Subject: Hazardous Waste HS: HSS CRAD 64-30 U.S. Department of Management Implementation Rev: Energy Inspection Criteria, Approach, Eff. Date: 12/04/2007 and Lines of Inquiry Office of Independent Director, Office of ES&H Oversight **Evaluations** Page 1 of 4 Criteria Review and Criteria Lead, Hazardous Waste Approval Document Management 2007

1.0 PURPOSE

Within the Office of Independent Oversight, the Office of Environment, Safety and Health (ES&H) Evaluations' mission is to assess the effectiveness of those environment, safety, and health systems and practices used by field organizations in implementing Integrated Safety Management and to provide clear, concise, and independent evaluations of performance in protecting our workers, the public, and the environment from the hazards associated with Department of Energy (DOE) activities and sites. A key to success is the rigor and comprehensiveness of our process; and as with any process, we continually strive to improve and provide additional value and insight to field operations. Integral to this is our commitment to enhance our program. Therefore, we have revised our Inspection Criteria, Approach, and Lines of Inquiry for internal use and also we are making them available for use by DOE line and contractor assessment personnel in developing and implementing effective DOE oversight and contractor self-assessment and corrective action processes on this WEB page.

2.0 APPLICABILITY

The following Inspection Criteria document is approved for use by the Office of ES&H Evaluations.

3.0 FEEDBACK

Comments and suggestions for improvements on these Inspection Criteria, Approach, and Lines of Inquiry can be directed to the Director of the Office of ES&H Evaluations on (301) 903-5392.

Hazardous Waste Management Implementation Inspection Criteria, Approach, and Lines of Inquiry

Introduction: This document provides an overview of the Criteria, Activities, and Lines of Inquiry that will be used to collect information to assess the hazardous waste management focus area. Attention will be given to on-site activities governed by 40 Subchapter I (Solid Waste) and state regulations where delegated authority exists, excluding landfill operations and underground storage tanks used for non-waste storage. In addition, worker safety-related to waste management activities is an integral part of this focus area. Review of transport practices for shipment of waste off-site may also be conducted under this Criteria Review and Approval Document (CRAD). Review of waste management activities governed by 40 Subchapter R (Toxic Substances Control Act), such as polychlorinated biphenyls, are outside of the scope of this focus area but may be reviewed as part of inspections conducted under the Work Planning and Control CRAD.

[Note: This CRAD does not cover managing, storing, and using hazardous chemicals prior to them meeting the Resource Conservation and Recovery Act definition of a solid waste (40 CFR 261.2). For a "cradle to grave" assessment of chemical management by a facility, this CRAD can be used in conjunction with the Chemical Management focus area CRAD (HSS CRAD 64-31)].

Inspection Criteria: Line management ensures that the requirements for generating, storing, treating, transporting, and disposing of hazardous waste, universal waste, and used oil, established under 40 CFR Subchapter I, applicable permits, and DOE requirements have been effectively implemented for federal and contractor employees, including subcontractors. Written programs and plans are in place and updated when conditions or requirements change. Employees have been properly trained for the wastes they handle. Documentation of waste characterizations, manifests, land disposal restrictions, inspections, and other records are accurate and accessible. Line management ensures that work practices, engineering controls, personal protective equipment (PPE) and other requirements for managing, storing, or handling wastes are followed.

Review Activity: Review records, policies, procedures, and written programs pertaining to generating, characterizing, storing, treating, transporting, and disposing of hazardous waste, universal waste, and used oil. Review training programs, qualification requirements, and records for employees involved in waste-related activities. Observe work activities involving the generation and short-term (satellite accumulation and less than 90 days) storage of hazardous waste. Observe work activities involving the generation and storage of universal waste and used oil. Observe work activities involving the permitted storage, treatment, transport preparation, handling, and disposal of wastes. Interview responsible managers, subject matter experts, employees, and other staff responsible for waste-related activities. Interview personnel responsible for recordkeeping, manifest tracking, transport, and disposal.

Lines of Inquiry:

- Are waste characterization procedures in place that ensure that the physical and chemical characteristics of the wastes are properly identified and documented (and meet the waste characterization requirements of applicable regulatory programs)?
- Are containers holding waste materials properly marked and labeled with all required information completed and visible for inspection?
- Are satellite accumulation areas at or near any point of generation, under the control of the operator generating the waste, and maintained in accordance with requirements?
- Are containers holding hazardous waste in less than 90 day storage areas maintained in accordance with applicable requirements and inspected weekly.
- Are tanks containing hazardous waste in less than 90 day storage areas maintained in accordance with applicable requirements and utilizing adequate secondary containment, and are data gathered from monitoring and leak detection equipment inspected daily?
- Are containers and/or tanks holding waste materials inspected in a manner and frequency as required by applicable regulations, and are the inspections documented in accordance with the requirements?
- Are treatment, storage, and disposal activities performed within the scope of the permit?
- Are programs, procedures, permits, contingency plans and emergency procedures, waste minimization plans, emergency contact postings, and other required documents current, accessible, and fully implemented?
- Are pollution prevention opportunities to minimize hazardous waste generation identified, funded, and implemented?
- Have the contractor and subcontractors adequately addressed co-generator situations in their waste management programs?
- Are employees involved in waste management operations at facilities that generate, store, treat, transport, or dispose of hazardous waste, universal waste, and used oil adequately trained, and are these employees provided with the necessary information and training at the time of initial assignment and annually thereafter?
- Have PPE requirements been properly identified for tasks involving waste materials, and is the correct PPE being used?
- Are containers holding wastes in good condition, and are they kept closed during storage (except when adding or removing waste)?
- Do areas where wastes are stored have adequate ventilation, containment, safety features (explosion proof fixtures, adequate lighting, etc.), leak detection, and other monitors/controls in place in accordance with applicable requirements?
- Are compressed gases, flammables, combustibles, reactives, explosives, corrosives, pyrophorics and incompatible wastes stored in a manner that minimizes the potential for release, employee injury, and/or facility damage?

- Are air emissions for hazardous waste handling, storage, treatment, and transport adequately characterized and controlled?
- Has a ground water monitoring program been developed and implemented where required?
- Are releases of hazardous waste promptly investigated, cleaned-up, and reported?
- Do personnel comply with postings, work control documents, procedures, and permits, including working within defined scopes, instructions and hazard controls, and completing required documentation?
- Is there adequate supervision and oversight of waste management activities based on the hazards, risks, complexity, and potential for injury or release to the environment?
- Before transporting hazardous waste or offering hazardous waste for transportation off-site, has the waste been properly packaged, labeled, marked, and placarded?