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PAPER

IDENTIFYING ENVIRONMENTAL SAFETY AND HEALTH REQUIREMENTS FOR THE
FERNALD ENVIRONMENTAL RESTORATION MANAGEMENT CORPORATION

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INTRODUCTION

This presentation will describe the Fernald Environmental Restoration Management Corporation's (FERMCO) Standards/Requirements Identification Documents (S/RIDs) Program, the unique process used to implement it, and the status of the program. We will also discuss the lessons learned as the program was implemented.

The Department of Energy (DOE) established the Fernald site to produce uranium metals for the nation's defense programs in 1953. In 1989, DOE suspended production and, in 1991, the mission of the site was formally changed to one of environmental cleanup and restoration. The site was renamed the Fernald Environmental Management Project (FEMP) to reflect this change. From its inception until November 1992, this site was managed under a Management and Operating contract. As a result in the change in mission, DOE awarded an Environmental Restoration Management Contract (ERMC), focusing on restoration. FERMCO assumed management of the site December 1, 1992. FERMCO's mission is to provide safe, early, and least-cost final clean-up of the site in compliance with all regulations and commitments.

DOE has managed nuclear facilities primarily through its oversight of Management and Operating contractors. These contractors were responsible for formulating, selecting, and administering standards controlling design, construction, operations, and maintenance. The DOE Operations Office Manager was responsible for approving individual contractor practices and the governing site standards and requirements to be met. Due to the absence of comprehensive nuclear industry standards when most DOE sites were first established, Management and Operating contractors had to apply existing non-nuclear industry standards and, in many cases, formulate new technical standards to address unique applications.

Because it was satisfied with the operation of its facilities, DOE did not incorporate modern practices and standards as they became available. In March 1990, the Defense Nuclear Facilities Safety Board (DNFSB) issued Recommendation 90-2, which questioned this practice. The recommendation called for DOE to identify relevant standards and requirements, conduct adequacy assessments of requirements in protecting environmental, public, and worker health and safety, and determine the extent to which the requirements are being implemented.

While this recommendation did not originally apply to restoration facilities specifically, the Environmental Restoration and Waste Management Office of DOE (DOE-EM) embraced the recommendation for facilities under its control. With the ERMC concept, there were strict accountability requirements, which made it absolutely essential that FERMCO and DOE clearly identify applicable requirements necessary for this type of contract, determine the requirements' adequacy, and assess FERMCO's level of compliance.

THE PROCESS

Development

The first stage of this project identified functional areas, developed an action plan, and secured personnel. To create the S/RIDs, we brought in experienced Subject Matter Experts from one of the corporate teaming partners that form FERMCO. The Action Plan defined the qualification criteria for the Subject Matter Experts, which was consistent with those contained in DOE Order 5480.18A. The criteria were guidelines and could be waived by the Functional Area Manager if the prospective

candidate demonstrated extensive functional area knowledge through personal interviews or professional experience. The final approval of the Subject Matter Expert resided with the Functional Area Manager.

FERMCO identified twenty-four functional areas (see Table 1). The first eighteen of the functional areas addressed the protection of the environment, and the safety and health of the public and site workers, consistent with those identified in the May 1993 draft DOE Functional Area Guidelines for Environmental Safety and Health in response to Recommendation 90-2. The last six dealt with business management requirements and addressed minimization of avoidable cost, ensuring cost efficient management, and effective utilization of resources as part of sound business practices. These functional areas encompass all requirements essential to conducting safe and cost effective environmental restoration by FERMCO. Requirements that overlap into other functional areas were also identified.

Potential requirements were reviewed, using a graded approach concept where possible, for applicability to the FEMP. This graded approach concept allowed us to determine how much of a potential requirement was relevant to the environmental restoration activities at the FEMP. In some cases, entire requirement documents were cited. At other times, only a paragraph was referenced. Occasionally, requirement documents were judged not to relate to our mission.

Sources of potential requirements included federal, state, and local statutes, regulations, and agreements; DOE Orders, rules, policies, guidance documents, regulatory guides, technical standards, and Secretary of Energy Notices; national consensus codes and standards; the Environmental Restoration Management Contract; and requirement documents from other DOE facilities. The result of this determination addressed the degree of implementation needed for a specific requirement based on the hazards associated with the structure, system, component, process, or procedure. A graded approach was applied to requirements concerned with the design, construction, operation, maintenance, and decommissioning of facilities with the potential of affecting safety. A graded approach was not an option for many federal, state, or local laws and regulations.

Because of FERMCO's focus on expediency and cost efficiency, we applied a unique approach to developing the S/RIDs. First, in identifying the requirements, we did not do a line-by-line assessment. We only identified requirements down to the paragraph or section level. Our review of the source documents was rigorous; however, we did not expend extra time by typing every statement of the requirement. Second, we did not restate the requirement in our document in any way, as in quoting or paraphrasing. We only cited the requirement by title, number, major section, and issue date. This saved a great deal of time and money by avoiding the time required to enter the text and the time required to edit the requirements documents every time a source document changed. Our S/RIDs have two primary functions: 1) direct our site experts to the appropriate sections of source documents as they develop our procedures and programs; and 2) list the requirements that auditors will use to assess our level of compliance. That way there is only one source of the actual information: the requirement source document itself. This helps prevent misinterpretation through inappropriate paraphrasing. The biggest advantage is not expending resources to re-key the actual requirement statement. Our database instead contains a fully related list of requirement citations, implementing documentation, and associated audit findings.

The requirements were then reviewed for adequacy in several areas: protecting the environment and the health and safety of workers and the public; providing risk minimization and cost effective management of resources; and fulfilling contractual obligations. The review included evaluating the applicability and the sufficiency of the identified requirements. For environmental, safety and health requirements, the evaluation determined the specific standards that applied to the functional area. Requirements that were necessary and sufficient to ensure health and safety were included regardless of whether we felt we were in compliance or could achieve compliance with them. The individual standards or requirements were analyzed to ensure that they provided for the adequate protection of worker and public safety and health against all known site-originated hazards and that they fully covered all safety assumptions defined in Safety Analysis Reports or other safety documents. The adequacy process relied on constant feedback from operating experiences, oversight and self-assessment results, audits, industry incidents and experiences, and new or revised standards and requirements. The Functional Area Managers and Site Technical Experts were told that these were requirements against which they would be audited. Once we established the applicability of a standard or requirement, it became the basis against which compliance was determined.

For business management concerns, the evaluation process was essentially the same. Good management practices were addressed, in addition to source documents that related to the business management functions and cost effective management, use of resources, and minimization of financial risk.

After each S/RID was drafted, the Program Manager and the Subject Matter Expert reviewed it. The S/RID was then given to the Site Technical Expert for a two week review, which was followed by a peer challenge. Peer challenge reviews were key to ensuring the quality and adequacy of the requirements documents. During the peer challenge, the Subject Matter Expert presented evidence to support the identification of standards or requirements. The peer challenge was a critical review to ensure that the Subject Matter Expert's determination of applicability was adequate for the specific functional area. These reviews resulted in comments that, in some cases, required the redefinition of the functional area or a revision of the individual requirements document. Peer challenge participants included the following: the Functional Area Manager, the S/RID Program Manager, DOE, other Subject Matter Experts, representatives of the Quality Assurance, Training, and Continuous Performance Improvement organizations, and other individuals deemed necessary by the Functional Area Manager, the Program Manager, or the Subject Matter Expert. Additional meetings between the Subject Matter Expert and the Site Technical Expert addressed all concerns identified during the peer challenge. After the review process was completed, the necessary approval from the Functional Area Manager and DOE approved the S/RID, and it was included in FERMCO's Management Plan. See Figure 1 for a sample S/RID.

Assessment

The initial assessment of the implementing documentation, comprising the second stage of this project, was performed by the Subject Matter Experts, who were given the consolidated list of open audit findings from past external appraisals. An open finding does not indicate that there is no program for corrective actions in place. They also developed a requirements checklist that contained the citation and general topic of each requirement. Existing implementing documentation, such as policies, plans, or procedures, were then listed with the corresponding requirement. All three facets (the requirements, the implementing procedures, and the documented deficiencies) provided an initial assessment of FERMCO's compliance level.

FERMCO's Compliance Baseline Development Department, with the assistance of the Quality Systems and Forms and Procedures Development Departments, was responsible for identifying evaluation criteria, developing an assessment reporting format, conducting assessment orientations, collecting all site procedures and audit findings for each functional area, and determining the extent to which site operating procedures were in compliance with the S/RIDs. Additional follow-up work was performed by Independent Reviewers from the other teaming partner corporations.

Maintenance

The third stage of the program established a program to update the S/RIDs when new requirements are identified or previous requirements are revised. When new or revised requirements appear, various organizations within FERMCO review them to determine what, if any, impact they have on the current S/RIDs. Because the S/RIDs contain only current requirements. Any anticipated regulatory changes are not included until such changes are formally published. If changes are required, Site Technical Experts lead the revision process. A quality check team, composed of a few key Subject Matter Experts and additional support from FERMCO and the other teaming partners, review the entire set of documents, especially the Interfaces and Requirements Sections, to identify overlaps, inconsistencies, or gaps in the information and has communicated where changes are needed. Ultimately, the revised S/RID is issued and included in the quarterly revision to the FERMCO's Management Plan. These activities ensure the S/RIDs are of the highest quality before inclusion in the Management Plan.

A key part of our approach to developing the S/RIDs was ensuring that they become "living" documents. One way of keeping the S/RIDs living is by combining the requirements identification process with other existing, accepted programs, such as the Management Plan. In addition to the S/RIDs, the Management Plan contains FERMCO policies, which are also categorized by functional area. Together the policies and requirements must then be integrated into various separate implementing documents, including site plans and procedures. After the S/RID is approved by the Functional Area Manager, it then becomes his responsibility to ensure that procedures and programs are in place to implement the requirements contained in the document. The S/RID provides the framework to ensure that our procedures correctly implement the requirement and our people are following the procedures correctly. The Functional Area Managers are the FERMCO experts ultimately responsible for the content of procedures and programs that cite their functional areas' requirements. The Functional Area Manager, as the expert within his specific activities, must approve any procedures in his functional area, and is responsible for ensuring compliance with the procedures.

Both FERMCO's and DOE's Self-Assessment Programs were set up to mirror the S/RIDs, as each of the 24 functional areas serves as a subassessable unit within the self-assessment program. Therefore, there is a direct tie between the Self-Assessment Program and the S/RIDs Program. FERMCO is also developing an audit management plan that would focus audits into these 24 functional areas. Therefore, both self-assessments and internal/external audits could be used to determine FERMCO's compliance with the S/RIDs.

Each requirements document is supported by a complete set of working files. These files contain the list of all requirement sources evaluated, in addition to justification for requirements not included in the document where such exclusion might seem questionable. Requirements that go beyond those deemed to be necessary and sufficient are identified there for possible inclusion in implementing

procedures. The functional area manager receives a copy of the entire working file at the end of the S/RID development. The original working files will be maintained by the Integration Department, which also manages the site's standards management program.

A final tool in keeping the S/RIDs up to date is an issues management database. The database is capable of cross-referencing the requirements and implementing procedures, and identifying any redundancies. This database is capable of creating the actual S/RID document, a summary level report, and the detailed requirements compliance matrix.

STATUS

As of January 1, 1994, 21 of 24 S/RIDs had been drafted, approved by the Functional Area Managers, and transmitted to DOE's Fernald Field Office for approval. As part of that approval, the DOE Fernald Field Office is reviewing what requirements were deemed inapplicable and our justification for doing so.

LESSONS LEARNED

Clearly Define the Purpose

We were trying to simultaneously design and implement the S/RIDs program to meet project deadlines and fulfill our commitment to the FERMC0 president and the DOE Fernald Field Office. We should have taken more time at the beginning to develop the program and document it through the Action Plan and administrative procedures. Some ideas were not thought out before they were implemented, and proved to be of questionable value. People working on this project made changes independently. Before these changes were approved, they were communicated to coworkers who would then include them. At times, the changes were rejected. By this time, though, they were so wide-spread that finding and removing the changes was a major undertaking. For example, some functional area titles were changed without approval. There then existed different lists depending on which title had been communicated last. One Subject Matter Expert shared a good idea for his peer challenge. He used strikeouts and italics in the document to show deletions and additions he had made based on the peer review before the meeting. Some word processing packages have the capability to do this automatically. This showed at a glance what had changed, and it resolved the question of the value of passing out a clean copy of the document at the meeting. This became the standard.

The Action Plan should have been issued before work began on the project. It was delayed because the constant refining of the process caused constant revisions to the draft. Our program was also developed to be consistent with DOE-published guidelines, which remained in draft through most of the project. DOE has not yet published the minimum acceptance criteria it is using for its independent reviews. As a result, the Action Plan became a moving target and was not widely distributed. It was out of date by the time it was published. Because the project was nearing completion, it was no longer appropriate to continue changing the plan, but to accept it as a snapshot of what the process was at a given time. The Action Plan was issued on August 20, 1993, then revised on September 9, 1993, to clarify how S/RIDs relate to FERMC0's contract. The document was revised to reflect Revision 4 of the draft DOE 90-2 Implementation Plan, which was received July 13, 1993, and Draft C of the ES&H Configuration Guidelines, received May 7, 1993. On September 3, 1993, the DNFSB accepted Revision 4 with some exceptions. Revision 0 of the ES&H

Configuration Guide, issued July 30, 1993, was received November 3, 1993, at the DOE Quarterly 90-2 Workshop, but the S/RIDs had already been transmitted to the DOE Fernald Field Office on November 1.

The receiving audience and goals continually changed as the project proceeded. For example, as of this writing, there is movement to use the S/RIDs to fulfill the requirements of 10 CFR 820, which says that contractors are required to develop implementation plans within 180 days of each rule issuance. Included in each of these implementation plans will be a schedule of actions required to come into compliance with the rule and procedures for what the contractor will do in response to violations. Because the S/RIDs will provide a portion of this information, they alone will not satisfy the implementation plan requirements.

The working files were originally intended to be informal, internal files containing all information in support of the S/RID. As the project evolved, the working files became an auditable part of the S/RID paper trail, as evidenced by the recent DOE Fernald Field Office audit as part of its approval process. The files should have been in auditable condition from the start of the program.

Define the Organization/Roles and Responsibilities

We initially pictured six teams working on six functional areas at a time, using a core support group of a clerk and two professionals. We didn't fill the approved positions, anticipating a hiring freeze. Scheduling the peer challenges, taking minutes at the challenges, and following up on the paperwork became a full-time job for the administrative staff we had. We brought in additional help from temporary agencies, but experienced a high rate of turnover. All peer challenges were recorded, but we experienced a high turnover of clerical help retained to transcribe the tapes. Additionally, confusion arose concerning whose responsibility it was to proof-read and issue the minutes, once they were finally typed. These factors led to the minutes from the peer challenges not being published in a timely manner. As a result of the delay, policy decisions and specific instructions arising during individual peer challenges were not communicated quickly or consistently to all Subject Matter Experts.

The length of time required to generate the S/RIDs varied greatly from document to document. Where the Subject Matter Expert and Site Technical Expert made the document their highest priority, the document took an average of twelve weeks from development to approval. This was generally not the case. With Subject Matter Experts working out of locations across the country, it was difficult to monitor the amount of attention the document was given. Some documents took as long as nine months and required multiple peer challenges. Peer challenges were repeated for five documents because key stakeholders did not attend or because extensive comments during the first review resulted in a change in document scope. We requested that alternates who attend peer challenges be briefed on the requirements identification process. Some divisions delegated their representation to people who didn't know the requirements identification process, nor were they familiar with their organization's role in it. To remedy this problem, the Program Manager scheduled time within all Level II Managers' staff meetings to ensure all had a clear picture of the S/RIDs process, the drivers for the process, and the divisional interactions within the process. These interactions were very productive. As a result, other organizations within the company began to recognize this activity's importance to their success. Some members of middle and first-line management started to accept the process and eagerly anticipated the deliverables.

Make Decisions Early - and Stick With Them

Directions changed mid-project and were not always communicated clearly to all participants. Some changed many times: for example, how to handle redundant requirements, how to justify and document non-applicability, or who would approve the S/RIDs. There needed to be a change control mechanism in place for the program so all changes or refinements could be controlled and tracked.

Continuous Information Flow

The Subject Matter Experts should have been controlled as a more close-knit "task force," reducing the number of remote work locations. More daily management attention should have been focused on their efforts. Many Subject Matter Experts did not work closely enough throughout the process and had to be continuously urged to communicate with each other. As a result, the documents were initially approved containing overlapping or contradicting requirements and interface descriptions. This, while corrected by the quality check before inclusion in the Management Plan, caused some confusion during the review process.

Lessons learned from one peer challenge to the next should have been communicated in a number of ways. In retrospect, it would have been a good idea to establish a running list of lessons learned as a required reading file for all Subject Matter Experts. Because of the unique setup with a number of Subject Matter Experts working at locations across the country, it was difficult to ensure that everyone received the same information at the same time. We began to have the Subject Matter Experts attend any peer challenges that occurred while they were in town, especially before conducting their own, so that they could be better prepared for their reviews.

Monthly status meetings were not enough for communicating changes in the process. Weekly progress meetings were then held to improve internal communications among the Subject Matter Experts. However, we noted that information passed on orally at the weekly status meetings was not necessarily assimilated or disseminated, because of the number of Subject Matter Experts working in other parts of the country, and because of lack of documentation of these meetings. We began to teleconference our weekly status meetings, using a more structured agenda with minutes published after each one. This idea came about when a Continuous Performance Improvement Department facilitator was brought in to help us identify weaknesses in the communications throughout the program.

Training/Process Standardization

The qualifications for a Subject Matter Expert should have been more strictly defined. A Subject Matter Expert was defined as an individual who possessed functional area knowledge and experience acquired from similar government or industry activities. We thought the Subject Matter Expert should have a minimum of eight years of professional experience of which two should be in the specific functional area and should include knowledge of DOE Orders, rules, and policies; federal, state, and local laws and regulations; and national consensus codes and standards. We found that two years of experience in a specific functional area was not enough. Additionally, too much emphasis was placed on engineering experience, whereas many of the areas were not of an engineering nature. The candidates' communication skills should have also been evaluated and weighed heavily. To this end, there should have been more emphasis on conducting personal interviews between the Subject Matter Experts and the Program Manager, the Functional Area Managers, and the Site Technical Expert. The qualifications of the Site Technical Expert should have been reviewed so that any proposed Subject Matter Experts would complement the Site Technical Expert with whom they were to work to develop the S/RID.

We experienced inconsistency from one Subject Matter Expert to the next. The quality of each draft document and its initial reviews directly reflected the personalities of the Subject Matter Expert and Site Technical Expert. This was not reflected in the ultimate quality of the document because of the number and variety of reviews that each document underwent. The problem would have been avoided with better up-front training and more continuous management control as discussed above and below.

Midway through the project, the Program Manager began to review each Subject Matter Expert's preparation for his or her peer challenge one or two days before the event. Each was to have the following prepared: a list of all documents reviewed, a list of all comments and their disposition, and the S/RID itself. These were passed out to the peer challenge participants. As a result, the peer challenges progressed more smoothly and were more significant.

The Subject Matter Experts received orientation when they started their work. The quality and content of this orientation changed with time. At the beginning of the project, little orientation was received beyond reading a copy of the draft Action Plan and going on a site tour. Since the Action Plan changed drastically over the project, this was not always meaningful. By the middle of the project, we had built the orientation to include a site tour, a copy of the Action Plan, overview talk from the Program Manager regarding the purpose of the S/RIDs, and an explanation of expense and time sheets. By the end of the project, the last Subject Matter Experts to arrive, or replacement Subject Matter Experts, tended to be thrown into the project with little instruction beyond receiving a copy of the Action Plan and explanation of the time and expense sheets.

Clarify Format and Content

The Interface Section of the S/RIDs caused some confusion. This section was intended to clarify where unique or complex overlaps exist between functional areas. Where a functional area has a general scope that affects all other functional areas equally, it need not be identified. The Interface Section was intended to explain where the relationship between functional areas was unique, or where they possibly shared a requirement and it was not clear which document should contain the citation. The Interface Section dictated which document should contain which citation and, therefore, which Functional Area Manager owned the requirements. It had clearly delineated the boundaries where two or more functional areas may have had joint responsibilities. Most functional areas affect all the other functional areas; an interface is called out if there are requirements that are shared between areas, or if there is something unique in the interface.

Even after many instructions to the contrary, we continued to see whole requirements listed. It is an unusual case where any specific DOE Order, for example, applies in its entirety to one functional area. Our intention was to cite major sections or paragraphs. We also experienced difficulty in citing all applicable requirements where primary sources contained references to additional requirements. Any applicable references were invoked by specific citation.

In identifying the requirements, we have to ask if we have adequately defined the safety envelope. Are the requirements being identified necessary? Are they sufficient to protect the public and worker health and safety, and that of the environment? If not, we may wish to invoke industry standards. This reinforces that we don't want to include sweeping references: where a requirement cites additional requirements by reference, those citations should be evaluated and specifically cited as

applicable or not. We don't want to let an auditor infer that something is applicable only because it was invoked by something else that was. All citations must be exact, specific, and explicit. If requirements were cited as not being applicable, it was documented in the working file.

CONCLUSION

We are nearing completion of the S/RIDs Program using our unique approach. The results of ongoing work to identify the content and format of the documents may be so prescriptive as to make our approach incorrect, and may require rework. The true test will be after the documents are in place, to see if they can function as the tools to build good programs and provide a sound and appropriate program and basis for audits.

Determining the level or number of constraints that we build into the documents and, thus, into the management of the FEMP is difficult. It is against the requirements contained in these S/RIDs that we will be audited. We have here a defense mechanism for focusing any auditor's appraisal on only the requirements that are truly applicable to work done by FERMCO. This then becomes a double-edged sword. We are building the bat with which we can be beaten. Or, more positively, this will be the yardstick against which our success will be measured. Any good contractor determines the requirements he must meet before beginning construction work. As keepers of the public trust we can do no less.

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		AREA DESCRIPTIONS
1.	Configuration Management	<ul style="list-style-type: none"> • establish change control process. • establish and control facility technical baselines. • establish and maintain records management. • establish and maintain documentation control.
2.	Engineering Design	<ul style="list-style-type: none"> • manage demolition plans. • identify safety class systems. • design and modification of facilities. • evaluate site structural characterization.
3.	Emergency Preparedness And Management	<ul style="list-style-type: none"> • emergency preparedness planning and hazards identification. • emergency response.
4.	Research And Development And Experimental Activities	<ul style="list-style-type: none"> • technical search and evaluation. • experimental programs and demonstrations. • experimental programs design, approval, control, assessment, and reporting.
5.	Environmental Protection	<ul style="list-style-type: none"> • programmatic and technical requirements, formal controls, and standards which are protective of human health and the environment and which particularly emphasize environmental media, biota, and cultural resources
6.	Fire Protection	<ul style="list-style-type: none"> • fire prevention/detection. • fire protection.
7.	Maintenance	<ul style="list-style-type: none"> • establish equipment/systems maintenance methods/practices. • provide equipment calibrations, routine and on demand. • establish preventative/routine equipment maintenance. • set standards for facility and utility support.

Table 1. FERMCO Standards/Requirements Identification Documents.

		AREA DESCRIPTIONS
8.	Management Systems	<ul style="list-style-type: none"> • management of procedures issues. • ES&H compliance controls and occurrence reporting. • operational readiness review moved here per DOE. • emergency reporting. • coordinate the identification, evaluation, and documentation of site requirements and the degree of compliance. • ensure corrective action and tracking of noncompliance.
9.	Nuclear and Safety Systems	<ul style="list-style-type: none"> • nuclear safety analysis, reporting, and planning. • nuclear criticality safety.
10.	Occupational Safety And Health	<ul style="list-style-type: none"> • construction safety • occupational (worker) safety and health. • employee safety and health.
11.	Operations	<ul style="list-style-type: none"> • execution and monitoring of operational activities • operating methodologies and procedures. • lock and tagout. • abnormal events investigation. • equipment/process labeling
12.	Packaging And Transportation	<ul style="list-style-type: none"> • administration/monitoring on-site/off-site transportation of hazardous and radioactive materials and waste. • administration/monitoring packaging of hazardous and radioactive materials and waste.
13.	Quality Assurance	<ul style="list-style-type: none"> • identify integral elements of the QA program
14.	Radiological Protection	<ul style="list-style-type: none"> • monitoring and ALARA approach to limiting radiological exposure of workers and public.
15.	Security	<ul style="list-style-type: none"> • program planning and management • personnel security • protection program operations • nuclear materials control and accountability • surveys and facility approval • independent inspection and evaluation
16.	Training And Qualification	<ul style="list-style-type: none"> • training and qualification of personnel. • development of creditable programs.

Table 1. FERMCO Standards/Requirements Identification Documents.

		AREA DESCRIPTIONS
17.	Environmental Restoration and Waste Management	<ul style="list-style-type: none"> · elements and programmatic controls directly associated with Environmental Restoration program compliance · activities and requirements associated with the management and implementation of the DOE remedial action program and the decontamination and decommissioning program for surplus contaminated facilities · elements and programmatic controls necessary to manage hazardous, radioactive and solid waste compliance at active treatment, storage, and disposal facilities · includes generation, characterization, transport, processing, storage, treatment, and disposal of radioactive, solid, and hazardous waste
18.	Construction	<ul style="list-style-type: none"> · physical demolition. · planning, scheduling, managing, and closing construction of new facilities or modification to existing ones.
19.	Acquisition	<ul style="list-style-type: none"> · long lead procurement. · property purchasing and acquisition. · subcontractor (temporary worker) purchasing.
20.	Human Resources And Industrial Relations	<ul style="list-style-type: none"> · human resource management. · career development. · equal employment opportunity. · career retraining.
21.	Project Control	<ul style="list-style-type: none"> · scheduling/cost control. · project performance measure and reporting.
22.	Property Management	<ul style="list-style-type: none"> · track usage, inventory, and disposal of property. · materials control and accountability <ul style="list-style-type: none"> - nuclear material tracking - hazardous waste (RCRA) tracking - low level radioactive waste

Table 1. FERMCO Standards/Requirements Identification Documents.

		AREA DESCRIPTIONS
23.	Public Involvement	<ul style="list-style-type: none"> · promoting good relations between the site and surrounding communities through interactive programs and media involvement. · researching community concerns through community interviews · addressing concerns through community relations activities
24.	Financial Management	<ul style="list-style-type: none"> · maintain site financial accounting and reporting system · exercise control over expenditures and assets · limit financial risks through investigation and planning.

Table 1. FERMCO Standards/Requirements Identification Documents.

The following is the format and explanation of the sections for a Standards/ Requirements Identification Document.

X.0 Functional Area Name

X.1 Introduction

This section includes a description of the functional area, its scope, and purpose.

X.2 Interfaces and Boundaries

This section lists other functional areas that may affect or be affected by this one and any functional area boundaries that may need to be identified.

X.3 Requirements

This section cites the actual requirements. Each requirement is listed in its own sub-sections. Only applicable parts of the requirement document are included. If an entire document is listed, such as X.3.2, that entire document is considered relevant to the FEMP and FERMCO.

X.3.1 40 CFR 1234.1.2.j

X.3.2 DOE Order 1234.2A

X.3.3 DOE Order 6789.5

X.3.3.1 Chapter 1

X.3.3.2 Chapter 3

X.3.3.3 Chapter 9

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Figure 1. Standards/Requirements Identification Document sample format.