. Maintenance activities occur throughout the 4-year life cycle of the PC. In the event that business needs dictate the purchase/replacement of a PC before the end of its 4-year life cycle, the local IT organization must document the business need and consideration must be given to transferring the current system to another user that may be reaching the end of the life cycle, as appropriate.