



United States Department of the Interior

OFFICE OF THE SECRETARY

Washington, DC 20240

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PEP - ENVIRONMENTAL COMPLIANCE MEMORANDUM NO. 30-2

To: Heads of Bureaus and Offices

From: Michaela E. Noble, Director *MEN*
Office of Environmental Policy and Compliance

Subject: Locations of Concern and Comprehensive Inventory of Contaminated Sites

PURPOSE

This Environmental Compliance Memorandum (ECM) establishes a strategic approach for creating, managing, and maintaining an inventory of cleanup and restoration sites on Department-managed land, or where natural resources for which the Department is a trustee have been injured. The purpose of the inventory is to compile common data elements for all known or suspected contaminated sites into one information management system to support the Department's allocation of resources and policy development related to cleanup of contaminated sites. This ECM identifies minimum data requirements needed to support management decisions and emergency management. To date, the following data sources have been identified to support the inventory: Environmental and Disposal Liabilities (EDL) database, Damage Assessment and Restoration Tracking System (DARTS), the Abandoned Mine and Cleanup Site Module (AMSCM), National Park Service Contaminated Sites Inventory (NPS CS Inventory), Formerly Used Defense Sites (FUDS)/Military Legacy System, EPA's Federal Facility Hazardous Waste Compliance Docket, and locations of concern data.

DEFINITIONS

Cleanup - The multi-disciplinary actions necessary to investigate and remediate a contaminated site.

Contaminated Sites¹ - Contaminated sites include land managed by, or natural resources under the stewardship or trusteeship of, the Department that have been determined through the process of Due Care to be injured or otherwise adversely affected by a release or threatened release of a hazardous substance, petroleum, or a pollutant or contaminant, as those terms are defined under Federal law.

¹ DOI, OEPC, ECM 10-7, Policy and Procedures for Prioritization of Contaminated Sites, November 19, 2018

Comprehensive Inventory of Contaminated Sites (CICS) - The CICS is a compilation of the Department's contaminated sites that is located in an information management system that compiles consistent data elements for all known or suspected contaminated sites to support the Department's allocation of resources and policy development related to cleanup of contaminated sites.

Department-managed Land - Resources under a Department of the Interior bureau's jurisdiction, custody, or control. For purposes of this definition, land or other resources that the United States holds in trust for an Indian tribe or individual Indian is not considered under the jurisdiction, custody, or control of a Department of the Interior bureau or office solely because of its trust status.

Due Care - The process followed by a bureau or office to use reasonable effort to examine an LOC site to identify the presence or likely presence of contamination at concentrations significant enough to require further study or cleanup and to add the site to the EDL. This typically is a Preliminary Assessment/Site Inspection (PA/SI), Phase I Environmental Site Assessment (ESA) (ASTM E1527-13), or equivalent. The Due Care process must be performed by or under the oversight of an environmental professional and is a less rigorous standard than the ASTM standard for Due Diligence to enable initial field-level reporting and data capture by bureau personnel for later confirmation by subject matter experts.

Environmental & Disposal Liabilities (EDL) - EDL is part of the financial reporting process. It is defined as, "An anticipated future outflow or other sacrifice of resources where, based on the results of Due Care, further study or cleanup is warranted due to past or current operations that have contaminated Department assets. In accordance with Office of Management and Budget (OMB) Circular A-136, *Financial Reporting Requirements*, EDLs comprise two types of financial liability: environmental remediation liabilities and asbestos cleanup liabilities. These liabilities are reported as EDL in the Department's Consolidated Balance Sheet and are disclosed in notes to the financial statements on the "Agency Financial Report (AFR)." OMB Circular A-136 requires federal agencies to prepare a balance sheet that reflects their assets, liabilities and their net position (the difference between the two.) The EDL lists those sites that have been identified as contaminated per the Due Care process described in this memo and as posing future financial liability for the Department. See the Department's EDL Handbook for more information.

Environmental Professional - A person who possesses sufficient specific education, training, and experience necessary to exercise professional judgment to develop conclusions regarding conditions indicative of releases of hazardous substances or petroleum causing injury or adverse effects on, at, or to Department lands or facilities.

An environmental professional must have one or more of the following:

- a. a current Professional Engineer's or Professional Geologist's license or registration and three years of relevant full-time work experience;
- b. a state- or tribal-issued registration, certification or license and three years of relevant full-time work experience;

- c. a Baccalaureate degree or higher in science or engineering and five years of relevant full-time work experience; or
- d. ten years of relevant full-time work experience.

Locations of Concern (LOC) - A location of concern is an area on Department lands that is suspected to be a contaminated site based on past ownership, operational history, anecdotal information, and physical indicators but where no Due Care has yet been conducted.

System of Record - A system of record (SOR) or source system of record (SSoR) is a data management term for an information storage system (commonly implemented on a computer system running a database management system) that is the authoritative data source for a given data element or piece of information. The need to identify systems of record can become acute in organizations where management information systems have been built by taking output data from multiple source systems, re-processing this data, and then re-presenting the result for a new business use.

User Guide - A user guide or user's guide, also commonly known as a manual, is a technical communication document intended to give assistance to people using a particular system.

Data Sources – ADD definition that shows how this is different from the “System of Record”.

POLICY

The Department’s policy is to use data from the systems of record, augmented annually by the Department, the bureaus, and other federal data sources, to populate the CICS and minimize data entry from the field. Systems of record include the following:

- the EDL database is the system of record for the Department’s environmental and disposal liabilities (EDL) and is managed by the Office of Environmental Policy and Compliance (OEPC).
- the Central Hazardous Materials Fund (CHF) Nomination Module is the system of record for CHF site data and is managed by OEPC.
- DARTS is the system of record for NRDAR sites and is managed by the Office of Restoration and Damage Assessment (ORDA).
- AMSCM is the system of record for the Bureau of Land Management to track and assess their inventory of abandoned mine and cleanup sites within the bureau.
- The NPS Contaminated Sites (CS) Inventory, maintained on the CSPortal website, is the bureau’s comprehensive database of contaminated sites.
- The FUDS data is the system of record for former military sites that are no longer under Department of Defense management and may have contamination or munitions. The FUDS data is managed by the US Army Corps of Engineers.
- The Federal Agency Hazardous Waste Compliance Docket (Docket) is managed by the US EPA to track all federal facilities eligible for listing on the docket as specified by Section 120(c) of CERCLA. For instance, facilities permitted under the Resource Conservation and Recovery Act (RCRA) to operate as Treatment, Storage, and Disposal

- (TSD) facilities or facilities with reportable quantity releases under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).
- Location of Concern (LOC) Module is the system of record for monitoring potentially contaminated sites on DOI managed lands. The module is managed by the OEPC. Data would flow from the LOC module to the EDL Database if a liability was identified. If not, the data would be archived.

GUIDANCE

Management of Data

To maintain currency of the CICS, the Department will pull from the various systems of record (listed above in the “Policy” section) annually. Data fields will use the EDL and DARTS systems for their primary data standard. Each bureau head will designate a single entity within his or her organization responsible for validating and reporting CICS data to the Department. Bureau data sources must be updated in accordance with the bureau’s processes prior to each data pull. Bureaus will coordinate cross-programmatically to ensure completeness of data provided to the Department. Similarly, bureaus will coordinate with the Department to ensure that non-bureau sources, such as FUDS and Docket data, are accurate. Data can be submitted via an Excel spreadsheet template or by electronic data pulls. All inventory data will be for internal use only by the Department and bureaus. Data will be managed by the Office of the Chief Information Officer (OCIO). Changes to the database or reports will be coordinated with OEPC. A user’s guide and data dictionary will be maintained by OEPC.

RESPONSIBILITIES

Locations of Concern

Bureau personnel routinely conduct mission-related work that involves reconnaissance of the land within their jurisdiction, custody, or control. During these activities or normal work duties, employees may identify a potential spill or release. Physical indicators may include, but are not limited to, stained soil, solvent or petroleum odor, scorched earth, discolored vegetation, illegal dumps, dead animals, discolored water in a stream, surface water sheen, etc. These potential sites need further evaluation and will be reported to the bureau’s environmental or natural resources staff. LOCs will be termed, or reported as “sites” to ensure consistent data reporting.

The next step is to conduct Due Care at the LOC. The release or suspected release of hazardous substances, petroleum, pollutant, or contaminant causing injury or other adverse effects at a LOC will be evaluated through Due Care by or under the oversight of an environmental professional. This typically is performed as a Phase I ESA, PA/SI, or an equivalent. Staff will also verify that the abnormal site conditions are on land within their bureau’s jurisdiction, custody, or control.

- Investigation of aerial or satellite photographs that may reflect prior uses, areas of distressed vegetation, or changing population centers;
- Inquiry into records that are available from federal, state, tribal, and/or local jurisdictions that show whether there has been a release or suspected release of a hazardous substance, petroleum, pollutant, or contaminant on the property (and adjacent property that could impact the bureau's property);
- Investigation of complaints regarding abnormal health conditions or concerns raised by the public;
- Interviews with current and past employees on past operations or activities;
- Visual site inspection of any portions of the property where contamination by hazardous substances, petroleum, pollutant, or contaminant is known or suspected;
- Collection and analysis of soil, surface water, and groundwater samples; and
- Documentation of findings.

Not every activity identified above must be conducted under the Due Care process. The number and type of activities necessary to appropriately assess the LOC will be determined by or under the oversight of the environmental professional. If the results of Due Care indicate that it is likely that contamination is present and warrants further study or future cleanup, the LOC will become an EDL site. If, however, contamination is not present or the cleanup can be accomplished in the current fiscal year, then the LOC is not an EDL and is to be documented and archived for future reference.

The date and results of the Due Care conducted and actions performed will be documented in the LOC module and files retained by the bureau. Unless or until a LOC is determined to be an EDL site, appropriated operational funds should be used for activities at the site and the costs incurred will be recorded as current operating expenses. Once a site is listed on the EDL, any future year actions and costs are reported for EDL purposes.

The Department uses the LOC module to assist bureaus in tracking LOCs and provide visibility to the Department. The module will be maintained in the system as part of the Department's Environmental Management Information System (EMIS). For bureaus that already have a system in place to collect LOC information, OEPC will work with these bureaus to determine if an automatic upload into the Department's system is possible. Until this functionality is available, bureaus will submit their LOC information electronically by the end of the first quarter of each fiscal year. At a minimum, the information must include the following:

1. LOC ID number
2. LOC Site name
3. Bureau
4. Region
5. Bureau unit (e.g., name of refuge, land management unit, park alpha)
6. Address
7. County
8. City
9. State
10. Latitude

11. Longitude (in decimal format, e.g., 144.708889)
12. Likely Env. Law Authority (drop down)?
13. Site type (drop down)
14. Size Range (approximate acres potentially impacted)
15. Cost Factors that will affect Due Care (sub fields include Remoteness; T&E species; Cultural Resources; Natural Resources, Wilderness)

These and other required fields will follow standardized definitions and formatting developed by the Department in consultation with the bureaus to ensure that the data collection needs of the inventory and of the bureaus are met. Bureaus will validate the inventory data at least once annually and are responsible for ensuring inventory completeness consistent with this ECM. If LOCs become identified as EDLs, the bureau will flag the record and transfer the information to the EDL. For the transferred sites, the bureaus will follow the EDL process in the Department's EDL Handbook.

The information submitted to the Department is considered confidential and will not be provided to external auditors, or anyone else, without concurrence and approval with the applicable bureau representatives on the Environmental and Disposal Liabilities Workgroup, applicable bureau programmatic office, and the Office of the Solicitor.

The Office of Restoration & Damage Assessment will annually report the data from the DARTS system using their existing data fields.

IV. AUTHORITY

The inventory is being created under the authority of 112 DM 4, Office of Environmental Policy and Compliance Organization and 381 DM 4.5b, Departmental Directives System. LOCs are identified under the authority of FASAB SFFAS No. 5, Accounting for Liabilities of the Federal Government, SFFAS No. 6, Accounting for Property, Plant, and Equipment, and Technical Release 2, Determining Probable and Reasonably Estimable for Environmental Liabilities in the Federal Government.

Appendix I - Location of Concern Examples

Abandoned Mine Lands (AMLs) - Abandoned mine lands are those lands, waters, and surrounding watersheds where extraction, beneficiation or processing of coal, ores and minerals took place. Abandoned mine lands include areas where mining or processing activity is determined to have ceased and there is no private ownership interest. Environmental impacts include acid mine drainage and toxic heavy metals in soils above natural background levels or regulatory action levels.

Abandoned Hardrock Mine Site or AML Site² - A site is defined as the grouping of features such as facilities, structures, improvements, and disturbances associated with activities that supported a past operation, including prospecting, exploration, uncovering, drilling, discovery, mine development, excavation, extraction, or processing of mineral deposits locatable under the general mining laws. At most AML sites, some of the features may be considered an LOC and other features will not be considered LOCs. Listing a feature as an LOC does not mean that the entire site is listed as an LOC, although the LOC-listed feature can be termed a “site” for Departmental reporting purposes.

Chemical Storage - The current presence of any containers of chemicals or hazardous substances stored on the property should be ascertainable based on-site observations or interviews. Examples of areas in which hazardous substances may be stored include sheltered or covered enclosures, sheds, cellars, closets, and other structures on the property. Examples of containers which may store hazardous substances include cans, buckets, cartons, sacks, drums, storage bins, and large canisters. Human health and environmental impacts can come from spills, deteriorating containers, and improper storage.

Distressed Vegetation - Distressed vegetation may be an indication that a release of hazardous substances or petroleum products has occurred. The vegetation may be dead, discolored (e.g., mottled or yellowing leaves), an area of bare ground, or different in other ways from the surrounding vegetation for no apparent reason.

Dumps and Landfills - Waste disposal practices, including dumping above grade, burying, or burning, on the property represent an environmental concern because they may have resulted in the release of hazardous substances or petroleum.

Formerly Used Defense Sites (FUDS) - A facility or site that was under the jurisdiction of the Secretary of Defense and owned by, leased to, or otherwise possessed by the United States at the time of actions leading to contamination by hazardous substances. The FUDS Program is limited to those real properties that were transferred from DoD control prior to October 17, 1986. FUDS properties are located in the United States. Many of these sites were Department managed lands that were transferred to DoD for military purposes and later returned to the Department contaminated from DoD activities.

² Ibid

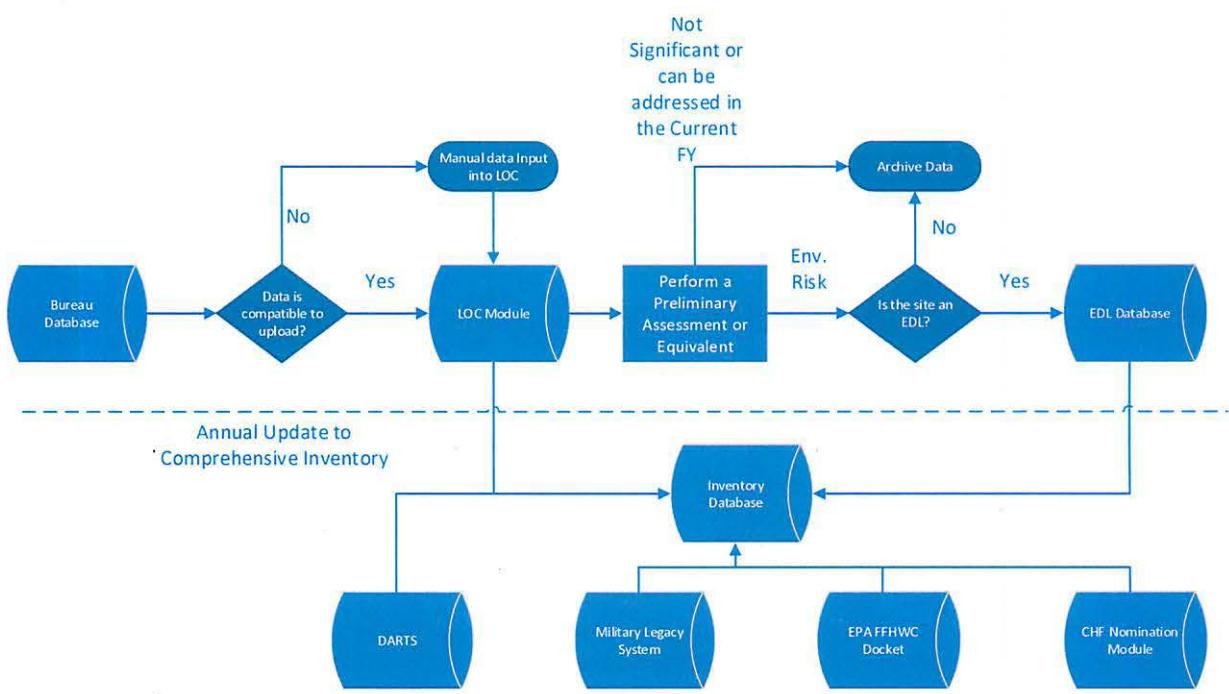
Fill Dirt Piles - Fill dirt refers to soil, sand, or other earth brought to the property from off-site to fill holes or depressions, create mounds, or change the grade or elevation of the property. It is not intended to include materials used during typical landscaping activities, assuming such activities employed proper protocols to ensure the use of clean fill.

Polychlorinated Biphenyls (PCBs) - PCBs were used as a dielectric or insulating fluid in transformers, capacitors, and hydraulic equipment, such as elevators, automobile lifts or hoists, presses, compressors, and doors, until prohibited by U.S. EPA regulations in 1979.

Staining - Staining may be present on exterior surfaces such as soil, concrete, asphalt, or surrounding stormwater drains or may be present on interior surfaces such as flooring, drains, or walls located on the property.

Storage Tanks - Storage tanks are often used to contain heating fuels, chemicals, and other petroleum products. Most commonly, storage tanks are associated with liquid fuel heating systems, such as oil furnaces, and vehicle fuels, such as gasoline or diesel. Leaks from the tanks and their accessories (i.e., pipelines, dispensers) or spills during tank filling or vehicle fueling activities are likely to result in contamination.

Appendix II – Comprehensive Inventory of Contaminated Sites Diagram



Appendix III – EDL Data Field Definitions for General Information

GENERAL INFORMATION SECTION FIELD REQUIREMENTS											
Field Name	Field Description	Type of Field	Validation	Condition							
Site Code	The Site code of the LOC Site (follows the EDL Site Code format).	Will be automatically generated	Required	It will be calculated as the concatenation of the Bureau ID, Region code and the Site Number entry. For BIA, ID =1, BLM =2, BOR=3, FWS=4, NPS=5 and USGS = 6. So all the Site codes for BIA will start with 1 and for BLM start with 2 and so on.							
Bureau	Bureau name	Already filled	Required	If a user has bureau level privileges, the user's bureau will default.							
Facility Name	Facility Name	Drop down list		The drop down list will show existing facilities for the bureau. If it exists, then select it from the list. The State and Region information will automatically populate. If it is not there, enter a new Facility Name, if applicable.							
Region	Region	Drop down list	Required								
Site Name	A clearly distinguishable place that that will uniquely identify the Site	Free-form text field	Required	Site name should be unique. Check the Existing Site Names to make sure the site name does not exist already.							
City	The city or town in which the EDL Site is located. It should match the entry in CERCLA or the Federal Docket.	Free-form text field	Required								
State	The state in which the EDL Site is located.	Drop down list	Required								
ZIP	The zip code in which the EDL Site is located.	Free-form text field (number)	Required								
Latitude	Latitude of the Site	Free-form text field (number)	Optional	Convert Degrees, Minutes, Seconds to Decimal Degrees by dividing the minutes by 60 and the seconds by 3600 and adding to the degrees (e.g. $40 + 12'/60 + 50"/3600 = 40.213889\text{DD}$)							
Longitude	[West] Longitude of the Site (no negative) necessary	Free-form text field (number)	Optional	Convert Degrees, Minutes, Seconds to Decimal Degrees by dividing the minutes by 60 and the seconds by 3600 and adding to the degrees (e.g. $40 + 12'/60 + 50"/3600 = 40.213889\text{DD}$)							
Site Type	Type of Site	Drop down list	Required	<table border="1"> <thead> <tr> <th>Type</th> <th>Name</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>AGRI</td> <td>Agricultural</td> <td>dip vats or other agricultural chemical uses</td> </tr> </tbody> </table>		Type	Name	Description	AGRI	Agricultural	dip vats or other agricultural chemical uses
Type	Name	Description									
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GENERAL INFORMATION SECTION FIELD REQUIREMENTS				
Field Name	Field Description	Type of Field	Validation	Condition
			HAZDUMPI NG	Illegal Dumping of Hazardous Substances
			LANDFILL	Landfill/Dump
			ACMINEMIL L	Active Mine/Mineral Processing Mill
			ABMINEMIL L	Abandoned Mine/Mineral Processing Mill
			AST	Above Ground Storage Tanks
			UST	Underground Storage Tanks
			SPILL	Spills releases of hazardous substances other than pipelines
			LINELEAK	Pipeline Leaks / Spills includes pumping and compressor stations
			SCHOOL	School
			DOIFAC	DOI Facility DOI-owned and operated; includes multiple source types, e.g., ASTs, USTs, spills, etc.
			ACOG&WE LL	Active Oil and Gas Well includes reserve pit, produced water pond and other energy and petroleum waste
			ABOG&WE LL	Abandoned Oil and Gas Well includes reserve pit, produced water pond and other energy and petroleum waste
			MIXEDINDF AC	Mixed Federal Industrial Facility Mixed Federal and industrial/commercial operations;

GENERAL INFORMATION SECTION FIELD REQUIREMENTS					
Field Name	Field Description	Type of Field	Validation	Condition	
				OTHER	Other
				INDFAC	Industrial Facility
				ACQFEDFA C	Acquired Federal Facility
Law/ Regulation	Choices: RCRA, CERCLA, UST, CWA, CAA, TSCA, Other	Check box	Required	includes multiple source types, e.g., AST, USTs, spills, landfills, etc.	
Site Description	Site Description	Free-form text	Optional field	If other is chosen, user will be required to enter a name or description.	
Cost Factors (Sub Fields listed below)					
Size Range	Size of Site by Acres	Numeric	Required		
Remoteness	Distance from Population Centers	Pull Down	Optional		
T&E Species	Are T&E Species impacted in the area	Yes/No	Required		
Cultural Resources	Are Cultural Resources impacted in the area	Yes/No	Required		
Natural Resources	Are Natural Resources impacted in the area	Yes/No	Required		
Wilderness	Is the area concerned wilderness for access purposes	Drop down List	Required	Designated Wilderness, Geographically Remote location, N/A	