

Long-Term Stewardship Information Management Program Plan

Prepared for the U.S. Department of Energy
Assistant Secretary for Environmental Management

Contractor for the U.S. Department of Energy
under Contract DE-AC06-09RL14728



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Mission Support Alliance

Long-Term Stewardship

Information Management

Program Plan



November 2012

LTS Information Management Program Plan

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LTS Information Management Program Plan

I. Introduction

This plan describes the Mission Support Alliance, LLC (MSA) Long-Term Stewardship (LTS) Information Management (IM) Program. LTS IM is a part of the LTS program, which is part of the MSA Land and Facilities Management organization.

The MSA LTS Program has contractual responsibility for and implements the key LTS activities identified in the *Hanford Long-Term Stewardship Program Plan* (DOE/RL-2010-35), including the management of LTS records and data (information).

The MSA LTS Program was initiated in late 2011. Since then LTS IM has been fully integrated into the MSA LTS Program contributing IM services and applying IM requirements to all aspects of the MSA LTS Program. Because LTS is a relatively new program, it is anticipated that IM's support activities will continue to develop as the program matures.

This plan identifies the scope, activities, roles, responsibilities, and interfaces of the LTS IM Program, which will apply to all MSA personnel and MSA subcontractors.

II. Background

When the Hanford Site cleanup mission is complete, management of the Hanford Site is expected to transfer to the U.S. Department of Energy (DOE), Office of Legacy Management (LM). LM is responsible for conducting LTS activities at DOE Office of Environmental Management (EM) sites that have been cleaned up and for which there is no continuing DOE mission. Until responsibility for the Hanford Site is transferred to LM, the DOE Richland Operations Office (RL) will manage the Hanford LTS Program in a manner consistent with LM's goals, policies, and procedures in order to prepare for the transfer.¹

The MSA LTS IM Program supports transition activities by processing Transition Turnover Packages (TTP), MSA LTS surveillance, monitoring, and maintenance activities (S&M), and program management, which includes developing methods for making the LTS records and data accessible to current and future generations.

This document describes the approach, scope, activities and how records and data (information) will be managed before transfer to their next steward LM. RL explained LTS IM's purpose in DOE/RL-2010-35 as:

Information management is a critical component required to ensure the Hanford LTS Program will have ready access to complete and accurate information about the cleanup activities, and the associated requirements, including DOE's regulatory obligations.²

And...

to help ensure that the requisite data generated during the cleanup mission, necessary to support LTS and required under the regulatory process, are preserved and available for the future in a timely, cost-effective, and understandable manner.²

¹ HNF-53404, *Long-Term Stewardship Life Cycle Baseline*, Mission Support Alliance, LLC, Richland Washington

² DOE/RL-2010-35, *Hanford Long-Term Stewardship Program Plan*, Rev. 1, U.S. Department of Energy, Richland Operations Office, Richland Washington pg. 4-4

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Several DOE EM sites have already transitioned to LM. Key lessons learned from those transitions included the importance of identifying, collecting, and cataloging LTS information while the source material and personnel are still readily available.

DOE/RL-2010-35, Section 4.6, “Manage LTS Information,” identifies RL’s LTS IM strategic approach and is summarized in Figure 1.

Figure 1. LTS Information Management Strategic Approach



Source: Hanford Long-Term Stewardship Program Plan DOE/RL-2010-35, Sec. 4.6

The actions identified in Figure 1 form the foundations of the LTS IM Program. These actions are addressed in Sections VII and VIII of this plan.

III. Requirements

The requirement for establishing the LTS IM program is DOE/RL-2010-35. The MSA LTS IM scope also is driven by programmatic requirements, the MSA contract, DOE orders, and MSA policies and procedures. The current requirements are cited in Appendix A, MSA LTS IM Requirements.

MSA LTS IM follows the well-established policies and procedures of MSA’s Content and Records Management and Information Systems departments. Their respective requirements are reviewed annually by the MSA IM Directors of Content and Records Management, Information Systems, and by the MSA LTS Program Manager (PM).

The LTS IM Program ensures continuous improvement by conducting regular lessons learned, as well as reviewing industry standards and best business practices.

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IV. Scope

This plan addresses the near-term LTS IM Program activities in support of transitioning the land and waste sites to MSA and subsequent S&M activities. The MSA LTS IM Program scope supports both the RL LTS goals and LM's Goal and Objective #2:

Preserve, protect and share records and information, with the following stated objectives:

- *Meet public expectations for outreach activities.*
- *Protect records and make them accessible.*
- *Protect and assure access to information.³*

The LTS IM scope is pertinent to the execution and transitions of the River Corridor Segments. The Central and Inner Areas of the Hanford Site, which include the tank farms, are not expected to be part of the LTS IM Program for several years.

As described in HNF-53404, *LTS Lifecycle Baseline (LTS Baseline)*, the IM scope includes managing and directing the LTS IM activities. Operationally, the IM scope includes the following:

- Integrate records management with data management
- Manage LTS data relationships between LTS information systems and their data
- Establish standard metadata for the Integrated Document Management System (IDMS) record indexing
- Ensure configuration control of information systems, information, and data supporting LTS
- Ensure control of LTS records
- Address S&M phase information requirements
- Communicate/share the LTS story with record owners and information system owners.

LTS IM activities will support the entire LTS Program and its associated business processes. IM activities include the disciplines of project management, information systems management, including geospatial management, and records management.

To ensure the continued protection of human health and the environment, RL and their stakeholders must have ready access to specific and accurate information about the history, the cleanup, and the as-left condition of the land. The ability to make land-use decisions will strongly depend on the quality and accessibility of information.

The term "information" includes records, documentation about systems, system code, as well as data input and output from information systems kept as record material.

³ LM-04-XXXX, *Information and Records Management Transition Guidance*, U.S. Department of Energy, Office of Legacy Management, March 2004, pg. 1

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What LTS IM Does Not Include:

- The actual transition from RL to LM; however, it does address preparatory activities.
- The LTS IM Program does not duplicate existing record repositories or their contents such as the Administrative Record required by the *Hanford Federal Facility Agreement and Consent Order*⁴, the Records Holding Area (RHA) (physical records storage), or IDMS, nor is it the intent to duplicate databases or tools. Instead records will be indexed or cross-walked creating or using finding aids and cataloging solutions.
- LTS does not include any quality affecting records because the records are not kept to document whether items, services, activities or processes meet specified quality assurance (QA) requirements.

The work scope is further described by the following constraints.

Constraints:

1. As with all programs and projects, funding is limited; therefore, the activities for the MSA LTS IM Program are prioritized each fiscal year to determine which MSA LTS IM activities will receive precedence as funding permits.
2. MSA LTS IM activities rely on input from the Cleanup Contractor (CC) to provide documents and records, as well as data about their information systems.
3. MSA LTS IM will rely on viable IM infrastructure (local area network, wireless technology, telephone, information technology data centers, etc.) to perform their scope.
4. The LTS IM Program is bound by the MSA contract and applicable regulations.

V. LTS Program Work Scope and Lifecycle

In the LTS Baseline the LTS Program has three work scope components over the lifecycle of the LTS Program. These lifecycle elements create boundaries of the LTS IM scope:

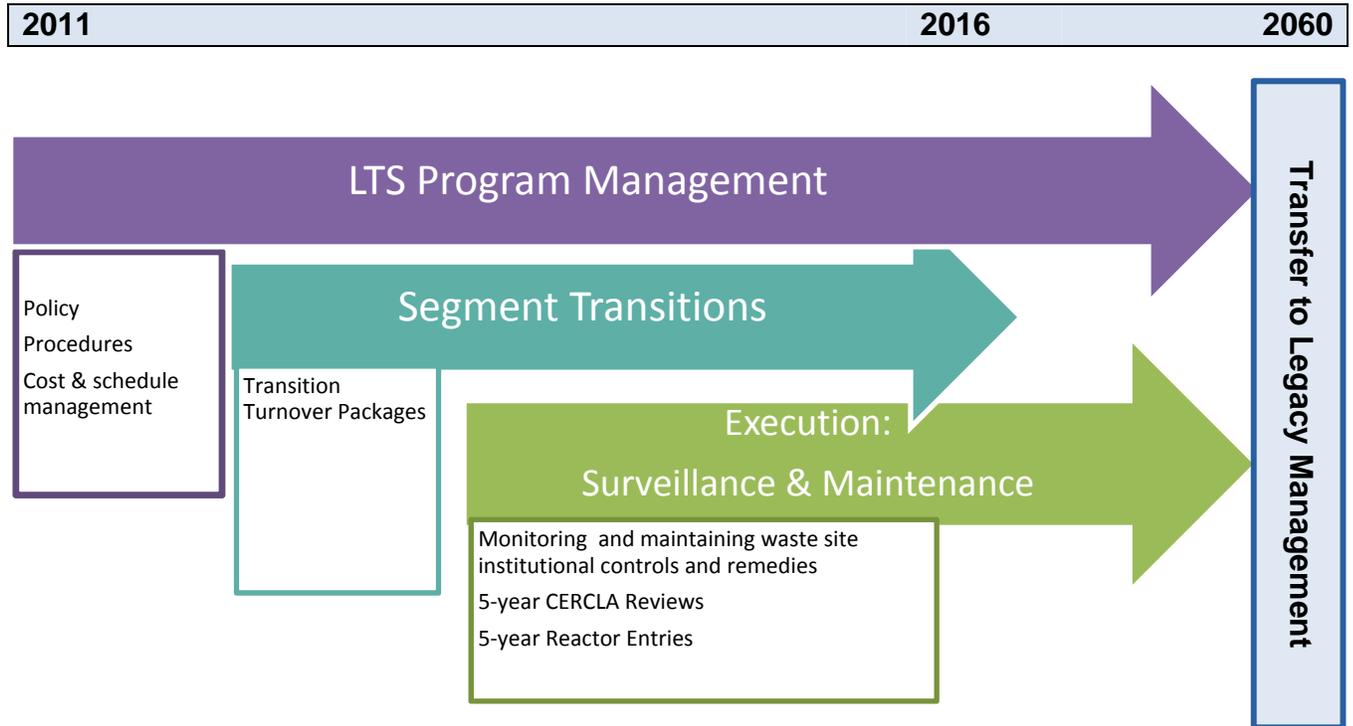
- **Program and Project Management** – Overall strategy, cost and schedule management, and business process development such as procedures and policies
- **Segment Transitions** – Activities associated with transitioning the segments of cleaned up land from the CC to MSA
- **LTS Execution** – Monitoring and maintaining waste site remedies and institutional controls protecting the remedies.

Figure 2 depicts the relationship of the lifecycle components to the ultimate plan to transfer LTS records and data to LM.

⁴ Ecology, EPA, and DOE, 1989, Hanford Federal Facility Agreement and Consent Order, as amended, Washington State Department of Ecology, U.S. Environmental Protection Agency, and U.S. Department of Energy, Olympia, Washington

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Figure 2. LTS Program Work Scope and Lifecycle



The work scope is further described by the following assumptions.

Assumptions:

Assumptions that are anticipated to influence the MSA LTS IM Program were identified in the LTS Baseline and are not duplicated here.

VI. Mission

To support the MSA LTS Program, LTS IM states their mission as:

Enable the success of Hanford’s Long-Term Stewardship program by identifying, locating, storing or cataloging, protecting, and making accessible LTS records and data. Identify and locate information systems and data contributing to the LTS program and validate software control and data quality.

The ultimate goal of the MSA LTS IM Program is to provide the services necessary to make LTS information available, retrievable and understandable for the LTS stakeholders. Figure 3 depicts the LTS IM mission.

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Figure 3. LTS Information Management Mission



Identifying and cataloging this level of information was a key lesson learned from LM to ensure that information is collected while the source material and personnel are still readily available. The components of the mission are further described below:

- **Identify** - includes documenting the existence and categorizing Hanford Site records and data pertinent to the MSA LTS Program.
- **Locate** - includes determining the location and appropriate metadata of LTS records and data.
- **Store or catalog** - requires the migration or movement necessary to confine the records and data within MSA's LTS Program control, which includes moving the records to an approved recordkeeping system or confirming the records and metadata are located in an approved recordkeeping system and cataloged to the location where records are stored. It also includes assuring records are scheduled for retention with the appropriate National Archives and Records Administration (NARA) approved record (retention) schedule. **Stored** records are references to the TTPs resulting in the "LTS Reference Library". **Cataloged** records refer to information residing in approved records repository other than the LTS Reference Library.
- **Protect** - includes preventing loss, damage, or unauthorized destruction or disclosure by implementing protective measures to keep records from physical hazards and controlling unauthorized access. Protection will include the appropriate information protection levels of control as defined by DOE and MSA policies. Records schedules and recordkeeping repositories also protect records from alteration or destruction. Specified system's data sets will be stored as record material to assure ongoing protection.

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- **Make accessible** - includes ensuring there is a method to view and access the data easily, creating the finding aids, and/or providing the education or training to do so. This objective may be provided via existing systems or new systems development. The solution may include moving the data to existing systems; creating finding aids, or a combination thereof. Access to the information will be granted to stakeholders, and the public, as determined by the DOE. Security access privileges will be applied and it is anticipated that documents will be reviewed for public clearance. Transparency is the goal; however, regulations controlling access will take precedence.
- **Transition information** from existing Hanford repositories to LM. This is the ultimate mission of the LTS IM Program and an overarching influence to all activities.

Figures 4 and 5 further explain the relationship of the LTS IM mission (Identify, Locate, Store, etc.) and the associated activities to be completed by the LTS IM Program. The activities are discussed further in Sections VII and VIII. Figures 4 and 5 are representative of the activities in Sections VII and VIII and do not portray an exhaustive list.

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Figure 4. LTS IM Mission Activities - Transition

LTS IM Mission Activities - Transition					
Examples of Transition and TTP Activities (Transition from Cleanup Contractor to MSA)					
Identify	Locate	Store or Catalog	Protect	Make Accessible Internally	Make Accessible Externally
Create TTP Records Identification Table & Data Source Table	Locate TTP Reference / source documents & photos	Store TTP References in IDMS Reference library	Ensure TTP statements are accurate to their sources & locate sources	Use state of the art tools such as SharePoint	Revise and continually update the RL external website as TTPs are published
Begin reconciliation of LM's file plan of records vs. Hanford's	Create IDMS report with links to TTP references	Create Spider charts of all TTP systems	Convert records to PDF/A	Index TTP references to their content	Attempt to clear for public release un-cleared TTP references
Identify stakeholder TTP needs	Create finding aids to TTP references - new IDMS Search template		Assess TTP systems for software control	Assure photos and maps are kept as standalone records	Identify RL stakeholder access requirements

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Figure 5. LTS IM Mission Activities - Surveillance, Monitoring, and Maintenance

LTS IM Mission Activities - Surveillance, Monitoring, and Maintenance Activities					
Identify	Locate	Store Or Catalog	Protect	Make Accessible Internally	Make Accessible Externally
Finish reconciliation of LM records to Hanford's	Identify all databases containing S&M data	Create Spider charts of all S&M databases	Data Systems Group – continue Records Information	Create pointers / finding aids – about where to find records	Identify DOE stakeholder access requirements to S&M data
Identify records through evaluation of procedures	Create search utility of records repositories	Develop S&M databases	Assess S&M information systems for software control	Update internal RL LTS website	Influence the Clearance of all records and data
Develop information systems transition plan	Get Institutional Controls database from INNEL or other sites	Store and catalog best Hanford photos and images	Store S&M database inputs, outputs and documentation	Document requirements of new system/portal	Expand search portal to external stakeholders
	Begin to identify people-centric records, data/systems	Create finding aids to S&M data	Ensure all records are kept long enough	Create Portal to all records in any repository	
	Promote indexing standards and fully indexed records	Catalog existing River Corridor Information	Maintain systems viability by upgrading operating systems	Enhance LTS Reference Library to include S&M records	

Transfer to Legacy Management



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VII. Planned Activities through 2015

Information management is integral to all phases of the LTS work scope and its lifecycle. The information below elaborates on the priorities and activities of each. The organization of the data is shown according to the LTS Baseline therefore the three major divisions of the work scope are: Program Management, Transition, and Execution of S&M.

Work Scope Focus

Of the near term activities through 2015 the focus is on completing segment and reactor area transitions. The secondary focus is on tasks supporting Program Management and Execution of S&M.

All IM activities exist to create efficiencies and/or effectiveness in the LTS Program.

Segment Transition – Transition Turnover Packages

- **Compose Section 7 of the TTP and perform technical reviews** of the entire TTP for IM compliance:
 - Ensure cited information has identified sources and is traceable to its source providing integrity of the information
 - Perform compliance reviews of Section 7 using Appendix A of the LTS Program Transition and Turnover Checklist⁵
 - Assure photos and maps are kept as standalone records to ensure reusability and accessibility
 - Assure configuration control of the TTP draft documents and store as record material.
- **Create Records Identification Table (RIT) TTP Appendix C -** Manage references cited in the TTP. Documents are identified, stored, and protected in approved records repositories, specifically in the IDMS managed information electronic records area. The documents are indexed and assigned a NARA retention schedule before being stored. Ensure RIT indicates the following information:
 - Description of records
 - TTP sections where the record was referenced
 - Location of record: Typically IDMS electronic records
 - Evaluate records for public or limited clearance.
- **Create Data Source Table (DST) TTP Appendix D -** Ensure the DST is accurate and complete. Assess software system documentation to ensure that systems used to generate information included in the TTP have adequate software controls and that the systems are under proper software configuration control. DSTs contain the following information:

Segment Transition Deliverables

- TTP Sections
 - Section 7,
 - Appendix C RIT, and
 - Appendix D DST
- TTP Process Workflow

⁵ DOE/RL-2010-35, *Hanford Long-Term Stewardship Program Plan*, Rev. 1, U.S. Department of Energy, Richland Operations Office, Richland, Washington pg. A-18

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- Systems engineering information, including objective evidence of appropriate software system documentation
 - Records capture information
 - Configuration management processes of documentation, code, and data, including backups
 - Spider chart (system inputs and outputs) showing interfaces and data flow
 - Quality control and data integrity indicators
 - Ability for the system to create export data files in acceptable file formats
 - Evidence of recent assessments or audits.
- **Maintaining the TTP process workflow** to identify and implement efficiencies in the TTP process.
 - **Analyze available state of the art technology and automation tools** to use in LTS to increase transition efficiency and effectiveness:
 - Evaluate the use of IDMS automated work flows as a potential method to improve the TTP creation process
 - Evaluate Microsoft SharePoint for implementation to improve communications.
 - **Conduct lessons learned** to regularly evaluate the efficacy of the TTP and the transition process with regards to IM. Provide recommendations to DOE to improve the process, as identified.

Execution – Surveillance, Monitoring, and Maintenance (S&M)

The LTS IM Program is responsible for required monitoring and maintenance of protective remedies, institutional controls, and natural resources once cleanup activities have been completed. Note the LTS Program is not always the performing organization of these actions. MSA needs to support RL in demonstrating its work to maintain the protectiveness of the cleanup remedies in accordance with regulatory requirements and to protect and manage the resources and the environment.

S&M Deliverables

- Identify database needs
- Develop databases
- Begin cataloging information
- Develop systems transition plan.

Large amounts of data are collected as MSA takes over responsibility for the waste sites and the S&M of the remedies. Some of the data is expected to require the development of new databases to preserve the data and make the data accessible in an understandable manner.

- **Identify databases** needed to support S&M activities. Examples of S&M data that may be stored includes the following:
 - Interim Safe Storage water detection and temperature readings
 - Radiation Monitoring and Control – Gamma ray detection
 - Monitoring and maintenance of Institutional Controls.

Where possible, identify how existing databases can be used and/or modified to support S&M needs.

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- **Develop databases** using software engineering methodology, store system inputs, outputs and application documentation as record material. Database output (reports and queries) shall demonstrate the ongoing containment of residual contamination, thus the database and records will serve as evidence for stakeholders. Additionally, where new databases may be needed every effort will be made to search out existing information systems, and reuse them to the extent practical and appropriate rather than developing new systems
- **Begin cataloging the LTS Program S&M information** – Develop lists and/or tools of the S&M records and databases, analyze records retention practices and create indexes to the data
- **Develop an Information Systems Transition Plan** - Long-term S&M of remediated sites requires the availability of historical and current records that document site operations, environmental cleanup activities, and environmental monitoring. The LTS S&M records collection should include any records that are needed to manage long-term site responsibilities. To preserve records and data generated by the CCs, a robust transition plan for information systems will be developed.

Depending on the availability of time, based on transition activity priorities, the following transition plan steps may be executed:

- Perform a gap analysis of S&M data, including system inputs, outputs and documentation to determine if all is being captured and stored as records. If records are already stored in site repositories then only cataloging activities are needed
- Identify all applicable MSA and Other Hanford Contractor (OHC) procedures supporting S&M activities
- Identify all applicable MSA and OHC S&M databases
- Transfer ownership of records and systems to RL then MSA, as appropriate
- Identify, store, or catalog the S&M activity records ensuring long-term protection and accessibility.
- **Assure upward compatibility of applicable Hanford Site databases** contributing to LTS data by ensuring systems are upgraded to current technology
- **Ensure geospatial data are legible, traceable** to their sources, accurate, and stored as records
- **Expand the use of geospatial data** to enable topographic relationships to LTS land, waste sites, etc.

PROGRAM MANAGEMENT

Program management is subdivided into five areas: Requirements Analysis; Management and Administration; Communications and Education; Systems and Tool Development; and Evaluation.

Requirements Analysis:

- **Identify and document LTS IM Program requirements** and analyze to ensure compliance:
 - Identify stakeholder IM needs
 - Establish RL's access requirements to LTS information for stakeholder's requirements for a new system or set of tools to provide records storage and data access.

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- **Support the Hanford Site Records Officer (HRSO)** in the analysis of the Hanford records retention schedules to ensure LTS records align with LM file plans and are not destroyed prematurely:
 - Assist in repurposing records with inadequate retention periods
 - Analyze and document the relationship of LTS records and data to the greater Hanford record collection.

Management and Administration:

- **Perform the IM processes** described in DOE/RL-2010-35
- **Develop LTS IM project data** such as schedules, budget and cost performance data
- **Develop and maintain LTS IM plans, operational procedures, and processes** to support the activities in DOE/RL-2010-35, Section 2.2, “Activities.” Programmatic documents require updating and coordination with OHCs and internal interfaces to ensure appropriate records and information system documentation is captured and stored:
 - Create and update procedures for the creation of the RIT and the DST
 - Document legacy LTS activities to identify the LTS records collection
 - Document the TTP creation process to ensure quality and incorporate efficiencies into the process
 - Update this LTS IM Program Plan as needed.
- **Create correspondence** transmitting LTS IM Program deliverables
- **Store and protect LTS records** for the MSA LTS Program:
 - Program/project management information, such as budget and schedules
 - Legacy cleanup and as-left documentation, as appropriate.

Communication and Education:

- **Maintain and promote regular communications with RL and LM Points of Contact** to assure alignment with requirements and the ultimate transfer of information, including lessons learned and best practices
- **Network** with OHCs and non-Hanford DOE field office contractors to ensure cost savings and effective solutions by identifying:
 - Databases to clone or reuse
 - Tools for Records management such as finding aids
 - Ideas from lessons learned - reviewed and implemented.
- **Increase MSA personnel recognition of LTS mission via communications**
 - Provide operational and content management support for internal and external LTS-related web sites
 - Create newsletter articles
 - Provide briefings for management and staff.
- **Continue periodic communications with the LTS Data Systems Group** – Communicate and share the LTS story with record owners and information system owners to ensure

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preservation of input, output and system documentation as record, the use of Portable Document Format/Archive (PDF/A) format, and the need for regular software control audits to ensure data quality, integrity and control.

- **Integrate records management with data management** - Influence the storage of information as record material where not currently implemented, especially where information is born electronic, ensuring it stays electronic, and then is stored in IDMS. This includes system file dumps.
 - Encourage systems with LTS information to capture data in formats that will be useable for generations to come such as PDF/A. PDF/A is the archival version preferred by LM.
- **Training materials** – Create and deliver as needed to support spreading the word to MSA personnel.

Systems and Tool Development:

- **Develop and present concepts for future cost-effective automated solutions** for the segment TTP review process, S&M processes, accessibility/retrieval of LTS information by the public, Tribal Nations, and stakeholders and new methods to tell the Hanford LTS story and communicate progress. For example, develop virtual tours of each remediated segment to post on the external web site to show progress.
- **Create indexing or finding aids** to assist in easy retrieval of LTS records and data with generationally applicable finding aids. Developing the concept of an enterprise search data portal (search portal) is related, see expansion below. Create an IDMS report of the LTS Reference Library.
- **Maintain and enhance the LTS electronic records library** in IDMS to improve usability and efficiency by streamlining; example is streamlining the folder structure. Convert files to PDF/A.
- **Develop internal MSA and external RL web sites** using the best available technology considering such platforms as SharePoint.
- **Influence improvement of site-wide indexing cataloging/indexing standards** - propose and support their development through communications with MSA management and subcontractors and the HRSO. Additional indexing information is shown in Appendix D, LTS Records Indexing Guidelines. **Note:** LTS does not provide funding for the development of these activities.
 - Required use of site area designation, when applicable to the document
 - Increased performance of search and retrieval by using robust, complete keywords of content
 - Improved site-wide indexing of legacy and S&M photographs, maps and Light detection and ranging (Li-DAR) images
 - Improve site-wide storage, indexing, and accessibility of information system input, output and system documentation
 - Use of appropriate access restrictions, such as Official Use Only.

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- **Develop a comprehensive LTS Data Management Plan** - This plan will contain a master list of all identified Hanford information systems that have an association to LTS either by function or by stored data. The data management plan will evaluate records capture on Records Inventory Disposition Schedules versus the requirement of same. The data management plan shall be periodically reviewed and updated.
- **Create master systems flow chart and maintain individual system flow charts** for any existing and new LTS-identified information systems and add them to the existing master LTS spider chart that shows all identified LTS-related data systems. Spider charts of LTS-related information systems add value because they show the location of data, databases, information subsystems, and interfaces with other information systems. The information systems include the following:
 - Stewardship Information System (SIS)
 - Waste Information Data System (WIDS)
 - CareTaker
 - Sunflower Asset Management System (SAMS)
 - Hanford Geographic Information System (HGIS)
 - Hanford Environmental Information System (HEIS)
 - Hanford Wells Information System (HWIS)
 - Facilities Information Management System (FIMS)
 - Hanford Site Structure List (HSSL)
 - Content Manager
 - IDMS
 - Records Holding Area – Management Information System (RHA-MIS)
 - Records Management Access Portal (RMAP).
- **Evaluate additional systems as potential LTS contributing S&M systems** to be included in master systems flow chart, contributors to the search portal and for records storage needs. The objective is to ensure all applicable systems are identified. Candidates are to include people-centric systems as well as any system containing data that LM has identified to be captured and ultimately transferred to them. Examples are:
 - Stewardship Information System (SIS)
 - Air Operating Permit system (AOP)
 - Human Resources Integrated System (HRIS)
 - Environmental monitoring systems
 - Groundwater monitoring systems.
- **Develop the enterprise search portal concept** - Currently, records and data exist in multiple separate systems and cannot be found using a single search command. An enterprise search capability and/or data retrieval portal is planned for development. The software development lifecycle activities and associated documentation for a search portal capability and/or data retrieval portal that may be conducted over a span of a few years are dependent on funding and are as follows:
 - Develop a concept document identifying the purpose, scope and needs of the portal
 - Document user requirements and pursue software development activities

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- Conduct an alternatives analysis for system/application or automation methods to provide documented requirements
- Perform functional and system design
- Additional steps to complete the portal will be done in 2016 and beyond.

Evaluation:

- **Perform self-assessments** on the LTS IM Program and other areas as requested
- **Conduct lessons learned activities** to ensure continuous improvements in program effectiveness and efficiency
- **Determine the need for additional training or education program** necessary for the management and protection of LTS information.

VIII. Planned Activities 2016 and Beyond

The LTS IM Program development of S&M activities will continue in 2016 and beyond; however, the transition activities for the River Corridor will be complete. The aforementioned program development activities discussed above will continue where appropriate into 2016. New activities beyond 2016 are still being determined; however, the known tasks that LTS IM will perform are shown below, provided adequate funding is provided:

- **Perform a needs analysis to identify information systems and records management needs** from a LTS perspective. The outcome of the analysis will be used as the basis to communicate the need for potential systems and finding aids that could be developed to support LTS by pulling LTS-related records and data together in one place or portal for internal and external users. (See DOE/RL-2010-35, Section 4.6, “Manage LTS Information,” and Figure 4-1.)
- **Complete the cataloging of LTS information** – ensure systems not previously cataloged are analyzed and evaluated for including into the LTS records and data library and suite of systems
- **Continue the creation of indexing or finding aids** to assist in easy location of records and data and ensure they are usable for all generations of stakeholders. Analyze and propose solutions, such as cataloging tools which will assist users’ ability to find information between the repositories Administrative Record, RHA and IDMS.
- **Enterprise Search Portal** - The following activities are anticipated to be conducted in 2016 or beyond as a continuation of prior year’s activities to develop the search portal:
 - Perform construction/coding and testing
 - Perform integration with existing systems and platforms
 - Implement the search portal
 - Perform maintenance - After the new system is implemented, maintenance is required for various reasons such as meeting new reporting requirements or installing updates to keep the software compliant with enhanced standard operating system environments.
- **Develop a business process between CHPRC, OHCs as applicable, and MSA** to identify, catalog or store, protect, and make accessible applicable records and data. This may require

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adding new functionality to WIDS, work control or other applications, assigning a project file clerk, and or scanning documents.

- **Transition systems** from CCs to MSA
 - Washington Closure Hanford's (WCH) Stewardship Information System (SIS) is a first priority because the SIS database was created for the specific purpose of supporting transition of information from the CCs to RL.⁶ The WCH SIS database is composed of four primary components used to capture information regarding waste sites, facilities, miscellaneous restoration items, and stewardship elements within the River Corridor.
 - Additional systems are to be reviewed for preservation of record material or for the potential to be transitioned.
- **Maintain systems** via upgrades to current operating systems to ensure future use
- **Periodically assess information systems** identified as being associated with LTS to ensure required software management and controls are in place and adhered to
- **Ensure systems being retired** are reviewed for preservation of record material
- **Scan and index physical records into electronic records** located in the RHA or active records in the field
- **Expand master systems flow chart and maintain individual system flow charts** – begin including people-centric records and S&M data where the activity is not performed by MSA LTS:
 - People-centric systems such as human resources, training, health, and medical records systems
 - S&M related data capture systems that monitor or maintain such functions as entry restrictions, land-use management, warning notices, etc.
- **Develop an LTS S&M operations framework plan** and include IM scope - describe the integrated system environment to support the S&M operations phase activities of identifying, capturing, protecting, and providing access to systems and their data/records generated during S&M activities.

IX. The LTS Records Collection

Federal records are retained according to NARA-approved records schedules. Currently, records in the LTS Reference Library are scheduled with the environmental schedule ENV-1.K3 with a retention period of 75 years. Hanford Administrative Records also are scheduled using the ENV-1.K3 schedule.

LTS records are described further as: Documentation of work done for the government recording the history, ecology, cleanup actions and as-left conditions of the site. This includes Cleanup Verification Packages (CVP), Remaining Sites Verification Packages (RSVP), Orphan Site

⁶ WCH-134, *Planning for the Transition to Long-Term Stewardship under the River Corridor Closure Contract*, Rev. 0, Washington Closure Hanford, Richland, Washington pg. 4-2

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Evaluation Reports (OSE and OSER) as well as documents about the historical activities of processes and building uses on the Hanford Site.

Records to be included in the LTS records collection will be reviewed and compared to LM file plans and appropriate records schedules applied. The analysis will include reviewing current records schedules used at Hanford for LTS records and the length of the retention period. Records with inadequate (short) retention periods may be repurposed to ensure they are adequately retained for LTS purposes. The MSA LTS IM team, HRSO, and records management personnel will work together to accomplish the analysis and repurposing of the records as needed. To accommodate these goals the following actions need to occur:

1. Create the resolved list of LTS Records because a single comprehensive list of records applicable to LTS has not yet fully been identified by LM. The LTS IM team is currently supporting the HRSO and working with LM to identify the specifics of the collection so that Hanford records may be preserved accordingly and appropriately. LM has identified several types of technical records, shown in Table 2, LTS Records.
2. LTS records scheduled with ENV-1.K3 will be flagged in the recordkeeping repositories at Hanford for non-destruction to ensure that any LTS records will not be destroyed and will be eligible for repurposing when they reach the end of the 75-year retention period.
3. Hanford records were previously under a legal hold, so records that had met their retention period were not being destroyed. This legal hold was recently lifted, but records eligible for destruction have not yet begun to be destroyed. A committee has been organized to review proposed records eligible for destruction to ensure that records will be reviewed for potential repurposing. A representative and member of the committee from the LTS Program will ensure the LTS collection is not at risk. This review of records eligible for destruction has not yet begun.

Records that are known to be required and preserved and ultimately transferred to LM are provided in Table 2.

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Table 2. LTS Records

LTS Records	
• Custody and long-term care licensing information	• Real estate information including surface and subsurface ownership, surveys, deeds, and encumbrances, etc.
• Legal information	• Site-specific legal agreements
• Institutional control information	• Site use and operational records
• Programmatic plans	• Remediation documents
• Risk assessments	• Investigation documents
• Environmental information	• Radon and environmental hazard monitoring information
• Ground/surface/leachate water monitoring information	• <i>National Environmental Policy Act</i> (NEPA) information
• Completion/closure reports	• Site surveillance and inspection information
• Site maintenance information	• Community relations and public involvement information
• Health and safety information	• Permits
• Waste management and disposal information	• Technical studies
• Quality assurance information	• CERCLA Administrative Record
• CERCLA, RCRA, <i>Clean Air Act</i> , <i>Clean Water Act</i> , and U.S. Nuclear Regulatory Commission investigation, risk assessment, and remediation documents, plans, and specifications.	

Data Source: J. Gueretta Legacy Management, June 2011

There are other records series that are known to be of value to LM that are not yet indicated on the list provided by LM. Those records are people-centric records such as employment, training, medical/health, and benefits. These record types need to be vetted with LM and a new list of LTS Records is expected to result.

Hanford has two official recordkeeping repositories for retired records, as well as the Administrative Record, which is an active record repository required by law. LTS recognizes there are various information systems that could be considered unauthorized records repositories. This occurs if the information stored in them is record material and is not restored in the official repositories. This situation will need to be remedied before transition to LM.

The LTS IM Program does not retain any quality affecting records; LTS only retains a copy of these records.

X. Assessments

LTS IM will develop an assessment process and perform assessments of LTS Program and/or IM business processes as determined necessary by the LTS PM. Assessments are based on compliance with requirements. Potential assessments include the following:

- S&M data is stored and protected as record material
- System software control practices and data integrity practices are adequate

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- Systems protect input, output and documentation as record material
- Completeness and accuracy of the LTS Records Collection
- Completeness of the TTP in regards to IM practices
- Sample questions are shown in Appendix E, Examples of TTP IM Assessment Line of Inquiries.

XI. Roles and Responsibilities

The LTS Program has 14 key business elements as stated in DOE/RL-2010-35. One of the 14 is: “Manage LTS Information,” which LTS IM is responsible for executing. For the remaining 13 business elements, LTS IM is a secondary contributor. The 14 business elements are shown in Figure 6.

Figure 6. LTS Program Key Activities.

LTS Program Key Activities	
1. Conduct Administrative Activities	2. Conduct Monitoring and Maintenance of Completed Natural Injury Restoration Projects
3. Surveillance and Maintenance of Physical Remedies and Institutional Controls	4. Ensure the Safety and Health of LTS Workers
5. Conduct CERCLA 5-Year Reviews	6. Provide Quality Assurance
7. Conduct Environmental Monitoring of the Remedies	8. Manage and Budget Necessary Funding
9. Protect and Manage Site Resources	10. Communications
11. Manage LTS Information	12. Provide Emergency Services and Response
13. Continuous Process Improvement	14. Manage Post-Cleanup Completion Infrastructure

Roles and responsibilities for program execution, oversight and funding are shown below.

A. Program Execution Responsibilities

The MSA LTS IM Program is managed by an MSA LTS IM PM who has responsibility and accountability for managing and executing the MSA LTS IM Program. The PM is supported by an LTS IM Information Systems Lead and an LTS IM Records Management Specialist. The Information Systems Lead has the responsibility to provide leadership and expertise of the software development activities. The Record Management Specialist has the responsibility to provide expertise and guidance on records identification, proper records maintenance and use, and records disposition activities. Additional resources provide support as needed.

B. Oversight and Funding

The MSA LTS IM PM provides services and support to the MSA LTS Program and their suppliers and stakeholders. As a result, the appropriate funding for the MSA LTS Program is provided by RL. Oversight of the LTS IM Program performance will be provided by the MSA IM Department and Site Infrastructure and Utilities Department. The oversight of LTS technical compliance, scope, cost,

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schedule, and risk is provided by the MSA LTS IM PM and the MSA LTS Program Director. Jointly they ensure program requirements, compliance, and growth towards established best practices and ensure full implementation of the MSA LTS IM objectives.

The following RL individuals provide guidance to the MSA LTS IM Program:

- LTS PM
- HRSO
- Chief Information Officer.

XII. Programmatic Interfaces

There are several areas where MSA LTS IM interfaces with others at MSA and the Hanford Site. Transition of land management responsibilities from the CC to MSA is the primary area. Multiple contractors and RL work as a team to support the transitioning of responsibility for the land to RL and then to MSA. LTS IM is a member of the RL LTS Integrated Project Team.

Interface with RL and MSA

LTS IM staff communicates regularly with the RL Chief Information Officer and the HRSO. LTS IM also communicates regularly with the MSA Director of Content and Records Management, the Director of Information Systems, and other management and staff in MSA.

Interface with DOE Office of Legacy Management

The HRSO, together with MSA LTS IM, is working with LM regarding the creation of an LTS records file plan. Coordination with LM will include the management expectations of record and non-record data, inputs, outputs and documentation of information systems as indicated in LM guidance documents.⁷

XIII. Revisions to this Plan

This document will be a living document and will be revised as lessons are learned and the program matures. This plan will be reviewed annually to identify whether an update is necessary. An update will be considered if one or more of the following occurs:

- A significant new type of activity begins where IM has new substantial scope previously not identified in this plan
- Requirements or expectations of existing activities change significantly
- Lessons learned have identified significant changes to the activities described in this plan.

⁷ LM-04-XXXX, 2004, *Information and Records Management Transition Guidance*, U.S. Department of Energy, Office of Legacy Management, Washington, D.C.

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XIV. References

DOE/RL-2010-35, *Hanford Long-Term Stewardship Program Plan*, Rev. 1, U.S. Department of Energy, Richland Operations Office, Richland, Washington, page 4-4

HNF-53404, *Long-Term Stewardship Life Cycle Baseline*, Mission Support Alliance, LLC, Richland, Washington

Ecology, EPA, and DOE, 1989, *Hanford Federal Facility Agreement and Consent Order*, as amended, Washington State Department of Ecology, U.S. Environmental Protection Agency, and U.S. Department of Energy, Olympia, Washington

LM-04-XXXX, *Information and Records Management Transition Guidance*, U.S. Department of Energy, Office of Legacy Management, March 2004

WCH-134, *Planning for the Transition to Long-Term Stewardship under the River Corridor Closure Contract*, Rev. 0, Washington Closure Hanford, Richland, Washington, page 4-2

XV. Working References

ASME NQA-1-2008, Requirement 17, *Quality Assurance Records*, American Society of Mechanical Engineers

DOE EIS-0222-SA-01, *Hanford Comprehensive Land-Use Plan Environmental Impact Statement Supplement Analysis*, U.S. Department of Energy, Washington, D.C.

DOE G 200.1-1, *Software Engineering Methodology*, U.S. Department of Energy, Washington, D.C.

DOE O 200.1A. *Information Technology Management*, U.S. Department of Energy, Washington, D.C.

DOE/RL-2009-52, *Hanford Site Records Disposition Contingency Plan*, Rev. 1, U.S. Department of Energy, Richland, Washington

LM-04-XXXX, 2004, *Information and Records Management Transition Guidance*, U.S. Department of Energy Office of Legacy Management, Washington, D.C.

MSC-MP-309, *Controlled Software Management*, Mission Support Alliance, Richland, Washington

MSC-MP-599, *Quality Assurance Program Description*, Mission Support Alliance, Richland, Washington

MSC-MP-49744, *MSA Long-Term Stewardship System Description*, Mission Support Alliance, Richland, Washington

MSC-PRO-246, *Management Assessment*, Mission Support Alliance, Richland, Washington

MSC-PRO-309, *Controlled Software Management*, Mission Support Alliance, Richland, Washington

MSC-PRO-10588, *Records Management Processes*, Mission Support Alliance, Richland, Washington

MSC-PRO-32281, *Electronic Records Management*, Mission Support Alliance, Richland, Washington

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MSC-PRO-46855, *Non-Record Information*, Mission Support Alliance, Richland, Washington

MSC-PRO-49715, *MSA Long-Term Stewardship Transition Procedure*, Mission Support Alliance, Richland, Washington

MSC-RD-210, *Records Management Program*, Mission Support Alliance, Richland, Washington

MSC-RD-10768, *Computer Software Requirements*, Mission Support Alliance, Richland, Washington

RL-TPA-90-0001, *Hanford Federal Facility Agreement and Consent Order (Tri-Party Agreement) Handbook*, U.S. Department of Energy, Richland, Washington

Long-Term Stewardship Information Management Project Plan, Draft, Fluor Hanford Inc., September 2004

U.S. Department of Energy, Legacy Management 2011 – 2020 Strategic Plan

XVI. List of Appendices

Appendix A: MSA LTS IM Requirements

Appendix B: Acronyms

Appendix C: Definitions

Appendix D: LTS Records Indexing Guidelines

Appendix E: Examples of TTP IM Assessment Lines of Inquiries

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Appendix A – MSA LTS IM Requirements

- *Atomic Energy Act of 1954* as amended, 42 USC 2011-2259
- 10 CFR 830 Subpart A, “Nuclear Safety Management - QA Requirements”
- 36 CFR 1220, “Federal Records General”
- 36 CFR 1222, “Creation and Maintenance of Federal Records”
- 36 CFR 1224, “Records Disposition Programs”
- 36 CFR 1225, “Scheduling Records”
- 36 CFR 1226, “Implementing Disposition”
- 36 CFR 1232, “Transfer of Records to Records Storage”
- 36 CFR 1236, “Electronic Records Management”
- 36 CFR 1237, “Audiovisual, Cartographic and Related Records Management”
- 40 CFR 300-372, “Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)”
- 41 CFR 101, “Federal Property Management Regulations”
- CRD O 243.1, *Records Management Program*
- DOD 5015.2, *Design Criteria Standard for Electronic Records Management Software Applications*
- DOE O 200.1A, *Information Technology Management*, U.S. Department of Energy, Washington, D.C.
- DOE O 241.1B, *Scientific and Technical Information Management*, U.S. Department of Energy, Washington, D.C.
- DOE O 243.1A, *Records Management Program*, U.S. Department of Energy, Washington, D.C.
- DOE O 414.1D, *Quality Assurance*, U.S. Department of Energy, Washington, D.C.
- DOE O 430.1B, *Real Property Asset Management*, U.S. Department of Energy, Washington, D.C.
- DOE O 436.1, *Departmental Sustainability*, U.S. Department of Energy, Washington, D.C.
- DOE/RL-2010-35, 2012, *Hanford Long-Term Stewardship Program Plan*, Rev. 1, U.S. Department of Energy, Richland, Washington
- DOE/RL-89-10, *Hanford Federal Facility Agreement and Consent Order*, U.S. Department of Energy, Richland, Washington
- *Mission Support Contract (DE-AC06-09RL14728) Section I.155 (DEAR 970.5232-3)*
- MSC-MP-599, *Quality Assurance Program Description*
- MSC-PRO-309, *Controlled Software Management*
- MSC-RD-210, *Records Management Program*
- MSC-RD-10768, *Computer Software Requirements*
- *National Historic Preservation Act*, 16 USC 470
- *Records Management by Federal Agencies*, 44 USC 3301
- Section 552 (5 USC 552), *Freedom of Information Act*
- Section 552a (5 USC 552a), *Privacy Act*
- Title 5, United States Code, Chapter 5, *Administrative Procedure*, Subchapter 2,
- Title 44, United States Code, Chapter 31, *Records Management by Federal Agencies*
- Title 44, United States Code, Chapter 33, *Disposal of Records*

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Appendix B – Acronyms

CC	Cleanup Contractors
CERCLA	<i>Comprehensive Environmental Response and Recovery Act of 1980</i>
DOE	U.S. Department of Energy
DST	Data Source Table
EM	U.S. Department of Energy, Office of Environmental Management
IDMS	Integrated Document Management System
IM	Information Management
Li-DAR	Light Detection and Ranging (images)
LM	Office of Legacy Management
LTS	Long-Term Stewardship
MSA	Mission Support Alliance, LLC
NARA	National Archives and Records Administration
PDF/A	Portable Document Format/Archive
PM	Program Manager
QA	quality assurance
RCRA	<i>Resource Conservation and Recovery Act of 1976</i>
RHA	Records Holding Area
RHA-MIS	Records Holding Area-Management Information System
RIT	Records Identification Table
RL	U.S. Department of Energy, Richland Operations Office
RM	Records Management
ROD	Record of Decision
SIS	Stewardship Information System
S&M	surveillance, monitoring and maintenance
TPA	Tri-Party Agreement (<i>Hanford Federal Facility Agreement and Consent Order</i>)
TTP	Transition Turnover Package
WCH	Washington Closure Hanford
WIDS	Waste Information Data System

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Appendix C – Definitions

Hanford Site Records Officer (HSRO): The HSRO is responsible for the oversight of Records Management on the Hanford Site, and ensuring contractor's Records Management activities are compliant with all applicable regulations as well as being cost effective and proactive. The HSRO is the principal point of contact for RL and DOE Office of River Protection regarding RM matters and is the RM interpretive authority for the DOE at Hanford.

Information Technology: Information Technology, as defined by the Clinger-Cohen Act of 1996, sections 5002, 5141, and 5142, means any equipment or interconnected system or subsystem of equipment used in the automatic acquisition, storage, manipulation, management, movement, control, display, switching, interchange, transmission, or reception of data or information. For purposes of this definition, equipment is "used" by an agency whether the agency uses the equipment directly or it is used by a contractor under a contract with the agency that (1) requires the use of such equipment or (2) requires the use, to a significant extent, of such equipment in the performance of a service or the furnishing of a product. Information Technology includes computers, ancillary equipment, software, firmware and similar procedures, services (including support services), and related resources. It does not include any equipment acquired by a Federal contractor incidental to a Federal contract.

Long-Term Stewardship (LTS): The physical controls, institutions, information and other mechanisms needed to ensure protection of people and the environment at sites where DOE has completed or plans to complete cleanup (e.g., landfill closures, remedial actions, removal actions, and facility stabilization). This concept includes land-use controls, monitoring, maintenance, and IM. (DOE O 430.1B)

Long Term S&M Records: LTS&M records may include, but are not limited to, custody and long-term care licensing information; real estate information including surface and subsurface ownership, surveys, deeds, encumbrances, etc.; legal information; site-specific legal agreements; institutional control information; site use and operational records; programmatic plans; remediation documents; risk assessments; investigation documents; environmental information; radon and environmental hazard monitoring information; ground/surface/leachate water monitoring information; *National Environmental Policy Act* (NEPA) information; completion/closure reports; site surveillance and inspection information; site maintenance information; community relations and public involvement information; healthy and safety information; permits; waste management and disposal information; technical studies; QA information; *Comprehensive Environmental Response, Compensation, and Liability Act of 1980* (CERCLA) Administrative Record; and CERCLA, *Resource Conservation and Recovery Act of 1976* (RCRA), *Clean Air Act*, *Clean Water Act*, and U.S. Nuclear Regulatory Commission investigation, risk assessment, and remediation documents, plans, and specifications.

Oversight: "RL Oversight" encompasses activities performed by RL organizations to determine whether Federal and contractor programs and management systems, including assurance and oversight systems are performing effectively and/or complying with DOE requirements. Oversight programs include operational awareness activities, onsite reviews, assessments, self-assessments, performance evaluations, and other activities that involve evaluating contractor organizations and Federal organizations that manage or operate DOE sites, facilities, or operations. (DOE O 226.1A "DOE Oversight")

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Record: All books, papers, maps, photographs, machine-readable materials, or other documentary materials, regardless of physical form or characteristics, made or received by an Agency of the United States Government under Federal law or in connection with the transaction of public business and preserved or appropriate for preservation by that Agency or its legitimate successor as evidence of the organization, functions, policies, decisions, procedures, operations, or other activities of the Government or because of the informational value of the data in them (44 U.S.C. 3301).

Recordkeeping System/Repository: Manual or automated mechanism in which records are collected, organized, and categorized to facilitate their preservation, retrieval, use, and disposition.

Records Management: Planning, controlling, directing, organizing, training, promoting, and other managerial activities involved with records creation, records maintenance and use, and records disposition to achieve adequate and proper documentation of the policies and transactions of the Federal Government and effective and economical management of Agency operations.

Risk: A measure of the potential inability to achieve overall project objectives within the defined cost, schedule, and technical constraints. The two components of risk are the probability or likelihood of failure to achieve a desired outcome, and the consequence or impact of this failure.

Transition and Turnover Package (TTP): A document that demonstrates the physical cleanup of a parcel of land (e.g., Segment) is complete. It supports the transition of the land from the cleanup program to the LTS Program and provides the information necessary to support Hanford LTS activities. The TTP documents the history of the cleaned up segment, cleanup activities performed, and the as-left condition of each segment.

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Appendix D – LTS Records Indexing Guidelines

Use the Basic Category for the primary indexing of records in IDMS. Ensure the following are completed:

- Document number (if applicable)
- Revision Number (if applicable)
- Document Date
- Document Type
- Document Title
- Author and Recipient (if known)
- Reference Numbers
- Keywords—include:
 - Repeat the title
 - Long-Term Stewardship
 - Area and/or operable unit, (i.e., 100-F/IU-2/IU-6 Area)
 - Segment number or reactor area
 - Include as much other additional detail as possible in order to identify and locate document if title is not known to searcher. Some areas will have multiple variations of nomenclature; index all variations (i.e., 100-F, 100F, 100 F). Other examples of key phrases to capture, if applicable, are facility number, what “category” of LTS info is—existing hazards, past and present releases, cleanup/disposition of historical hazards, existing barriers and other active or passive mechanisms for preventing exposures, process history, historical infrastructure, post-cleanup requirements, regulatory framework for cleanup, etc.
 - Metadata describes the content, quality, condition, and other characteristics of electronic data. Metadata are used to organize and maintain investments in data, to provide information to data catalogs and clearinghouses, and to aid data transfers. Metadata must describe data sets in sufficient detail for a user to understand and find enough about each data set to understand what it contains and how the data might be used.
- Metadata should provide a means of sifting through a series of data sets to find the specific data that the user needs.

Use the Access Rights Indexing Category to indicate the clearance level of the document.

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Appendix E – Examples of TTP IM Assessment Line of Inquiries

Records Management:

1. Has sufficient documentation been provided to support information cited in each section of the TTP?
2. Has all required metadata been provided for each document on the RIT to include TTP section, document number, revision, document date, document title/description and as appropriate metadata should include author, originating company, company location.

Information Systems:

1. Have all the information systems that contained data cited in the TTP been entered onto the Data Source Table?
2. Is there sufficient objective evidence to provide understanding of the information systems cited in the TTP?
3. Is there objective evidence of conducting periodic reviews of electronic information systems?
4. Is there evidence of quality control of the data via procedures and/or access controls?