Directives and Standards

Subject: Environmental Management System (EMS) Implementation

Purpose: The purpose of this Directive and Standard (D&S) is to establish the

requirements and responsibilities for EMS within the Bureau of

Reclamation. The benefit of this D&S is reduced risk to natural resources

and human health, more efficient operations, better environmental information for decision making, and improved environmental

performance.

Authority: Executive Order (E.O.) 13423, Strengthening Federal Environmental,

Energy, and Transportation Management, January 26, 2007

(E.O. 13423); the Council on Environmental Quality *Implementing Instructions and Requirements for E.O. 13423*, March 29, 2007 (Implementing Instructions); and the Department of the Interior's Departmental Manual (DM) Part 515 Chapter 4, August 13, 2008

(DM 515 DM 4)

Approving Official: Director, Policy and Program Services (PPS)

Contact: Maintenance Services Office, 84-57000

1. Introduction.

A. **Background.** E.O. 13423 directs Federal agencies to implement EMS as the primary management approach for addressing the environmental impacts of agency operations and activities. In addition to each agency's specific environmental priorities, E.O. 13423 defines sustainability goals to be accomplished through an EMS framework. The sustainability goals address energy and water conservation; sustainable building design, construction and operation; environmentally sound (e.g., green) purchasing; green electronics; alternative fuel vehicles and alternative energy; and hazardous and solid waste reductions. DM 515 DM 4 and Reclamation Manual Policy, *The Bureau of Reclamation's Commitment to Environmental Stewardship* (ENV P05) direct Reclamation to implement EMS at appropriate organizational levels to address our environmental impacts and implement sustainable practices. Implementation of D&S ENV 05-01 facilitates Reclamation's compliance with these requirements.

B. Explanation of EMS.

(1) An EMS is an integrated management approach or way of doing business to strategically address an organization's environmental impacts. It incorporates both traditional activities to manage environmental issues (e.g., environmental compliance review programs for hazardous materials management), and newly developed programs and procedures that go beyond compliance to address the wide range of organizational activities and operations that contribute to

Directives and Standards

environmental and human health impacts and the consumption or degradation of natural resources. When all programs and activities addressing environmental impacts are integrated into an EMS, managers can more easily and comprehensively assess, prioritize, monitor and assign responsibility for its environmental issues.

- (2) Organizations implementing EMS follow a common "Plan, Do, Check, Act" model to ensure sound management of environmental impacts. The model requires the implementation of standardized processes to:
 - (a) identify how an organizations day-to-day operations and activities interact with the environment to cause environmental impacts¹;
 - (b) establish environmental objectives and targets to reduce significant impacts;
 - (c) train staff and clearly define responsibilities;
 - (d) institute operational controls, emergency procedures, and monitor activities with potential significant impacts; and
 - (e) take corrective action where necessary to avoid and reduce impacts.
- (3) An EMS helps an organization take a systematic, standardized, and corporate approach to management of its environmental impacts. It facilitates integration of environmental accountability into day-to-day operations and provides management with key information to use to make decisions. An EMS does not guarantee environmental compliance, but it provides the framework and tools to achieve and sustain compliance, thereby reducing liability. Successful implementation of EMS can enhance compliance efforts, reduce environmental liability, increase operational efficiencies, conserve resources, prevent pollution, and reduce an organization's environmental footprint.

¹The National Environmental Policy Act of 1969 (NEPA) also establishes requirements for Federal agencies proposing actions "significantly affecting the quality of the human environment" to analyze the environmental impacts of these actions and of alternatives. Although complimentary, EMS differs from NEPA in that the EMS typically requires identification of environmental aspects associated with an organization's ongoing operations and activities, prioritizing those which have or can have significant impacts on the environment. NEPA commonly provides impact prediction, analysis, and consideration of mitigation at *a discrete proposal design and decision phase*. EMS provides a framework to improve environmental performance in ongoing day-to-day operations (including those subject to environmental regulation), not just "major Federal actions." The NEPA process can be used to inform an EMS on the identification and prioritization of environmental aspects of a proposed activity. Commitments and mitigation measures established as a result of the NEPA process can be tracked and monitored through the EMS. For more information on EMS and NEPA, please see the Council on Environmental Quality guide on "Aligning NEPA Processes with Environmental Management Systems" http://www.fedcenter.gov/ kd/Items/actions.cfm?action=Show&item id=6899&destination=ShowItem

Directives and Standards

- 2. **Applicability.** Whereas ENV P05 applies to all Reclamation employees, the responsibilities and requirements for implementing an EMS, as specified in this D&S, apply to regional directors (RDs) and their designee(s). PPS shall consult with the Reclamation Leadership Team to reevaluate, as needed, the responsibilities for implementing EMS to ensure that Reclamation's operations and activities with potentially significant environmental impacts are addressed.
- 3. **Definitions.** In addition to the definitions below, see Paragraph 3 of <u>ENV P05</u> for definitions applicable to this D&S.
 - A. **Appropriate Organization.** Any Reclamation facility, area office, or region identified by an RD to implement EMS to address the significant environment impacts of the region's operations and activities.
 - B. **International Organization for Standardization (ISO).** A worldwide federation founded in 1947 to promote the development of international manufacturing, trade, and communication standards. Over time, the acronym ISO has come to represent the International Organization for Standardization. ISO develops globally recognized standards in almost all industries. ISO 14000 is comprised of a series of voluntary, generic standards that provide organizations with the structure for managing environmental impacts.
 - C. **Significant Environmental Aspect.** An element of a Reclamation operation or activity that an RD deems as having, or potentially having, a significant impact on the environment. Examples of common significant environmental aspects include energy and water consumption, solid and hazardous waste generation and disposal, air emissions, waste water, and natural resources consumption or degradation. RDs shall have the flexibility to determine the criteria for significance, considering the following factors:

(2)	human health impacts;
(3)	toxicity;
(4)	probability of occurrence;

natural resources impact;

(5) frequency;

(6) cost;

(1)

(7) within the control or influence of the organization; and

Directives and Standards

- (8) regulated by local, state and/or Federal law or required by E.O. or other requirement.
- D. **Sustainability Goals.** The sustainable goals and performance targets are identified in Section 2 of E.O. 13423². The goals address:
 - (1) energy efficiency and reduction of greenhouse gas emissions;
 - (2) renewable energy;
 - (3) water consumption;
 - (4) sustainable acquisitions;
 - (5) use and disposal of toxic and hazardous chemicals and materials;
 - (6) waste prevention and recycling programs;
 - (7) high performance and sustainable buildings;
 - (8) vehicle fleet management; and
 - (9) electronic stewardship.

4. Responsibilities.

- A. **RD.** RDs shall implement EMS in accordance with this D&S to address significant environmental aspects under their areas of responsibility. In implementing EMS, the RD or designee shall:
 - identify the appropriate organization(s) and the manager(s) accountable for implementing EMS within their area of responsibility in accordance with Paragraph 6 below;
 - (2) identify an EMS Coordinator for overall EMS coordination within their area of responsibility and as point-of-contact with PPS on Reclamation-wide EMS policy, guidance, and reporting;
 - (3) develop an implementation plan according to Paragraph 8 below;
 - (4) provide resources to implement EMS at all appropriate organizations; and

²E.O. 13423 can be found at http://edocket.access.gpo.gov/2007/pdf/07-374.pdf.

Directives and Standards

- (5) review their organization's progress in meeting the EMS implementation plan at planned intervals, address challenges and issues, and make adjustments as needed.
- B. **Managers of Appropriate Organizations**. Managers of appropriate organizations as identified in Paragraph 4.A.(1) shall ensure his/her appropriate organization's EMS meets all of the required elements of Paragraph 6.A.-H. of this D&S and immediately inform the RD of any issues that may affect successful implementation of EMS.
- C. Director, PPS. The Director, PPS, is responsible for facilitating the implementation of EMS in accordance with this D&S through the development and employment of policy, guidance, and technical assistance. The Director, PPS, is responsible for collecting and analyzing data to produce all required Reclamation-wide EMS reports. The Director, PPS, shall designate a Reclamation-wide EMS Coordinator to provide staff support in meeting these responsibilities.
- D. **PPS EMS Coordinator**. The Reclamation-wide EMS Coordinator shall support the Director, PPS, and facilitate the development of policy, guidance, technical assistance tools, outreach materials, and reports. The Reclamation-wide EMS Coordinator will work with regional EMS coordinators as designated pursuant to Paragraph 4.A.(2) in the implementation of EMS.
- 5. **Scope.** EMS shall be implemented to address Reclamation's significant environmental aspects.
 - A. **Identification of Appropriate Organizations.** Each RD shall identify appropriate organizations required to implement EMS at the organizational level that best addresses their region's significant environmental aspects and business needs. The Director, PPS, shall request annually from the RD any revisions, additions, or deletions to the list of appropriate organizations by a deadline specified by the Director, PPS.
 - B. Lessee, Contract, and Concessionaire Activities. Where lessee, contractor, and concessionaire activities on Reclamation lands, including contractor operation of Reclamation-owed facilities and vehicles, affect Reclamation's significant environmental aspects, the manager of the appropriate organization responsible for oversight of the contract shall:
 - (1) assess and include the significant environmental aspects of lessee, contractor, and concessionaire activities on Reclamation lands in the appropriate organization EMS; and
 - (2) ensure that contracts entered into after the date of this D&S specify the lessee, contractor or concessionaire's role and responsibilities to reduce their significant environmental aspects in support of the appropriate organization's EMS.

Directives and Standards

- C. Reclamation as Tenant. Where an appropriate organization is a tenant within a General Services Administration (GSA) facility and the GSA has requested Reclamation's participation in implementation of its EMS, the manager of the appropriate organization shall coordinate with GSA to determine and address Reclamation's responsibilities as a tenant. The appropriate organization manager shall consider including these responsibilities in his/her EMS. Reclamation offices and facilities that are GSA tenants, but not currently identified as an appropriate organization required to implement EMS, shall work cooperatively with GSA, as requested, to reduce their environmental impacts as tenants.
- 6. **EMS-Required Elements.** An EMS shall reflect the following elements of the ISO 14001:2004(E) "Plan, Do, Check, Act" framework³:
 - A. Statement of Commitment to Environmental Policy. Reclamation has communicated its environmental stewardship policy in Reclamation Manual Policy, ENV P05. As part of the EMS, the appropriate organization shall formally adopt the Policy as stated in Paragraph 5 of ENV P05, and include additional commitments to reflect the needs of the appropriate organization, as necessary. A sample distribution memorandum adopting the Policy is provided in Appendix A. The manager of the appropriate organization shall communicate the commitment statement to the Policy to all employees of the appropriate organization and to external stakeholders as he/she deems appropriate.
 - B. **Planning.** Appropriate organizations shall establish, conduct, and document procedures to identify environmental aspects and impacts of the organization; the legal and other requirements related to their environmental aspects; and the significant environmental aspects to be addressed in the EMS. The appropriate organization shall also establish and document objectives and targets in the EMS for all significant environmental aspects identified.
 - (1) **Environmental Aspects.** Appropriate organizations shall identify and list the environmental aspects and impacts of all operations and activities under its responsibilities (e.g., a regional EMS shall address the area and field office and facility aspects) and document them in the EMS. Pursuant to E.O. 13423 requirements, appropriate organizations shall also address in the EMS the sustainability goals in Section 2 of E.O. 13423 based upon their applicability to the appropriate organization's business activities and the organization's ability to influence the activity. The organization shall develop a plan to include the sustainability goals in the EMS through continual improvement.
 - (2) **Legal and Other Requirements.** Appropriate organizations shall establish, implement, and maintain procedures within the EMS for identifying the Federal,

2

³EMS manual templates outlining the required EMS elements and processes can be found on the EMS Intranet website.

Directives and Standards

- state, and local environmental regulations and other requirements and commitments applicable to their organization's environmental aspects. The procedures shall include a periodic review of legal and other requirements and the process for documenting and communicating changes.
- (3) **Significant Environmental Aspects.** Appropriate organizations shall develop, document, and apply criteria for determining significant environmental aspects. Appropriate organizations shall include in the EMS all significant environmental aspects from operations and activities under the organization's control or responsibility.
- C. **Objectives and Targets.** The appropriate organization shall establish, implement, and document in the EMS measureable, realistic, and time-specific environmental objectives and targets for their significant environmental aspects. The environmental objectives and targets shall support ENV P05 to promote regulatory compliance, prevent pollution, and improve environmental performance.
- D. **Implementation and Operation.** Appropriate organizations shall ensure that adequate resources, staff, and internal controls are put in place to accomplish the EMS objectives and targets related to significant environmental aspects. This element requires appropriate organizations to document and communicate the following sub-elements:
 - (1) **Roles and Responsibilities.** Appropriate organizations shall define, document, and communicate the roles and responsibilities related to significant environmental aspects and achievement of the environmental objectives and targets.
 - (2) **Training.** Employees working in activities or operations tied to significant environmental aspects shall be trained to perform their job functions in an environmentally sound manner. The appropriate organization shall identify training needs associated with its significant environmental aspects, shall provide training or other means to meet the needs, and retain associated training records.
 - (3) **Communication.**
 - (a) **Internal Communication**. Appropriate organizations shall communicate their commitment to ENV P05 and their specific EMS environmental objectives and targets to all employees. They shall also establish and maintain procedures in the EMS for communication on the EMS between organizational functions and levels.
 - (b) **External Communication.** The appropriate organization shall communicate the EMS to external stakeholders as they deem appropriate. The EMS shall

Directives and Standards

contain procedures for receiving, documenting, and responding to communication relevant to the EMS from external parties for review by management, annually.

- E. **Documentation.** Appropriate organizations shall maintain and control documents so that they are up-to-date, legible, consistent, and available.
 - (1) **Operational Controls.** Appropriate organizations shall identify, implement, maintain, and document or reference procedures, practices, and operational controls related to their significant environmental aspects. This may include reference to current standard operating procedures, policies, D&Ss, plans, and programs. Appropriate organizations shall ensure that these controls are carried out in order to avoid deviation and potential environmental impacts and to achieve environmental objectives.
 - (2) **Emergency Preparedness and Response.** Appropriate organizations shall establish, implement, and maintain emergency response procedures for potential occurrences that can have an environmental impact. The organization shall refer to existing emergency action plans in the EMS, as appropriate.
- F. **Monitoring and Measurement.** Appropriate organizations shall establish, document and implement procedures to monitor and measure the key operations related to significant environmental aspects, including an assessment of the effectiveness of operational controls in place to reduce environmental impacts. Monitoring and measurement activities shall include an assessment of performance in achieving the environmental objectives and targets, as well as a review of quality assurance procedures to ensure the collection of reliable EMS performance data. The appropriate organization shall identify and document any noncompliance issues and deficiencies and put corrective action plans in place.
- G. **Evaluation of Compliance.** ISO 14001(E) requires organizations to establish, implement, and maintain procedures in the EMS for periodically evaluating compliance with legal requirements related to significant environmental aspects. Reclamation Manual D&S, *Hazardous Materials and Hazardous Waste Auditing and Review Program Implementation* (ENV 02-08) establishes Reclamation's environmental compliance review program for statutes, regulations, and issues related to hazardous materials, air pollution, water quality, and pest management, among others. The appropriate organization shall adopt and reference the environmental compliance review procedures in ENV 02-08 to meet this EMS required element.⁴

⁴E.O. 13423 additionally requires the development of a Compliance Management Plan (CMP) outlining an organization's formal audit and review process for determining compliance with environmental regulatory requirements and tracking and addressing findings of non-conformance. In conjunction with implementation of an EMS, implementation of ENV 02-08 meets the minimum E.O. 13423 CMP requirements. Thus, a stand alone CMP is not required.

Directives and Standards

- H. **Management Review.** The manager of the appropriate organization shall conduct management reviews of its EMS annually to ensure continued suitability, adequacy, and effectiveness. The management review shall focus on conformance with this D&S and address any deficiencies and opportunities for improvement. The management review shall be documented and include:
 - (1) any EMS-related communication from external interested parties;
 - (2) the extent to which EMS objectives and targets have been met, including compliance with environmental regulations and other legal requirements;
 - (3) a review of the status of EMS implementation and, where EMS is fully implemented and meeting the requirements Paragraph 6 of this D&S, a reaffirmation of the conformance declaration as determined in Paragraph 7 below; and
 - (4) the results and status of any follow-up actions from previous conformance audits, if any, as described in Paragraph 7 of this D&S.

7. Declaration of Conformance.

- A. To declare conformance to this D&S, an appropriate organization must complete the following three steps:
 - (1) verify implementation of the required EMS elements in Paragraph 6.A.-H. of this D&S through a formal audit⁵ performed by a qualified, independent auditor outside of the control or scope of the EMS;
 - (2) develop and initiate a corrective action plan for each audit finding; and
 - (3) if the audit determines that all required EMS elements have generally been met, declare EMS conformance with this D&S in writing through the responsible RD to the Director, PPS.
- B. Once conformance has been declared, perform repeat audits of the EMS by a qualified independent auditor at least every 3 years from the date of the initial declaration.
- 8. **Implementation Plans.** Sixty days after approval of this D&S, RDs shall submit to the Director, PPS, implementation plans for all appropriate organizations designated prior to

⁵For information on the process, roles, and responsibilities associated with EMS conformance audits, contact the PPS EMS Coordinator. The Reclamation Manual D&S 05-02, *Environmental Management System (EMS) Conformance Audit and Declaration* is scheduled for completion in calendar year 2009.

Directives and Standards

- approval of the D&S. Implementation plans for appropriate organizations designated after approval of the D&S are due 90 days after they have been formally identified in writing to PPS as required in Paragraph 5.A.
- 9. **EMS Reporting.** The Director, PPS shall coordinate the collection and reporting of data on EMS implementation for the Department and the Office of Management and Budget quarterly and annual reports and the EMS Annual Report, requested by the Office of the Federal Environmental Executive and the Environmental Protection Agency. Each RD shall provide information to the Director, PPS, relative to his/her appropriate organizational EMS to meet these reporting requirements.