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Alternative Considerations for Environmental Oversight Training: Results from a Needs Assessment

Environmental Assessment Division

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Alternative Considerations for Environmental Oversight Training: Results from a Needs Assessment

by C. Young and J. Hensley

November 1995

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NOTATION

The following is a list of the acronyms, initialisms, and abbreviations used in this document.

ACRONYMS, INITIALISMS, AND ABBREVIATIONS

CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
D&D	Decontamination and Decommissioning
DOE	U.S. Department of Energy
EM	Office of Environmental Management
IDP	Individual Development Plan
NEPA	National Environmental Policy Act
RCRA	Resource Conservation and Recovery Act
RDDT&E	Research, Development, Demonstration, Testing, and Evaluation

ALTERNATIVE CONSIDERATIONS FOR ENVIRONMENTAL OVERSIGHT TRAINING: RESULTS FROM A NEEDS ASSESSMENT

by

C. Young and J. Hensley

SUMMARY

A headquarters organization of the U.S. Department of Energy's (DOE's) Office of Environmental Management directs and oversees environmental remediation activities at the Chicago, Idaho, Oakland, and Richland Operations Offices. To successfully oversee environmental remediation activities, staff must be adequately trained in the various tasks they perform. Argonne National Laboratory conducted a training needs assessment for this headquarters organization by having staff members identify tasks performed and the knowledge, skills, and abilities needed to accomplish those tasks. This information provided the basis for determining and prioritizing possible training needs.

As part of the training needs assessment, staff from this headquarters office completed a workbook to identify the most critical skills needed for each task. Respondents also identified tasks they actually perform and should perform. These tasks are listed in staff's position descriptions, assigned by their supervisors, or based on DOE policy. Staff were also asked to specify the tasks they do not perform and their preferences for performing each task. Further, staff rated their competency in performing each task and how appropriate they perceived their knowledge and skills to be.

Results from the assessment suggest that staff from this office perform diverse tasks that they should perform and that they generally like performing. Staff identified 10 tasks that should be performed by an additional 10% of staff. These tasks related to functions such as program oversight, document preparation, and policy analysis. Staff have relatively wide ranges of ability for some of the tasks that they currently perform and should perform. Moreover, those tasks that most staff do not or should not perform are generally those tasks that are least preferred.

The results suggest staff are moderately proficient in using the skills needed to perform the above tasks. However, for the organization to function at its best, staff must be extremely proficient in the skills they use to carry out most of their tasks. Seventeen important, common skills were found to be associated with the multiple tasks that staff perform and should perform. Given the importance of these skills, training is appropriate. These 17 skills fall into three broad categories: (1) communication, (2) critical thinking/problem solving, and (3) program management. Examples include "writing clearly and succinctly"; "assessing strengths and weaknesses of alternatives"; and

knowledge of "planning, programming, funding, and acquisition management." Staff should be encouraged to attend training in these areas.

Next steps include improving the knowledge and skills of staff of this headquarters office, particularly in the 17 common skills necessary for most tasks that staff perform and should perform. This improvement can be accomplished by identifying and examining different types of skill development opportunities to accomplish a high proficiency level. Not only should formal training courses be identified or developed, but on-the-job experiences should also be considered. The opportunities for training should then be evaluated for their effectiveness to determine which training is most useful. Management support for training should be demonstrated through actions such as developing and carrying out plans that address individual training needs and professional development.

1 INTRODUCTION

For staff to perform their jobs effectively and efficiently, they must be adequately trained. Well-trained staff are also more likely to be satisfied with their jobs and to remain with a given organization (Kleiman 1993; Hubble and Green 1992). In addition to hiring staff with relevant backgrounds and skills, critical steps in maintaining adequately trained staff are to analyze skill levels needed for the various tasks that personnel are required to perform and to provide training to improve staff's skill base. This first analysis is commonly referred to as a training needs assessment. Training needs are usually determined by defining the tasks required for a particular job and the associated knowledge, skills, and abilities necessary to adequately accomplish these tasks (Cook and Seith 1992; Marshall and Mayer 1992).

The Office of Northwestern Area Programs of the U.S. Department of Energy's (DOE's) Office of Environmental Management (EM) oversees environmental remediation activities in the Chicago, Idaho, Oakland, and Richland Operations Offices. For this organization to effectively carry out its mission, its staff need to be as proficient as possible in the appropriate knowledge and skills. Therefore, a training needs assessment was conducted to determine staff's level of knowledge and proficiency in various skills. The purpose of the assessment was to:

- Examine the types of activities or tasks in which staff are involved,
- Determine the skills needed to perform relevant tasks, and
- Assess gaps in knowledge and skills for the tasks performed in order to suggest opportunities for skill development.

2 METHODS

This section describes the methods used to gather and analyze information to determine where training would be useful.

2.1 WORKBOOK

A workbook was designed to collect information in three major areas: tasks that staff perform and believe they should perform, skills[1] associated with these tasks, and staff members' own assessments of their levels of expertise in these skills. These areas are standard components of a training needs assessment (Birnbrauer and Tyson 1985; Fisher and Frank 1992; Nadler 1982; Zemke 1985).

To prepare the workbook, information was gathered from multiple sources to identify the range of tasks performed. First, position descriptions were reviewed to generate a list of possible tasks performed by staff. Because position descriptions are not updated as frequently as job functions evolve and, therefore, may not accurately reflect the activities actually performed, additional sources were solicited. Additional lists of tasks for environmental programs were obtained from the DOE Office of Professional and Technical Training and Development, from the Office of Oversight and Self-Assessment, and from previous investigations into environmental activities in other agencies (Close 1987; Meshenberg et al. 1990). Tasks were consolidated to reduce duplication and to create consistency across a wide range of science and engineering position types. These tasks related to broad organizational functions such as communication, administration, personnel, project management, project implementation, remedial activities, and budget.

Information on the underlying knowledge and skills necessary to complete the indicated tasks was also obtained from multiple sources, including position descriptions, job announcements, and literature on environmental training, problem solving, and decision making (Green et al. 1985; Posner 1989; Segal et al. 1985). Additional information was obtained from the Office of Professional and Technical Training and Development, from previous work performed by the Office of Compliance and Program Coordination, and from performance evaluation criteria of this headquarters office. The lists of knowledge and skills were also consolidated to reduce duplication. Skills were listed under the broad categories of communication, administration, organizational structure and process, supervision, physical sciences, engineering, safety and health, biology, management of hazardous materials and wastes, federal environmental laws and regulations, DOE orders, and executive orders on environmental topics.

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[1] The term *skills* is used throughout the text and tables to refer to skills, knowledge, and/or abilities.

The lists of tasks and skills were then arranged into a pilot version of the workbook that contained three parts with accompanying instructions. Part 1 contained questions about activities or tasks in which staff are involved. Staff were asked which tasks they perform and should perform. This category was defined as consisting of tasks listed in their position descriptions, assigned by their supervisors, or based on DOE policy. Staff were also asked how much they liked performing these tasks and how well they thought they performed them. Part 2 asked the staff to identify the knowledge and skills needed to perform the tasks in Part 1. Part 3 addressed the individual staff member's level of proficiency with different types of knowledge and skills. Four staff members and training experts at Argonne National Laboratory reviewed the pilot version of the workbook. Their review focused on clarity of instructions, workbook format, completeness of task and skill lists, and ease of responding to questions. Reviewers indicated that definitions of tasks and skills were unnecessary but suggested the lists of regulatory knowledge be expanded.

A final workbook (see Appendix A) was then prepared and distributed to all 23 staff members. All workbooks were returned; 14 individuals completed all three sections, and the remaining staff completed parts of the workbook. A master code book was compiled, and the responses were entered into a database in Excel (Microsoft Corporation 1992).

2.2 DATA ANALYSIS

Responses were tabulated in Excel for each section of the workbook. For Part 1 (Tasks), the following were computed: (1) the proportion of staff that perform and should perform each task, (2) average score of staff's competency to perform each task, and (3) average score on levels of preference for tasks. For Part 2 (Ideal Skills for Each Task), the mean level of importance of all skills for each task was calculated. These mean scores were then sorted in descending order to determine the most important skills needed for each task. Appendix B of this report presents the skills that received the 10 highest mean criticality scores for each task. For Part 3 (Skills), the average score of competency of staff members' skill levels was calculated for each skill.

2.3 LIMITATIONS

The analysis provides valuable information on tasks associated with oversight of environmental remediation and skill levels of staff; the results also may be used to suggest training needs. However, the study has limitations. The response rate to the three parts of the workbook was variable. Part 2 of the workbook, which linked skills to tasks, was completed by only 14 of the 23 staff members.

In terms of data analysis, mean scores are presented in the aggregate for all staff. As a result, it is impossible to obtain information on skills associated with a task that only one person may perform or a skill that only one person may need.

In addition, the approach used in this project was a process of self-assessment — a standard approach for conducting needs assessments (Kosecoff and Fink 1982; American Society for Training and Development 1990). Staff indicated whether they performed various tasks, how well they performed those tasks, and their own skill level. Although these perceptions are valuable, they offer only one point of view. Another useful perspective could be managers' assessments of relevant tasks and skill levels of staff. (These perspectives have been solicited, and the results corroborate those presented in this report [Young and Hensley 1995; Hensley and Young 1995].) Even the perspectives of "outsiders" could be included — for example, evaluations by English teachers of staff writing samples.

Furthermore, despite pilot testing and review by experts, the lists of skills and tasks may not be exhaustive or may not be mutually exclusive.

3 RESULTS

3.1 TASKS PERFORMED

In Part 1 of the workbook, staff were asked to specify whether they currently perform a variety of tasks and whether they should perform tasks that they currently do not. The purpose of these questions was to identify activities or tasks that staff perform on a fairly regular basis, as well as to identify those that are irrelevant to the function of this headquarters organization.

Tasks that were considered important for this training needs assessment are those that most of the staff perform and feel they should perform as part of their job responsibilities. Tasks that staff should perform are those listed in their position descriptions, assigned by their supervisors, or based on DOE policy. As expected, most staff members perform and feel they should perform diverse types of tasks (Table 1). Tasks that most staff perform are related to the broad functions of preparing and processing documents, performing administrative/management duties, implementing guidance, and carrying out general remedial activities; they are not discipline-specific (e.g., "monitoring air quality"). Examples of these diverse tasks include "coordinate document review," "set schedules," and "implement regulations and policy." Moreover, respondents indicated that the tasks they are currently not performing (Table 2) and those that they should not perform are nearly identical.

For the most part, staff members believe they should perform the tasks they are currently performing.[2] However, staff identified 10 tasks that should be performed by at least an additional 10% of staff (Table 1). For example, although most staff "formulate, defend, and modify budget," an additional 14% of the staff indicated they should perform this task. This finding suggests a rather large gap in the proportion of staff who perform this task relative to the proportion of those who should perform it. Therefore, skill development opportunities may be appropriate.

The following tasks should be performed by an additional 10% of staff:

- "Conduct briefings/presentations";
- "Oversee assessments for cleanup";
- "Provide analyses to determine effects of remediation projects";
- "Evaluate contractors";
- "Develop testimony questions and answers";

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[2] Hereafter, "tasks that staff perform and should perform" will be simplified to "tasks that staff perform" (because the tasks that staff perform and should perform are essentially identical).

TABLE 1 Percentage[a] of Tasks that Staff Perform and Should Perform

Task	Perform (%)	Should Perform (%)
Advise, assist, and provide authoritative guidance[b]	90	100
Coordinate document reviews (in/out DOE)	100	100
Review documents	100	100
Formulate, defend, and modify budget[b]	80	100
Implement regulations and policy	90	100
Interface within/outside DOE	90	100
Conduct briefings/presentations[b]	70	90
Identify and document deficiencies	90	90
Operate equipment	100	90
Oversee environmental restoration activities	80	90
Provide analyses to determine effects of remediation projects[b]	50	90
Review remediation projects and their progress	90	90
Oversee assessments for cleanup[b]	60	90
Evaluate alternatives for cleanup	80	90
Develop testimony questions and answers[b]	70	80
Recommend actions to correct remedial problems	80	80
Provide regulatory analysis and guidance	80	80
Evaluate contractors[b]	50	80
Develop, coordinate, and disseminate program management policies and procedures	70	80
Oversee cost reviews[b]	70	80
Oversee National Environmental Policy Act (NEPA) activities	80	80
Prepare documents	80	80
Oversee program evaluations[b]	60	80
Establish cost, schedule, and technical baselines	70	70
Track and verify corrective actions	70	70
Set schedules	70	70
Participate in personnel training and development[b]	50	70
Oversee quality assurance/quality control activities	60	60
Oversee data/information management (e.g., Occurrence Reporting and Processing System)	70	60
Manage files and records	80	50

[a] Percentages have been rounded to the nearest 10% to simplify rankings.

[b] At least an additional 10% of staff should perform this task.

TABLE 2 Tasks that Staff Generally Do Not and Should Not Perform[a]

Oversee air quality activities
Oversee land use activities
Perform travel administrative functions
Investigate complaints, allocations, and incidents
Develop new/improved technologies
Oversee RDDT&E[b] activities
Manage contracts
Procure goods and services
Track correspondence

[a] Tasks that less than 30% of staff perform.

[b] Research, development, demonstration, testing, and evaluation.

- "Advise, assist, and provide authoritative guidance";
- "Formulate, defend, and modify budget";
- "Oversee cost reviews";
- "Oversee program evaluations"; and
- "Participate in personnel training and development."

Once the relevant tasks were identified from the complete list of tasks in the workbook, the underlying skills needed to carry out these tasks were determined. Skills needed for multiple tasks were termed "common skills." Common skills are those among the five most critical for a given task and needed for at least 30% of the relevant set of tasks. All staff should be proficient in these skills. Several common skills were found to be associated with the tasks that most staff perform (Table 3); examples include writing well, "keeping abreast of current developments," and "assessing strengths and weaknesses of alternatives."

The common skills associated with those tasks that an additional 10% of staff should perform are similar to those common skills associated with those tasks that most staff currently perform (Table 3). For the common skills discussed so far, staff indicated they have a working knowledge of these skills, although very few consider themselves experts in any of them.

TABLE 3 Common Skills[a] for Tasks that Most Staff Perform and Should Perform

Organizing/categorizing
Assessing strengths and weaknesses of alternatives
Organizing information and presenting cogent arguments
Prioritizing based on criteria
Keeping abreast of current developments[b]
Providing clear guidance and direction to accomplish tasks[b]
Writing succinctly and clearly
Examining trade-offs among alternatives
Addressing schedule constraints
Identifying relevant material/requirements[b]
Defining applicable criteria[b]
EM's mission, policies, management plans, procedures, priorities, goals, and objectives[b]
DOE management strategies

[a] Skills that were among the top 5 most critical skills for at least 9 of the 30 tasks that most staff perform. These skills have a mean score ranging from 3.1 at top of table to 2.4 at bottom of table based on a 4-point scale, where 1 = no knowledge; 2 = familiarity; 3 = working knowledge; and 4 = highly proficient/expert.

[b] Common skills for tasks that at least 10% more staff should perform.

3.2 COMPETENCY LEVELS

Staff were asked to rate on a 4-point scale how well they perform each task, with 1 being a low proficiency level and 4 being a high proficiency level. The purpose of this question was to determine whether there are tasks that staff do not perform well and to examine whether staff had widely varying ability levels in performing particular tasks. For those tasks that staff perform, high mean scores, low mean scores, and widely varying mean scores on competency were examined.

Those tasks for which staff have the lowest (although still generally moderate) competency levels include "identify and document deficiencies"; "manage files and records"; and oversight related to cleanup, cost reviews, National Environmental Policy Act (NEPA) activities, and data and information management (Table 4). Except for three common skills, staff use the same common skills to perform tasks regardless of whether they perform these tasks well or less well (Table 5). These three exceptions are "project or program management techniques," "analyzing information," and "knowledge of interagency agreements, administration, and process."

TABLE 4 Tasks that Staff Perform Relatively Less Well[a]

Implement regulations
Oversee assessments for cleanup
Oversee cost reviews
Oversee NEPA activities
Provide regulatory analysis and guidance
Oversee data/information management
Evaluate contractors
Manage files and records
Identify and document deficiencies
Oversee quality assurance/quality control

[a] Tasks with a mean score ranging from 2.9 at top of table to 2.7 at bottom of table based on a 4-point scale, where 1 = not at all well; 2 = somewhat well; 3 = sufficiently well; and 4 = extremely well.

TABLE 5 Common Skills[a] for Tasks with the Lowest Competency Levels

Interagency agreements, administration, and process
Providing clear guidance and direction to accomplish tasks
EM's mission, policies, management plans, procedures, priorities, goals, and objectives
Keeping abreast of current developments
Organizing/categorizing
Addressing schedule constraints
Assessing strengths and weaknesses of alternatives
Identifying relevant materials/requirements
Defining applicable criteria
Project or program management techniques
Analyzing information
Examining trade-offs among alternatives

[a] Skills that apply to at least 4 of the 10 tasks that staff do least well.

Staff were found to have relatively wide ranges of ability for several of the tasks they perform (Table 6). Rather than falling easily into categories, these tasks were quite diverse. Examples include "conduct briefings and presentations," "oversee assessments for cleanup," "evaluate contractors," and "oversee cost reviews."

All but three common skills for tasks for which staff have relatively wide-ranging ability (Table 7) are the same as the common skills for tasks that staff perform (Table 3). These three exceptions are "project and program management techniques"; "understanding schedule constraints"; and "planning, programming, funding, and acquisition management."

3.3 PREFERENCE LEVELS

Staff were asked to indicate the desirability of the tasks they perform. The rationale underlying this question was to ascertain those tasks that staff might easily choose and those tasks that might be burdensome and, therefore, less likely to be accomplished. If staff are provided with the opportunity to improve their skill proficiency for least preferred tasks, these tasks may become more desirable. The tasks with the highest and lowest mean scores on desirability/preference were examined.

Staff indicated that seven tasks were considered highly desirable (Table 8). These primarily relate to technical functions such as remediation activities and assessments. On the other hand, five tasks were considered undesirable, particularly those related to reporting ("develop testimony questions and answers," "prepare documents," and "coordinate document reviews"). Staff members also considered undesirable the task of overseeing NEPA activities because it duplicates other activities, particularly those associated with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). Tasks associated with NEPA were also viewed as having a subjective approval process and ambiguous guidance.

TABLE 6 Tasks with Relatively Wide Ranges[a] of Ability

Develop, coordinate, and disseminate program management policies
Participate in personnel training and development
Conduct briefings and presentations
Oversee NEPA activities
Oversee quality assurance/quality control activities
Oversee assessments for cleanup
Oversee cost reviews
Evaluate contractors

[a] Standard deviation, or the amount of variability around the mean ability score, is ≥ 0.75.

TABLE 7 Common Skills[a] Associated with Tasks with Relatively Wide Ranges of Ability

Providing clear guidance and direction to accomplish tasks
DOE management strategies
EM's mission, policies, management plans, procedures, priorities, goals, and objectives
Keeping abreast of current developments
Project or program management techniques
Addressing schedule constraints
Planning, programming, funding, and acquisition management
Identifying relevant material/requirements
Defining applicable criteria

[a] Skills that apply to at least four of the eight tasks with relatively wide ranges of ability.

TABLE 8 Most Preferred and Least Preferred Tasks that Staff Perform

Most Preferred Tasks
Review remediation projects and their progress
Recommend actions to correct remedial problems
Evaluate alternatives for cleanup
Advise, assist, and provide authoritative guidance
Oversee environmental restoration (CERCLA) activities
Oversee assessments for cleanup
Interface within/outside of DOE
Least Preferred Tasks
Develop testimony questions and answers
Oversee NEPA activities
Prepare documents
Coordinate document review
Oversee quality assurance/quality control activities

As described above, tasks with different preference levels were identified. The common skills associated with these tasks were then determined. The common skills associated with the most preferred tasks are listed in Table 9. The common skills associated with the least preferred tasks (Table 10) are similar to the common skills associated with all the tasks that staff perform (Table 3). These general skills include keeping abreast of current developments, organizing, writing clearly, and identifying relevant requirements.

3.4 SKILL LEVELS OF STAFF

Once the critical skills were identified for the tasks that staff perform, staff members' levels of proficiency with these various skills were examined. Levels of proficiency were evaluated for three categories of skills: general knowledge and skills (e.g., organizing information, assessing strengths and weaknesses); discipline-specific knowledge (e.g., chemistry, hazardous waste characteristics); and regulatory knowledge (e.g., federal laws, DOE orders).

TABLE 9 Common Skills[a] Associated with Most Preferred Tasks that Staff Perform

Organizing information and presenting cogent arguments
Providing clear guidance and direction to accomplish tasks
EM's mission, policies, management plans, procedures, priorities, goals, and objectives
Remediation techniques
RCRA[b]/CERCLA process

[a] Skills that apply to at least four of the seven most preferred tasks.

[b] Resource Conservation and Recovery Act.

TABLE 10 Common Skills[a] Associated with Least Preferred Tasks that Staff Perform

Writing clearly and succinctly
EM's mission, policies, management plans, procedures, priorities, goals, and objectives
Keeping abreast of current developments
Identifying relevant requirements

[a] Skills that apply to at least three of the five least preferred tasks.

For the three categories of skills identified above, the skills for which staff have low abilities are those skills for which training is especially important. However, in general, staff indicated that their skill levels are moderate to good. Appendix C provides details for those skills with both high and low levels of competency. Although staff collectively indicated they have working knowledge of most skills and although some individually indicated they are experts, staff do not collectively consider themselves experts in any skills. This is an interesting finding because these headquarters staff work in a complex environment where they provide guidance to the operations offices, interface with federal and state agencies, and defend programs — all of which depend on highly proficient environmental remediation skills. Despite staff's working knowledge, then, training is still appropriate for this headquarters office.

Examples of those general skills for which staff indicated the most proficiency include "organizing/categorizing information," "conducting library research," "operating computers," "assessing the strengths and weaknesses of alternatives," and "prioritizing based on criteria." Examples of general skills for which staff indicated the least proficiency include "speed reading" and "touch typing." However, these low-proficiency skills are not especially critical to the tasks that staff perform (Tables 3, 5, 7, and 10; Appendixes B and C).

Staff rated their abilities higher for general skills than for discipline-specific knowledge, which was rated higher than knowledge of regulations and agency orders. In terms of these discipline-specific skills, staff collectively indicated they were most knowledgeable of the principles of RCRA/CERCLA, NEPA, environmental sciences, and remediation techniques (with mean scores ranging from 2.6 to 2.9 on a 4-point scale, with 4 representing expert knowledge). On the whole, staff were least proficient at geomapping techniques, cartography, and nuclear engineering. In their responses for regulatory knowledge, staff indicated they were most knowledgeable in the following regulations: CERCLA, NEPA, and RCRA. Staff knew least about the regulations of the Noxious Weed Act, Repatriation Act, and Exotic Species Act; however, several staff members indicated that these acts do not apply to this headquarters office.

4 CONCLUSIONS

4.1 TRAINING NEEDS

Staff at a headquarters organization perform diverse tasks in functional areas such as preparing documents, implementing guidance, and overseeing general remedial activities. For the most part, these tasks are the same ones that staff should perform and like to perform.

Once relevant tasks were identified, the skills needed to carry out these tasks were determined. Of 165 skills, 17 were identified as necessary to perform the majority of tasks. These 17 skills focus on critical thinking, problem solving, communication, and program management. Staff were moderately proficient in these skills. If staff had indicated low proficiency in the skills needed for relevant tasks, one could simply conclude that training is justified for skills associated with those tasks. However, because staff have a working knowledge of most skills, training needs are not directly suggested. Therefore, an alternative way to look at training needs is proposed. The first step is to examine the most important skills that apply to multiple tasks (called common skills). Once the common skills are identified, those skills that underlie various sets of tasks are examined to determine the most important skills in which staff should be highly proficient and, thus, the skills for which training is appropriate.

Table 11 lists common skills associated with various tasks. The first of the five columns in the table lists the common skills associated with those tasks that most staff perform (refer back to Table 1 to review the tasks to which these skills apply). Training is valuable for skills associated with those tasks that most staff members perform (and should perform) regularly because these skills are not generally taught in formal science, engineering, and environmental curricula or job training. The second column presents the common skills for tasks that additional staff feel they should perform (these 10 tasks are also listed in Table 1). Considering skills associated with these tasks is worthwhile for assessing training needs because considerably more staff are likely to be called on to perform these tasks when time and resources allow.

The next two columns in Table 11 are related. The third column lists the common skills for those tasks performed least well (see Table 4). The fourth column lists the common skills associated with the tasks for which staff indicated wide ranges of ability (see Table 6). Staff need to be sufficiently trained in these skills to consistently perform the relevant tasks well.

The fifth column of Table 11 lists the common skills for the least preferred tasks that staff perform (see Table 8). This category is valuable because it can be argued that one reason certain tasks are less desirable is that staff feel less confident in their abilities to perform them well.

TABLE 11 Common Skills Associated with Various Sets of Tasks

Common Skills for Tasks that Most Staff Perform	Common Skills for Tasks that More Staff Should Perform	Common Skills for Tasks Performed Least Well	Common Skills for Tasks with Relatively Wide Ranges of Ability	Common Skills for Least Preferred Tasks
EM's mission, policies, management plans, procedures, priorities, goals, and objectives	EM's mission, policies, management plans, procedures, priorities, goals, and objectives	EM's mission, policies, management plans, procedures, priorities, goals, and objectives	EM's mission, policies, management plans, procedures, priorities, goals, and objectives	EM's mission, policies, management plans, procedures, priorities, goals, and objectives
Keeping abreast of current developments	Keeping abreast of current developments	Keeping abreast of current developments	Keeping abreast of current developments	Keeping abreast of current developments
Defining applicable criteria	Defining applicable criteria	Defining applicable criteria	Defining applicable criteria	
Providing clear guidance and direction to accomplish tasks	Providing clear guidance and direction to accomplish tasks	Providing clear guidance and direction to accomplish tasks	Providing clear guidance and direction to accomplish tasks	
	Identifying relevant material/requirements	Identifying relevant material/requirements	Identifying relevant material/requirements	Identifying relevant material/requirements
Addressing schedule constraints		Addressing schedule constraints	Addressing schedule constraints	
Organizing/categorizing information		Organizing/categorizing information		
Assessing strengths and weaknesses of alternatives		Assessing strengths and weaknesses of alternatives		
Writing clearly and succinctly				Writing clearly and succinctly
Examining trade-offs among alternatives		Examining trade-offs among alternatives		
DOE management strategies			DOE management strategies	
		Project or program management techniques	Project or program management techniques	

TABLE 11 (Cont.)

Common Skills for Tasks that Most Staff Perform	Common Skills for Tasks that More Staff Should Perform	Common Skills for Tasks Performed Least Well	Common Skills for Tasks with Relatively Wide Ranges of Ability	Common Skills for Least Preferred Tasks
Prioritizing based on criteria				
Organizing information and presenting cogent arguments				
		Interagency agreements, administration, and process		
		Analyzing information		
			Planning, programming, funding, and acquisition management	

More training in the common skills underlying these tasks could further improve staff proficiency in the relevant skills and make the tasks more desirable.

Training is appropriate for all 17 common skills presented in Table 11; these skills focus on critical thinking/problem solving, communications, and program management. However, it may be impossible to train for these 17 skills simultaneously. Thus, each skill has been further prioritized to assist in implementing training activities (Table 12).

Three criteria were used to determine priorities for training needs: (1) the number of task sets to which the skill applied, (2) the mean competency level for the skill, and (3) the standard deviation for the mean competency of the skill. If these criteria were considered separately, the priority would be as follows:

- Skills that apply to many sets of tasks would receive a higher priority than those that apply to fewer sets of tasks;
- Skills for which staff have low mean competency scores would receive higher priority than those with high mean competency scores; and
- Skills for which staff collectively have a wide variation in competency would be of higher priority than those with a small variation.

To be as comprehensive as possible, these three criteria were considered together. For example, a skill that applied to multiple sets of tasks, had a low mean competency level, and had a large standard deviation would suggest the highest priority for training. On the other hand, a skill that applied to only two sets of tasks and had a high mean competency score would be considered of lower priority for training.

This scheme suggests three levels of priority for staff to further improve their proficiency in the 17 common skills. Four skills were assigned first priority for training:

- Keeping abreast of current developments;
- Defining applicable criteria;
- Understanding of "EM's mission, policies, management plans, procedures, priorities, goals, and objectives"; and
- Understanding of "planning, programming, funding, and acquisition management."

TABLE 12 Priority Ranking for 17 Common Skills for which Training Is Most Important

Skill	Number of Task Groups to which Skill Applied[a]	Mean Proficiency Level[b]	Standard Deviation[c]	Priority
Communications				
Providing clear guidance and direction to accomplish tasks	4	3.0	0.7	2
Writing clearly and succinctly	2	3.0	0.7	3
Interagency agreements, administration, and process	1	2.7	0.7	2
Problem solving/critical thinking				
Identifying relevant material/requirements	4	2.8	0.7	2
Organizing/categorizing information	2	3.1	0.8	2
Keeping abreast of current developments	5	3.0	0.8	1
Defining applicable criteria	4	2.8	0.7	1
Analyzing information	1	3.1	0.5	3
Organizing information and presenting cogent arguments	1	3.1	0.7	3
Examining trade-offs among alternatives	2	2.9	0.7	3
Assessing strengths and weaknesses of alternatives	2	3.1	0.7	3
Prioritizing based on criteria	1	3.1	0.7	3
Program/project management				
EM's mission, policies, management plans, procedures, priorities, goals, and objectives	5	2.7	0.7	1
Addressing schedule constraints	3	2.9	0.7	3
Project or program management techniques	2	2.9	0.9	2
DOE management strategies	2	2.4	0.7	2
Planning, programming, funding, and acquisition management	1	2.5	0.9	1

[a] As illustrated in Table 11.

[b] Mean proficiency level is based on a 4-point scale: 1 = no knowledge; 2 = familiarity; 3 = working knowledge; 4 = expert.

[c] Standard deviation, or amount of variability, of mean proficiency level.

Six skills were assigned to second priority:

- Providing clear guidance and direction to accomplish tasks;
- Identifying relevant material/requirements;
- Organizing/categorizing information;
- Project or program management techniques;
- DOE management strategies; and
- Interagency agreements, administration, and process.

Seven skills were assigned to third priority:

- Writing clearly and succinctly,
- Analyzing information,
- Organizing information and presenting cogent arguments,
- Examining trade-offs among alternatives,
- Assessing strengths and weaknesses of alternatives,
- Prioritizing based on criteria, and
- Addressing schedule constraints.

4.2 FUTURE DIRECTIONS

The results of this project suggest many approaches for continuing to improve the knowledge and skills of staff. Possible next steps are briefly described below.

4.2.1 Develop Training Activities

Now that training needs have been identified, staff must be given an opportunity to meet these needs. Training activities should focus on improving communication skills, critical thinking

techniques, and program management skills. Different versions of the training may be appropriate for specific job categories or tasks performed. And, of course, diverse formats for training may be appropriate. For example, it may be useful to obtain reference materials and tools (e.g., software) so that staff can be involved in self-paced training.

Different types of existing training activities should be identified, and new training programs may need to be developed. Training courses within the government (e.g., DOE core project management courses, budget courses, technical courses) may be available from various offices within EM or DOE, the Office of Personnel Management, or other federal agencies. Training opportunities outside of DOE and the federal government should also be explored. For example, discussions with U.S. corporations could help identify successful training opportunities to improve staff's knowledge and skills and to promote staff performance.

Other types of opportunities for helping staff improve their skills should also be explored. Pairing experienced staff with less experienced staff and using in-house mentors could improve job proficiency and staff interaction.

4.2.2 Evaluate the Effectiveness of Training Activities

While it is critical to ensure that staff have opportunities to participate in training and related experiences, it is equally critical that these opportunities be monitored and assessed to determine how well they are working. Only with such feedback can training opportunities be continually enhanced to better help staff develop the appropriate skills. Effective evaluation includes identifying the purposes of the training, developing data collection materials to test whether the purposes have been achieved, determining how participants will be selected, analyzing the results, and using the results to improve the training.

4.2.3 Demonstrate Management's Commitment

Management of this headquarters organization should continue to demonstrate its commitment to professional and personal development for its staff by ensuring that the necessary administrative structures and personnel processes are in place so that training can occur in a timely manner. Actions that managers can take to demonstrate their commitment to meeting training needs are varied. In fact, some of these actions are already in place in varying degrees, although they can be further institutionalized.

Managers can develop and see that Individual Development Plans (IDPs) are implemented. IDPs are the roadmaps between two parties to achieve an agreed-upon goal. Supervisors should work closely with their staff to develop IDPs that reflect the training needs identified in this document and

the professional and personal training needs of each individual. Goals should be set for individual hours of training to be attended. Supervisors and staff should review IDPs regularly (e.g., twice a year) to evaluate the training process.

Moreover, management can empower staff to use knowledge and skills learned through training opportunities. This empowerment might be accomplished by sharing tasks usually performed by management, such as conducting briefings on projects in which staff have been greatly involved and delegating authority to staff members who are capable of performing tasks.

Managers can also provide flexible training schedules that take into account program activities and can ensure that staff attend the scheduled training. In addition, managers can keep lines of communication open by setting up and monitoring a training schedule, distributing training information to all staff, and assisting in the administrative process of requesting training. Management can also distribute feedback from training courses attended throughout the headquarters organization, share upcoming professional opportunities, and follow through on commitments made at retreats and other self-evaluation activities.

4.2.4 Explore Related Data Applications

This report focuses on the tasks and associated skills necessary for this headquarters organization to meet its mission. The information collected in this survey can be viewed from other perspectives to suggest alternative mechanisms for professional development. For instance, the findings reveal the staff's least preferred tasks (see Table 8). Within this headquarters organization, the least preferred tasks might be rotated so as to minimize the negative impact. Rotational assignments with operations offices or with other EM offices might also be considered.

Management of this headquarters organization could also provide staff with more opportunities to perform the tasks they view as most desirable (see Table 8). These tasks use skills such as knowledge of remediation techniques and of the RCRA/CERCLA process (see Table 9), which are not common skills for other sets of tasks (see Table 11) and thus may be used less often. However, if staff are to perform at their best, they need opportunities to perform tasks and use skills they find desirable.

4.2.5 Apply Methodology to Other Offices

From a broader EM perspective, it will be important to validate and replicate this study with other organizational units at both headquarters and operations offices to ensure that all staff within EM are performing their jobs as effectively as possible.

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APPENDIX A:

DATA COLLECTION WORKBOOK

INSTRUCTIONS FOR TRAINING ASSESSMENT/PROFESSIONAL DEVELOPMENT WORKBOOK

This headquarters organization desires to promote opportunities for your training and professional development so you can feel satisfaction from performing your job effectively and thoroughly. ANL has developed the attached workbook to facilitate this goal. The workbook is designed to inventory the types of activities in which you are involved, to solicit the importance of various skills you feel are necessary for accomplishing various tasks, and to describe your present skills. We are also interested in the types of technical knowledge you use and the regulations that you need to understand.

No one is required to participate in this assessment; it is strictly voluntary. The data collected from this workbook will be confidential. The results will be consolidated into job categories and will not be made available to supervisors for performance or qualification purposes. The information will be tabulated and used to make recommendations about needed training for all staff members. Completion of this workbook is your opportunity to provide input about the types of skills you feel you and other staff need, activities that are not central to your job, and the types of training that interest you.

The workbook is divided into three parts:

Part 1 - Tasks

Part 2 - Ideal Skills for Each Task

Part 3 - Skills

PART 1 - TASKS

Part 1 lists, down the left side, the types of activities or tasks that you might perform. As you complete this table, consider tasks that you perform on a routine basis, as well as those that may be performed by you on an irregular basis. These may be tasks listed in your position description, assigned by your supervisor or based on DOE policy.

Please provide your name and position title on the top right-hand corner. This confidential information will be used to group similar types of job categories for analysis.

Please place a response in each cell of all five columns so that every cell has an answer. For each task listed in the left-hand column, please indicate the following:

Column 1:

Circle "Yes" or "No" for whether you perform the particular task. You may not perform any number of these tasks for any number of reasons (e.g., "not in my job description," don't feel as you need to, don't have the time, or don't know how), so don't be concerned about answering "No." At the end of Part 1, please list additional tasks you currently perform that are not listed (both routine and irregular).

Column 2:

Circle the number that best indicates how much you ***like*** doing the particular task. Circle "NA" if you do not perform the particular task as indicated in Column 1. Please fill in all cells using the following scale:

1 = not at all
2 = a little
3 = somewhat
4 = a great deal
NA = not applicable

Column 3:

For those tasks to which you answered "Yes" in Column 1, circle the number that best indicates the degree to which you feel you are ***currently prepared*** to perform the task. Circle "NA" if you do not perform the particular task as indicated in Column 1. Please fill in all cells using the following scale:

1 = not at all
2 = somewhat well
3 = sufficiently well
4 = extremely well
NA = not applicable

Column 4:

Circle "Yes" or "No" for whether you ***should*** perform the particular task, but do not for whatever reasons. You should provide a response for each cell. If you answered "Yes" in Column 1 and "No" in Column 4, it will indicate that you perform a particular task that you do not believe you should perform. Likewise, a response of "No" in Column 1 and a "Yes" in Column 4 indicates a task that you currently do not perform, for whatever reason, but you believe you should perform.

Column 5:

If you circled "Yes" in Column 4 for a particular task, circle the number that best indicates how much you ***would*** like to do this task. If you circled "Yes" in Column 1 and Column 4, your answer in Column 5 should be the same as your answer in Column 2. If you circled "No" in Column 4 for a particular task, circle "NA." Please fill in all cells using the following scale:

1 = not at all
2 = a little
3 = somewhat
4 = a great deal
NA = not applicable

PART 2 - IDEAL SKILLS FOR EACH TASK

This part of the workbook examines your judgment of the knowledge or skills necessary to perform various tasks even though you may not perform them. Each task will likely require more than one area of knowledge or skill, so each cell of the matrix should have some number circled. These ratings should be based on the knowledge or skills you think ***well-trained*** employees need in ideal situations for performing the tasks.

For each individual task listed across the top of the page, please work down the column of cells, circling the number 1 to 4 to indicate how important, in your judgment, each of the 78 areas of knowledge or skills, listed down the left side of the table, is for completing each of the 52 tasks, listed across the top of the table. For example, when executing the task of "PREPARE DOCUMENTS," how important is each area of knowledge or skill (e.g., national consensus standards; interagency agreements, administration, and process; organizing information and present cogent arguments). Please fill in all cells using the following scale:

1 = not at all important (irrelevant for the task)
2 = of little importance (some minimum level of knowledge or skill needed to perform task)
3 = important (needed to perform the task well)
4 = of great importance (critical, one cannot perform this task without knowledge or skills in this area)

PART 3 - SKILLS

In this third part of the workbook, we want to know about your personal level of expertise. This part of the workbook is divided into the following subsections: general knowledge or skills, technical knowledge, and regulatory knowledge. At the end of Part 3, please list additional knowledge or skills you desire but were not listed.

Please circle the number that specifies your ***personal*** level of knowledge or skill. Please fill in all cells using the following scale:

1 = little or no knowledge (no understanding)
2 = familiarity (some understanding)
3 = working knowledge (enough understanding to answer questions asked by others)
4 = highly proficient/expert (could teach topic on particular knowledge or skill)

Finally, we would like for you to provide a list of training courses (either by specific title or by subject) that you need to take or would like to take.

TRAINING AND PROFESSIONAL DEVELOPMENT

NEEDS ASSESSMENT

WORKBOOK

Office of Northwestern Area Programs

June 1993

PART 1 - TASKS

PART 1 - TASKS

Name: _____

Position Title: _____

TASKS	COLUMN 1 TASKS YOU PERFORM	COLUMN 2 HOW MUCH YOU LIKE TO PERFORM	COLUMN 3 HOW WELL PERFORMED	COLUMN 4 TASKS YOU SHOULD PERFORM	COLUMN 5 HOW MUCH YOU WOULD LIKE TO PERFORM
Prepare documents (e.g., SARs, progress reports, environmental assessments, weekly highlights, memoranda, Five Year Plans, roadmaps etc.)	Yes No	1 2 3 4 NA	1 2 3 4 NA	Yes No	1 2 3 4 NA
Review documents (e.g., SARs, progress reports, environmental assessments, weekly highlights, memoranda, Five Year Plan, roadmaps, etc.)	Yes No	1 2 3 4 NA	1 2 3 4 NA	Yes No	1 2 3 4 NA
Coordinate document reviews (in/out of DOE)	Yes No	1 2 3 4 NA	1 2 3 4 NA	Yes No	1 2 3 4 NA
Develop testimony Q's and A'S	Yes No	1 2 3 4 NA	1 2 3 4 NA	Yes No	1 2 3 4 NA
Conduct briefings/presentations	Yes No	1 2 3 4 NA	1 2 3 4 NA	Yes No	1 2 3 4 NA
Interface within/outside DOE	Yes No	1 2 3 4 NA	1 2 3 4 NA	Yes No	1 2 3 4 NA
Advise, assist and provide authoritative guidance	Yes No	1 2 3 4 NA	1 2 3 4 NA	Yes No	1 2 3 4 NA
Provide regulatory analysis and guidance	Yes No	1 2 3 4 NA	1 2 3 4 NA	Yes No	1 2 3 4 NA
Implement regulations and policy	Yes No	1 2 3 4 NA	1 2 3 4 NA	Yes No	1 2 3 4 NA
Provide support to conduct permitting/licensing activities	Yes No	1 2 3 4 NA	1 2 3 4 NA	Yes No	1 2 3 4 NA
Operate equipment (e.g., computers, FAX, copy machine)	Yes No	1 2 3 4 NA	1 2 3 4 NA	Yes No	1 2 3 4 NA
Manage files and records	Yes No	1 2 3 4 NA	1 2 3 4 NA	Yes No	1 2 3 4 NA
Track correspondence	Yes No	1 2 3 4 NA	1 2 3 4 NA	Yes No	1 2 3 4 NA

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PART 1 - TASKS

TASKS	COLUMN 1 TASKS YOU PERFORM	COLUMN 2 HOW MUCH YOU LIKE TO PERFORM	COLUMN 3 HOW WELL PERFORMED	COLUMN 4 TASKS YOU SHOULD PERFORM	COLUMN 5 HOW MUCH YOU WOULD LIKE TO PERFORM
Perform travel administrative functions	Yes No	1 2 3 4 NA	1 2 3 4 NA	Yes No	1 2 3 4 NA
Participate in personnel training and development	Yes No	1 2 3 4 NA	1 2 3 4 NA	Yes No	1 2 3 4 NA
Oversee data/information management (e.g., ORPS)	Yes No	1 2 3 4 NA	1 2 3 4 NA	Yes No	1 2 3 4 NA
Address personnel/staffing issues	Yes No	1 2 3 4 NA	1 2 3 4 NA	Yes No	1 2 3 4 NA
Track and verify corrective actions	Yes No	1 2 3 4 NA	1 2 3 4 NA	Yes No	1 2 3 4 NA
Oversee surveillance/ monitoring/inspection activities	Yes No	1 2 3 4 NA	1 2 3 4 NA	Yes No	1 2 3 4 NA
Investigate complaints, allegations, and incidents	Yes No	1 2 3 4 NA	1 2 3 4 NA	Yes No	1 2 3 4 NA
Provide analyses to determine effects of remediation projects	Yes No	1 2 3 4 NA	1 2 3 4 NA	Yes No	1 2 3 4 NA
Review remediation projects and their progress	Yes No	1 2 3 4 NA	1 2 3 4 NA	Yes No	1 2 3 4 NA
Recommend actions to correct remedial problems	Yes No	1 2 3 4 NA	1 2 3 4 NA	Yes No	1 2 3 4 NA
Identify and document deficiencies	Yes No	1 2 3 4 NA	1 2 3 4 NA	Yes No	1 2 3 4 NA
Set schedules	Yes No	1 2 3 4 NA	1 2 3 4 NA	Yes No	1 2 3 4 NA
Identify and conduct facility acceptance	Yes No	1 2 3 4 NA	1 2 3 4 NA	Yes No	1 2 3 4 NA
Oversee assessments for clean up (e.g., risk, feasibility, water quality, etc.)	Yes No	1 2 3 4 NA	1 2 3 4 NA	Yes No	1 2 3 4 NA

PART 1 - TASKS

TASKS	COLUMN 1 TASKS YOU PERFORM	COLUMN 2 HOW MUCH YOU LIKE TO PERFORM	COLUMN 3 HOW WELL PERFORMED	COLUMN 4 TASKS YOU SHOULD PERFORM	COLUMN 5 HOW MUCH YOU WOULD LIKE TO PERFORM
Oversee environmental restoration activities (CERCLA)	Yes No	1 2 3 4 NA	1 2 3 4 NA	Yes No	1 2 3 4 NA
Oversee waste management Activities (RCRA)	Yes No	1 2 3 4 NA	1 2 3 4 NA	Yes No	1 2 3 4 NA
Oversee toxic and hazardous materials management activities	Yes No	1 2 3 4 NA	1 2 3 4 NA	Yes No	1 2 3 4 NA
Oversee water quality activities	Yes No	1 2 3 4 NA	1 2 3 4 NA	Yes No	1 2 3 4 NA
Oversee air quality activities	Yes No	1 2 3 4 NA	1 2 3 4 NA	Yes No	1 2 3 4 NA
Oversee cultural resources management activities	Yes No	1 2 3 4 NA	1 2 3 4 NA	Yes No	1 2 3 4 NA
Oversee radiation protection activities	Yes No	1 2 3 4 NA	1 2 3 4 NA	Yes No	1 2 3 4 NA
Oversee NEPA activities	Yes No	1 2 3 4 NA	1 2 3 4 NA	Yes No	1 2 3 4 NA
Oversee decontamination and decommissioning	Yes No	1 2 3 4 NA	1 2 3 4 NA	Yes No	1 2 3 4 NA
Oversee quality assurance/quality control activities	Yes No	1 2 3 4 NA	1 2 3 4 NA	Yes No	1 2 3 4 NA
Oversee land use activities	Yes No	1 2 3 4 NA	1 2 3 4 NA	Yes No	1 2 3 4 NA
Evaluate alternatives for cleanup	Yes No	1 2 3 4 NA	1 2 3 4 NA	Yes No	1 2 3 4 NA
Oversee program evaluations	Yes No	1 2 3 4 NA	1 2 3 4 NA	Yes No	1 2 3 4 NA
Manage contracts	Yes No	1 2 3 4 NA	1 2 3 4 NA	Yes No	1 2 3 4 NA
Evaluate contractors	Yes No	1 2 3 4 NA	1 2 3 4 NA	Yes No	1 2 3 4 NA
Oversee independent verification	Yes No	1 2 3 4 NA	1 2 3 4 NA	Yes No	1 2 3 4 NA

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PART 1 - TASKS

TASKS	COLUMN 1 TASKS YOU PERFORM	COLUMN 2 HOW MUCH YOU LIKE TO PERFORM	COLUMN 3 HOW WELL PERFORMED	COLUMN 4 TASKS YOU SHOULD PERFORM	COLUMN 5 HOW MUCH YOU WOULD LIKE TO PERFORM
Identify and allocate resources	Yes No	1 2 3 4 NA	1 2 3 4 NA	Yes No	1 2 3 4 NA
Procure goods and services	Yes No	1 2 3 4 NA	1 2 3 4 NA	Yes No	1 2 3 4 NA
Oversee cost reviews	Yes No	1 2 3 4 NA	1 2 3 4 NA	Yes No	1 2 3 4 NA
Formulate, defend, and modify budget	Yes No	1 2 3 4 NA	1 2 3 4 NA	Yes No	1 2 3 4 NA
Develop, coordinate, and disseminate program management policies and procedures	Yes No	1 2 3 4 NA	1 2 3 4 NA	Yes No	1 2 3 4 NA
Establish cost, schedule and technical baselines	Yes No	1 2 3 4 NA	1 2 3 4 NA	Yes No	1 2 3 4 NA
Develop resource requirements (budget/FTEs)	Yes No	1 2 3 4 NA	1 2 3 4 NA	Yes No	1 2 3 4 NA
Develop new/improved technologies	Yes No	1 2 3 4 NA	1 2 3 4 NA	Yes No	1 2 3 4 NA
Oversee RDDT&E activities	Yes No	1 2 3 4 NA	1 2 3 4 NA	Yes No	1 2 3 4 NA
Other (specify)	Yes No	1 2 3 4 NA	1 2 3 4 NA	Yes No	1 2 3 4 NA
Other (specify)	Yes No	1 2 3 4 NA	1 2 3 4 NA	Yes No	1 2 3 4 NA
Other (specify)	Yes No	1 2 3 4 NA	1 2 3 4 NA	Yes No	1 2 3 4 NA
Other (specify)	Yes No	1 2 3 4 NA	1 2 3 4 NA	Yes No	1 2 3 4 NA
Other (specify)	Yes No	1 2 3 4 NA	1 2 3 4 NA	Yes No	1 2 3 4 NA
Other (specify)	Yes No	1 2 3 4 NA	1 2 3 4 NA	Yes No	1 2 3 4 NA
Other (specify)	Yes No	1 2 3 4 NA	1 2 3 4 NA	Yes No	1 2 3 4 NA
Other (specify)	Yes No	1 2 3 4 NA	1 2 3 4 NA	Yes No	1 2 3 4 NA
Other (specify)	Yes No	1 2 3 4 NA	1 2 3 4 NA	Yes No	1 2 3 4 NA

PART 1 - TASKS

TASKS	COLUMN 1 TASKS YOU PERFORM	COLUMN 2 HOW MUCH YOU LIKE TO PERFORM	COLUMN 3 HOW WELL PERFORMED	COLUMN 4 TASKS YOU SHOULD PERFORM	COLUMN 5 HOW MUCH YOU WOULD LIKE TO PERFORM
Other (specify)	Yes No	1 2 3 4 NA	1 2 3 4 NA	Yes No	1 2 3 4 NA

A-15

PART 2 - IDEAL SKILLS FOR EACH TASK

PART 2 - IDEAL SKILLS FOR EACH TASK

TASKS ---> SKILLS/KNOWLEDGE	PREPARE DOCUMENTS (E.G., SARs, PROGRESS REPORTS, ENVIRONMENTAL ASSESSMENTS, WEEKLY HIGHLIGHTS, MEMORANDUM, FIVE YEAR PLANS, ROADMAPS, ETC.)	REVIEW DOCUMENTS (E.G., SARs, PROGRESS REPORTS, ENVIRONMENTAL ASSESSMENTS, WEEKLY HIGHLIGHTS, MEMORANDUM, FIVE YEAR PLANS, ROADMAPS, ETC.)	COORDINATE DOCUMENTS REVIEWS (IN/OUT OF DOE)	DEVELOP TESTIMONY Q'S AND A'S	CONDUCT BRIEFINGS/PRESENTATIONS
National consensus standards	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Interagency agreements, administration, and process	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Organizing information and present cogent arguments	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Writing succinctly and clearly	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Public speaking (e.g., public presentations, employee/employer interactions)	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Interpersonal facility (e.g., public, media, other employees and special interest groups)	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Negotiating/conflict resolution	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Providing clear guidance and direction to accomplish tasks	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Meeting facilitation/leadership	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
DOE management strategies	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
EM's mission, policies, management plans, procedures, priorities, goals and objectives	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
DOE departmental organization	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Contractor organization and procedures	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Decision analysis	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Conducting library research	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Facility, site, operations and processes	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Defining boundaries of a problem	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4

PART 2 - IDEAL SKILLS FOR EACH TASK

TASKS ---> / SKILLS/KNOWLEDGE	PREPARE DOCUMENTS (E.G., SARs, PROGRESS REPORTS, ENVIRONMENTAL ASSESSMENTS, WEEKLY HIGHLIGHTS, MEMORANDUM, FIVE YEAR PLANS, ROADMAPS, ETC.)	REVIEW DOCUMENTS (E.G., SARs, PROGRESS REPORTS, ENVIRONMENTAL ASSESSMENTS, WEEKLY HIGHLIGHTS, MEMORANDUM, FIVE YEAR PLANS, ROADMAPS, ETC.)	COORDINATE DOCUMENTS REVIEWS (IN/OUT OF DOE)	DEVELOP TESTIMONY Q'S AND A'S	CONDUCT BRIEFINGS/PRESENTATIONS
Keeping abreast of current developments	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Organizing/categorizing	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Operating equipment (e.g., testing equipment, respirators)	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Operating and using computer	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Touch typing	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Understanding principles of data base requirements and baseline techniques	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Using software and applying it to tasks	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Time management	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Weighing costs versus benefits	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Project or program management techniques	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Principles of DOE budget formulations, budget execution and cost accounting, and the procedures involved	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Schedule constraints	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Planning, programming, funding and acquisition management	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Conducting analyses involving complex variables	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Supervising staff/contractors	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Delegating authority and responsibility	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4

PART 2 - IDEAL SKILLS FOR EACH TASK

TASKS ---> SKILLS/KNOWLEDGE	PREPARE DOCUMENTS (E.G., SARs, PROGRESS REPORTS, ENVIRONMENTAL ASSESSMENTS, WEEKLY HIGHLIGHTS, MEMORANDUM, FIVE YEAR PLANS, ROADMAPS, ETC.)	REVIEW DOCUMENTS (E.G., SARs, PROGRESS REPORTS, ENVIRONMENTAL ASSESSMENTS, WEEKLY HIGHLIGHTS, MEMORANDUM, FIVE YEAR PLANS, ROADMAPS, ETC.)	COORDINATE DOCUMENTS REVIEWS (IN/OUT OF DOE)	DEVELOP TESTIMONY Q'S AND A'S	CONDUCT BRIEFINGS/PRESENTATIONS
Equal Opportunity program plans	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Analyzing/synthesizing information	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Assessing strengths and weaknesses of alternatives	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Anticipating unintended consequences	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Comparing existing conditions to pre-set standards	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Prioritizing based on criteria	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Identifying relevant material/requirements	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Delegating tasks	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Defining applicable criteria	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Reading technical material for a set purpose	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Speed reading	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Consolidating materials	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Examining trade-offs among alternatives	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Geomapping, remote sensing, and characterization techniques	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Proper engineering/technical standards	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Valid engineering solutions	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Remediation techniques	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4

PART 2 - IDEAL SKILLS FOR EACH TASK

TASKS ---> / SKILLS/KNOWLEDGE	PREPARE DOCUMENTS (E.G., SARs, PROGRESS REPORTS, ENVIRONMENTAL ASSESSMENTS, WEEKLY HIGHLIGHTS, MEMORANDUM, FIVE YEAR PLANS, ROADMAPS, ETC.)	REVIEW DOCUMENTS (E.G., SARs, PROGRESS REPORTS, ENVIRONMENTAL ASSESSMENTS, WEEKLY HIGHLIGHTS, MEMORANDUM, FIVE YEAR PLANS, ROADMAPS, ETC.)	COORDINATE DOCUMENTS REVIEWS (IN/OUT OF DOE)	DEVELOP TESTIMONY Q'S AND A'S	CONDUCT BRIEFINGS/PRESENTATIONS
Waste treatment/disposal technologies	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Human health impacts	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Radiation effects	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Health and radiological safety impacts and benefits	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Health physics	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Safety and health	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Transportation issues	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Packaging issues	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Biology, zoology, and ecology	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Chemistry	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Nuclear engineering	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Physical sciences	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Geohydrology	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Cartography	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Geophysics	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
D&D techniques	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Cultural diversity issues	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Hazardous, chemical, radioactive and mixed waste management	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
RCRA/CERCLA process	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Natural resources	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Land use	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4

PART 2 - IDEAL SKILLS FOR EACH TASK

TASKS ---> / SKILLS/KNOWLEDGE	PREPARE DOCUMENTS (E.G., SARs, PROGRESS REPORTS, ENVIRONMENTAL ASSESSMENTS, WEEKLY HIGHLIGHTS, MEMORANDUM, FIVE YEAR PLANS, ROADMAPS, ETC.)	REVIEW DOCUMENTS (E.G., SARs, PROGRESS REPORTS, ENVIRONMENTAL ASSESSMENTS, WEEKLY HIGHLIGHTS, MEMORANDUM, FIVE YEAR PLANS, ROADMAPS, ETC.)	COORDINATE DOCUMENTS REVIEWS (IN/OUT OF DOE)	DEVELOP TESTIMONY Q'S AND A'S	CONDUCT BRIEFINGS/PRESENTATIONS
Wildlife management	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Soils, and minerals	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Aquatic resources	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
NEPA process	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Environmental sciences	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Quality assurance	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Emergency response procedures	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4

PART 2 - IDEAL SKILLS FOR EACH TASK

TASKS ---> / SKILLS/KNOWLEDGE	INTERFACE WITHIN/OUTSIDE DOE	ADVISE, ASSIST & PROVIDE AUTHORITATIVE GUIDANCE	PROVIDE REGULATORY ANALYSIS & GUIDANCE	PROVIDE SUPPORT TO CONDUCT PERMITTING/LICENSING ACTIVITIES	IMPLEMENT REGULATIONS & POLICY
National consensus standards	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Interagency agreements, administration, and process	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Organizing information and present cogent arguments	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Writing succinctly and clearly	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Public speaking (e.g., public presentations, employee/employer interactions)	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Interpersonal facility (e.g., public, media, other employees and special interest groups)	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Negotiating/conflict resolution	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Providing clear guidance and direction to accomplish tasks	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Meeting facilitation/leadership	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
DOE management strategies	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
EM's mission, policies, management plans, procedures, priorities, goals and objectives	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
DOE departmental organization	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Contractor organization and procedures	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Decision analysis	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Conducting library research	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Facility, site, operations and processes	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Defining boundaries of a problem	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Keeping abreast of current developments	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4

PART 2 - IDEAL SKILLS FOR EACH TASK

TASKS ---> / SKILLS/KNOWLEDGE	INTERFACE WITHIN/OUTSIDE DOE	ADVISE, ASSIST & PROVIDE AUTHORITATIVE GUIDANCE	PROVIDE REGULATORY ANALYSIS & GUIDANCE	PROVIDE SUPPORT TO CONDUCT PERMITTING/LICENSING ACTIVITIES	IMPLEMENT REGULATIONS & POLICY
Organizing/categorizing	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Operating equipment (e.g., testing equipment, respirators)	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Operating and using computer	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Touch typing	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Understanding principles of data base requirements and baseline techniques	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Using software and applying it to tasks	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Time management	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Weighing costs versus benefits	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Project or program management techniques	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Principles of DOE budget formulations, budget execution and cost accounting, and the procedures involved	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Schedule constraints	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Planning, programming, funding and acquisition management	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Conducting analyses involving complex variables	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Supervising staff/contractors	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Delegating authority and responsibility	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Equal Opportunity program plans	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Analyzing/synthesizing information	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Assessing strengths and weaknesses of alternatives	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4

PART 2 - IDEAL SKILLS FOR EACH TASK

TASKS ---> / SKILLS/KNOWLEDGE	INTERFACE WITHIN/OUTSIDE DOE	ADVISE, ASSIST & PROVIDE AUTHORITATIVE GUIDANCE	PROVIDE REGULATORY ANALYSIS & GUIDANCE	PROVIDE SUPPORT TO CONDUCT PERMITTING/LICENSING ACTIVITIES	IMPLEMENT REGULATIONS & POLICY
Anticipating unintended consequences	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Comparing existing conditions to pre-set standards	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Prioritizing based on criteria	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Identifying relevant material/requirements	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Delegating tasks	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Defining applicable criteria	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Reading technical material for a set purpose	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Speed reading	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Consolidating materials	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Examining trade-offs among alternatives	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Geomapping, remote sensing, and characterization techniques	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Proper engineering/technical standards	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Valid engineering solutions	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Remediation techniques	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Waste treatment/disposal technologies	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Human health impacts	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Radiation effects	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Health and radiological safety impacts and benefits	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Health physics	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Safety and health	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4

PART 2 - IDEAL SKILLS FOR EACH TASK

TASKS ---> / SKILLS/KNOWLEDGE	INTERFACE WITHIN/OUTSIDE DOE	ADVISE, ASSIST & PROVIDE AUTHORITATIVE GUIDANCE	PROVIDE REGULATORY ANALYSIS & GUIDANCE	PROVIDE SUPPORT TO CONDUCT PERMITTING/LICENSING ACTIVITIES	IMPLEMENT REGULATIONS & POLICY
Transportation issues	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Packaging issues	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Biology, zoology, and ecology	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Chemistry	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Nuclear engineering	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Physical sciences	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Geohydrology	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Cartography	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Geophysics	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
D&D techniques	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Cultural diversity issues	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Hazardous, chemical, radioactive and mixed waste management	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
RCRA/CERCLA process	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Natural resources	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Land use	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Wildlife management	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Soils, and minerals	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Aquatic resources	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
NEPA process	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Environmental sciences	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Quality assurance	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Emergency response procedures	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4

PART 2 - IDEAL SKILLS FOR EACH TASK

TASKS ---> SKILLS/KNOWLEDGE	OPERATE EQUIPMENT (E.G., COMPUTERS, FAX, COPY MACHINES)	MANAGE FILES & RECORDS	TRACK CORRESPONDENCE	PERFORM TRAVEL ADMINISTRATIVE FUNCTIONS	OVERSEE DATA/INFORMATION MANAGEMENT (E.G., ORPS)
National consensus standards	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Interagency agreements, administration, and process	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Organizing information and present cogent arguments	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Writing succinctly and clearly	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Public speaking (e.g., public presentations, employee/employer interactions)	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Interpersonal facility (e.g., public, media, other employees and special interest groups)	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Negotiating/conflict resolution	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Providing clear guidance and direction to accomplish tasks	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Meeting facilitation/leadership	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
DOE management strategies	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
EM's mission, policies, management plans, procedures, priorities, goals and objectives	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Decision analysis	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Conducting library research	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Facility, site, operations and processes	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Defining boundaries of a problem	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Keeping abreast of current developments	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Organizing/categorizing	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Operating equipment (e.g., testing equipment, respirators)	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Operating and using computer	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4

PART 2 - IDEAL SKILLS FOR EACH TASK

TASKS ---> / SKILLS/KNOWLEDGE	OPERATE EQUIPMENT (E.G., COMPUTERS, FAX, COPY MACHINES)	MANAGE FILES & RECORDS	TRACK CORRESPONDENCE	PERFORM TRAVEL ADMINISTRATIVE FUNCTIONS	OVERSEE DATA/INFORMATION MANAGEMENT (E.G., ORPS)
Touch typing	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Understanding principles of data base requirements and baseline techniques	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Using software and applying it to tasks	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Time management	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Weighing cost versus benefits	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Project or program management techniques	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Principles of DOE budget formulations, budget execution and cost accounting, and the procedures involved	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Schedule constraints	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Planning, programming, funding and acquisition management	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Conducting analyses involving complex variables	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Supervising staff/contractors	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Delegating authority and responsibility	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Equal Opportunity program plans	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Analyzing strengths and weaknesses of alternatives	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Anticipating unintended consequences	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Comparing existing conditions to pre-set standards	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Prioritizing based on criteria	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Identifying relevant material/requirements	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4

PART 2 - IDEAL SKILLS FOR EACH TASK

TASKS ---> / SKILLS/KNOWLEDGE	OPERATE EQUIPMENT (E.G., COMPUTERS, FAX, COPY MACHINES)	MANAGE FILES & RECORDS	TRACK CORRESPONDENCE	PERFORM TRAVEL ADMINISTRATIVE FUNCTIONS	OVERSEE DATA/INFORMATION MANAGEMENT (E.G., ORPS)
Delegating tasks	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Defining applicable criteria	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Reading technical material for a set purpose	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Speed reading	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Consolidating materials	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Examining trade-offs among alternatives	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Geomapping, remote sensing, and characterization techniques	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Proper engineering/technical standards	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Valid engineering solutions	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Remediation techniques	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Waste treatment/disposal technologies	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Human health impacts	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Radiation effects	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Health and radiological safety impacts and benefits	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Health physics	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Safety and health	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Transportation issues	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Packaging issues	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Biology, zoology, and ecology	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Chemistry	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Nuclear engineering	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Physical sciences	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4

PART 2 - IDEAL SKILLS FOR EACH TASK

TASKS ---> / SKILLS/KNOWLEDGE	OPERATE EQUIPMENT (E.G., COMPUTERS, FAX, COPY MACHINES)	MANAGE FILES & RECORDS	TRACK CORRESPONDENCE	PERFORM TRAVEL ADMINISTRATIVE FUNCTIONS	OVERSEE DATA/INFORMATION MANAGEMENT (E.G., ORPS)
Geohydrology	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Cartography	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Geophysics	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
D&D techniques	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Cultural diversity issues	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Hazardous, chemical, radioactive and mixed waste management	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
RCRA/CERCLA process	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Natural resources	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Land use	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Wildlife management	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Soils, and minerals	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Aquatic resources	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
NEPA process	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Environmental sciences	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Quality assurance	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Emergency response procedures	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4

PART 2 - IDEAL SKILLS FOR EACH TASK

TASKS ---> / SKILLS/KNOWLEDGE	PARTICIPATE IN PERSONNEL TRAINING AND DEVELOPMENT	ADDRESS PERSONNEL/STAFFING ISSUES	TRACK AND VERIFY CORRECTIVE ACTIONS	OVERSEE SURVEILLANCE/MONITORING/INSPECTION ACTIVITIES	INVESTIGATE COMPLAINTS, ALLEGATIONS, AND INCIDENTS
National consensus standards	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Interagency agreements, administration, and process	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Organizing information and present cogent arguments	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Writing succinctly and clearly	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Public speaking (e.g., public presentations, employee/employer interactions)	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Interpersonal facility (e.g., public media, other employees and special interest groups)	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Negotiating/conflict resolution	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Providing clear guidance and direction to accomplish task	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Meeting facilitation/leadership	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
DOE management strategies	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
EM's mission, policies, management plans, procedures, priorities, goals and objectives	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
DOE departmental organization	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Contractor organization and procedures	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Decision analysis	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Conducting library research	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4

PART 2 - IDEAL SKILLS FOR EACH TASK

TASKS ---> / SKILLS/KNOWLEDGE	PARTICIPATE IN PERSONNEL TRAINING AND DEVELOPMENT	ADDRESS PERSONNEL/STAFFING ISSUES	TRACK AND VERIFY CORRECTIVE ACTIONS	OVERSEE SURVEILLANCE/MONITORING/INSPECTION ACTIVITIES	INVESTIGATE COMPLAINTS, ALLEGATIONS, AND INCIDENTS
Facility, site operations and processes	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Defining boundaries of a problem	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Keeping abreast of current developments	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Organizing/categorizing	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Operating equipment (e.g., testing equipment, respirators)	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Operating and using computer	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Touch typing	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Understanding principles of data base requirements and baseline techniques	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Using software and applying it to tasks	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Time management	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Weighing costs versus benefits	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Project or program management techniques	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Principles of DOE budget formulations, budget execution and cost accounting, and the procedures involved	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Schedule constraints	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Planning, programming, funding and acquisition management	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Conducting analyses involving complex variables	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4

PART 2 - IDEAL SKILLS FOR EACH TASK

TASKS ---> / SKILLS/KNOWLEDGE	PARTICIPATE IN PERSONNEL TRAINING AND DEVELOPMENT	ADDRESS PERSONNEL/STAFFING ISSUES	TRACK AND VERIFY CORRECTIVE ACTIONS	OVERSEE SURVEILLANCE/MONITORING/INSPECTION ACTIVITIES	INVESTIGATE COMPLAINTS, ALLEGATIONS, AND INCIDENTS
Supervising staff/contractors	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Delegating authority and responsibility	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Equal Opportunity program plans	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Analyzing/synthesizing information	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Assessing strengths and weaknesses of alternatives	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Anticipating unintended consequences	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Comparing existing conditions to pre-set standards	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Prioritizing based on criteria	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Identifying relevant material/requirements	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Delegating tasks	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Defining applicable criteria	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Reading technical material for a set purpose	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Speed reading	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Consolidating material	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Examining trade-offs among alternatives	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Geomapping, remote sensing, and characterization techniques	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Proper engineering/technical standards	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4

PART 2 - IDEAL SKILLS FOR EACH TASK

TASKS ---> / SKILLS/KNOWLEDGE	PARTICIPATE IN PERSONNEL TRAINING AND DEVELOPMENT	ADDRESS PERSONNEL/STAFFING ISSUES	TRACK AND VERIFY CORRECTIVE ACTIONS	OVERSEE SURVEILLANCE/MONITORING/INSPECTION ACTIVITIES	INVESTIGATE COMPLAINTS, ALLEGATIONS, AND INCIDENTS
Valid engineering solutions	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Remediation techniques	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Waste treatment/disposal technologies	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Human health impacts	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Radiation effects	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Health and radiological safety impacts and benefits	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Health physics	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Safety and Health	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Transportation issues	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Packaging issues	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Biology, zoology, and ecology	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Chemistry	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Nuclear engineering	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Physical sciences	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Geohydrology	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Cartography	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Geophysics	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
D&D techniques	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Cultural diversity issues	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Hazardous, chemical, radioactive and mixed waste management	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
RCRA/CERCLA process	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Natural resources	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Land use	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4

PART 2 - IDEAL SKILLS FOR EACH TASK

TASKS ---> / SKILLS/KNOWLEDGE	PARTICIPATE IN PERSONNEL TRAINING AND DEVELOPMENT	ADDRESS PERSONNEL/STAFFING ISSUES	TRACK AND VERIFY CORRECTIVE ACTIONS	OVERSEE SURVEILLANCE/MONITORING/INSPECTION ACTIVITIES	INVESTIGATE COMPLAINTS, ALLEGATIONS, AND INCIDENTS
Wildlife management	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Soils, and minerals	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Aquatic resources	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
NEPA process	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Environmental sciences	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Quality assurance	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Emergency response procedures	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4

PART 2 - IDEAL SKILLS FOR EACH TASK

TASKS ---> / SKILLS/KNOWLEDGE	PROVIDE ANALYSES TO DETERMINE EFFECTS OF REMEDIATION PROJECTS	REVIEW REMEDIATION PROJECTS AND THEIR PROGRESS	RECOMMEND ACTIONS TO CORRECT REMEDIAL PROBLEMS	IDENTIFY AND DOCUMENT DEFICIENCIES	SET SCHEDULES
National consensus standards	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Interagency agreements, administration, and process	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Organizing information and present cogent arguments	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Writing succinctly and clearly	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Public speaking (e.g., public presentations, employee/employer	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Interpersonal facility (e.g., public, media, other employees and special interest groups)	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Negotiating/conflict resolution	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Providing clear guidance and direction to accomplish tasks	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Meeting facilitation/leadership	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
DOE management strategies	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
EM's mission, policies, management plans, procedures, priorities, goals and objectives	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
DOE departmental organization	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Contractor organization and procedures	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Decision analysis	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Conducting library research	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Facility, site, operations and processes	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Defining boundaries of a problem	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Keeping abreast of current developments	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Organizing/categorizing	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4

PART 2 - IDEAL SKILLS FOR EACH TASK

TASKS ---> / SKILLS/KNOWLEDGE	PROVIDE ANALYSES TO DETERMINE EFFECTS OF REMEDIATION PROJECTS	REVIEW REMEDIATION PROJECTS AND THEIR PROGRESS	RECOMMEND ACTIONS TO CORRECT REMEDIAL PROBLEMS	IDENTIFY AND DOCUMENT DEFICIENCIES	SET SCHEDULES
Operating equipment (e.g., testing equipment, respirators)	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Operating and using computer	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Touch typing	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Understanding principles of data base requirements and baseline techniques	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Using software and applying it to tasks	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Time management	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Weighing costs versus benefits	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Project or program management techniques	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Principles of DOE budget formulations, budget execution and cost accounting, and the procedures involved	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Schedule constraints	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Planning, programming, funding and acquisition management	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Conducting analyses involving complex variables	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Supervising staff/contractors	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Delegating authority and responsibility	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Equal Opportunity program plans	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Analyzing/synthesizing information	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Assessing strengths and weaknesses of alternatives	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Anticipating unintended consequences	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4

PART 2 - IDEAL SKILLS FOR EACH TASK

TASKS ---> / SKILLS/KNOWLEDGE	PROVIDE ANALYSES TO DETERMINE EFFECTS OF REMEDIATION PROJECTS	REVIEW REMEDIATION PROJECTS AND THEIR PROGRESS	RECOMMEND ACTIONS TO CORRECT REMEDIAL PROBLEMS	IDENTIFY AND DOCUMENT DEFICIENCIES	SET SCHEDULES
Comparing existing conditions to pre-set standards	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Prioritizing based on criteria	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Identifying relevant material/requirements	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Delegating tasks	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Defining applicable criteria	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Reading technical material for a set purpose	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Speed reading	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Consolidating materials	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Examining trade-offs among alternatives	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Geomapping, remote sensing, and characterization techniques	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Proper engineering/technical standards	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Valid engineering solutions	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Remediation techniques	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Waste treatment/disposal technologies	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Human health impacts	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Radiation effects	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Health and radiological safety impacts and benefits	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Health physics	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Safety and health	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Transportation issues	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Packaging issues	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4

PART 2 - IDEAL SKILLS FOR EACH TASK

TASKS ---> / SKILLS/KNOWLEDGE	PROVIDE ANALYSES TO DETERMINE EFFECTS OF REMEDIATION PROJECTS	REVIEW REMEDIATION PROJECTS AND THEIR PROGRESS	RECOMMEND ACTIONS TO CORRECT REMEDIAL PROBLEMS	IDENTIFY AND DOCUMENT DEFICIENCIES	SET SCHEDULES
Biology, zoology, and ecology	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Chemistry	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Nuclear engineering	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Physical sciences	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Geohydrology	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Cartography	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Geophysics	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
D&D techniques	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Cultural diversity issues	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Hazardous, chemical, radioactive and mixed waste management	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
RCRA/CERCLA process	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Natural resources	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Land use	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Wildlife management	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Soils, and minerals	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Aquatic resources	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
NEPA process	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Environmental sciences	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Quality assurance	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Emergency response procedures	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4

PART 2 - IDEAL SKILLS FOR EACH TASK

TASKS ---> SKILLS/KNOWLEDGE	IDENTIFY & CONDUCT FACILITY ACCEPTANCE	OVERSEE ASSESSMENTS FOR CLEAN UP (E.G., RISK, FEASIBILITY, WATER, QUALITY, ETC.)	OVERSEE ENVIRONMENTAL RESTORATION ACTIVITIES (CERCLA)	OVERSEE WASTE MANAGEMENT ACTIVITIES (RCRA)	OVERSEE TOXIC & HAZARDOUS MATERIALS MANAGEMENT ACTIVITIES
National consensus standards	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Interagency agreements, administration, and process	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Organizing information and present cogent arguments	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Writing succinctly and clearly	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Public speaking (e.g., public, media, other employees and special interest groups)	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Negotiating/conflict resolution	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Providing clear guidance and direction to accomplish tasks	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Meeting facilitation/leadership	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
DOE management strategies	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
EM's mission, policies, management plans, procedures, priorities, goals and objectives	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
DOE departmental organization	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Contractor organization and procedures	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Decision analysis	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Conducting library research	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Facility, site, operations and processes	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Defining boundaries of a problem	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Keeping abreast of current developments	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Organizing/categorizing	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4

PART 2 - IDEAL SKILLS FOR EACH TASK

TASKS ---> / SKILLS/KNOWLEDGE	IDENTIFY & CONDUCT FACILITY ACCEPTANCE	OVERSEE ASSESSMENTS FOR CLEAN UP (E.G., RISK, FEASIBILITY, WATER, QUALITY, ETC.)	OVERSEE ENVIRONMENTAL RESTORATION ACTIVITIES (CERCLA)	OVERSEE WASTE MANAGEMENT ACTIVITIES (RCRA)	OVERSEE TOXIC & HAZARDOUS MATERIALS MANAGEMENT ACTIVITIES
Operating equipment (e.g., testing equipment, respirators)	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Operating and using computer	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Touch typing	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Understanding principles of data base requirements and baseline techniques	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Principles of DOE budget formulations, budget execution and cost accounting, and the procedures involved	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Schedule constraints	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Planning, programming, funding and acquisition management	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Conducting analyses involving complex variables	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Supervising staff/contractors	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Delegating authority and responsibility	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Equal Opportunity programs plans	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Analyzing/synthesizing information	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Assessing strengths and weaknesses of alternatives	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Anticipating unintended consequences	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Comparing existing conditions to pre-set standards	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Prioritizing based on criteria	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Identifying relevant material/requirements	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4

PART 2 - IDEAL SKILLS FOR EACH TASK

TASKS ---> SKILLS/KNOWLEDGE	IDENTIFY & CONDUCT FACILITY ACCEPTANCE	OVERSEE ASSESSMENTS FOR CLEAN UP (E.G., RISK, FEASIBILITY, WATER, QUALITY, ETC.)	OVERSEE ENVIRONMENTAL RESTORATION ACTIVITIES (CERCLA)	OVERSEE WASTE MANAGEMENT ACTIVITIES (RCRA)	OVERSEE TOXIC & HAZARDOUS MATERIALS MANAGEMENT ACTIVITIES
Delegating tasks	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Defining applicable criteria	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Reading technical material for a set purpose	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Speed reading	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Consolidating materials	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Examining trade-offs among alternatives	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Geomapping, remote sensing, and characterization techniques	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Proper engineering/technical standards	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Valid engineering solutions	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Remediation techniques	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Waste treatment/disposal technologies	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Human health impacts	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Radiation effects	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Health and radiological safety impacts and benefits	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Health physics	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Safety and health	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Safety and health	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Transportation issues	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Packaging issues	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Biology, zoology, and ecology	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Chemistry	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4

PART 2 - IDEAL SKILLS FOR EACH TASK

TASKS ---> / SKILLS/KNOWLEDGE	IDENTIFY & CONDUCT FACILITY ACCEPTANCE	OVERSEE ASSESSMENTS FOR CLEAN UP (E.G., RISK, FEASIBILITY, WATER, QUALITY, ETC.)	OVERSEE ENVIRONMENTAL RESTORATION ACTIVITIES (CERCLA)	OVERSEE WASTE MANAGEMENT ACTIVITIES (RCRA)	OVERSEE TOXIC & HAZARDOUS MATERIALS MANAGEMENT ACTIVITIES
Nuclear engineering	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Physical sciences	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Geohydrology	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Cartography	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Geophysics	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
D&D techniques	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Cultural diversity issues	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Hazardous, chemical, radioactive and mixed waste management	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
RCRA/CERCLA process	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Natural resources	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Land use	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Wildlife management	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Soils, and minerals	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Aquatic resources	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
NEPA process	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Environmental sciences	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Quality assurance	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Emergency response procedures	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4

PART 2 - IDEAL SKILLS FOR EACH TASK

TASKS ---> SKILLS/KNOWLEDGE	OVERSEE WATER QUALITY ACTIVITIES	OVERSEE AIR QUALITY ACTIVITIES	OVERSEE CULTURAL RESOURCES MANAGEMENT ACTIVITIES	OVERSEE RADIATION PROTECTION ACTIVITIES	OVERSEE NEPA ACTIVITIES
National consensus standards	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Interagency agreements, administration, and process	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Organizing information and present cogent arguments	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Writing succinctly and clearly	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Public speaking (e.g., public presentations, employee/employer interactions)	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Interpersonal facility (e.g., public, media, other employees and special interest groups)	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Negotiating/conflict resolution	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Providing clear guidance and direction to accomplish tasks	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Meeting facilitation/leadership	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
DOE management strategies	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
EM's mission, policies, management plans, procedures, priorities, goals and objectives	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Doe departmental organization	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Contractor organization and procedures	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Decision analysis	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Conducting library research	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Facility, site, operations and processes	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Defining boundaries of a problem	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Keeping abreast of current developments	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Organizing/categorizing	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4

PART 2 - IDEAL SKILLS FOR EACH TASK

TASKS ---> / SKILLS/KNOWLEDGE	OVERSEE WATER QUALITY ACTIVITIES	OVERSEE AIR QUALITY ACTIVITIES	OVERSEE CULTURAL RESOURCES MANAGEMENT ACTIVITIES	OVERSEE RADIATION PROTECTION ACTIVITIES	OVERSEE NEPA ACTIVITIES
Operating equipment (e.g., testing equipment, respirators)	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Operating and using computer	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Touch typing	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Understanding principles of data base requirements and baseline techniques	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Using software and applying it to tasks	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Time management	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Weighing costs versus benefits	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Project or program management techniques	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Principles of DOE budget formulations, budget execution and cost accounting, and the procedures involved	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Schedule constraints	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Planning, programming, funding and acquisition management	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Conducting analyses involving complex variables	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Supervising staff/contractors	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Delegating authority and responsibility	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Equal Opportunity program plans	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Analyzing/synthesizing information	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Assessing strengths and weaknesses of alternatives	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Anticipating unintended consequences	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4

PART 2 - IDEAL SKILLS FOR EACH TASK

TASKS ---> / SKILLS/KNOWLEDGE	OVERSEE WATER QUALITY ACTIVITIES	OVERSEE AIR QUALITY ACTIVITIES	OVERSEE CULTURAL RESOURCES MANAGEMENT ACTIVITIES	OVERSEE RADIATION PROTECTION ACTIVITIES	OVERSEE NEPA ACTIVITIES
Comparing existing conditions to pre-set standards	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Prioritizing based on criteria	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Identifying relevant material/requirements	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Delegating tasks	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Defining applicable criteria	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Reading technical material for a set purpose	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Speed reading	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Consolidating materials	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Examining trade-offs among alternatives	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Geomapping, remote sensing, and characterization techniques	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Proper engineering/technical standards	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Valid engineering solutions	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Remediation techniques	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Waste treatments/disposal technologies	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Human health impacts	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Radiation effects	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Health and radiological safety impacts and benefits	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Health physics	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Safety and health	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Transportation issues	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Packaging issues	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4

PART 2 - IDEAL SKILLS FOR EACH TASK

TASKS ---> / SKILLS/KNOWLEDGE	OVERSEE WATER QUALITY ACTIVITIES	OVERSEE AIR QUALITY ACTIVITIES	OVERSEE CULTURAL RESOURCES MANAGEMENT ACTIVITIES	OVERSEE RADIATION PROTECTION ACTIVITIES	OVERSEE NEPA ACTIVITIES
Biology, zoology, and ecology	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Chemistry	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Nuclear engineering	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Physical sciences	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Geohydrology	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Cartography	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Geophysics	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
D&D techniques	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Cultural diversity issues	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Hazardous, chemical, radioactive and mixed waste management	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
RCRA/CERCLA process	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Natural resources	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Land use	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Wildlife management	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Soils, and minerals	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Aquatic resources	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
NEPA process	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Environmental sciences	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Quality assurance	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Emergency response procedures	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4

PART 2 - IDEAL SKILLS FOR EACH TASK

TASKS ---> / SKILLS/KNOWLEDGE	OVERSEE DECONTAMINATION & DECOMMISSIONING	OVERSEE QUALITY ASSURANCE/QUALITY CONTROL ACTIVITIES	OVERSEE LAND USE ACTIVITIES	EVALUATE ALTERNATIVES FOR CLEANUP	OVERSEE PROGRAM EVALUATIONS
National consensus standards	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Interagency agreements, administration, and process	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Organizing information and present cogent arguments	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Writing succinctly and clearly	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Public speaking (e.g., public presentations, employee/employer interactions)	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Negotiating/conflict resolution	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Providing clear guidance and direction to accomplish tasks	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Meeting facilitation/leadership	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
DOE management strategies	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
EM's mission, policies, management plans, procedures, priorities, goals and objectives	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
DOE departmental organization	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Contractor organization and procedures	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Decision analysis	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Conducting library research	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Facility, site, operations and processes	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Defining boundaries of a problem	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Keeping abreast of current developments	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Organizing/categorizing	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Operating equipment (e.g., testing equipment, respirators)	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Operating and using computer	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4

PART 2 - IDEAL SKILLS FOR EACH TASK

TASKS ---> / SKILLS/KNOWLEDGE	OVERSEE DECONTAMINATION & DECOMMISSIONING	OVERSEE QUALITY ASSURANCE/QUALITY CONTROL ACTIVITIES	OVERSEE LAND USE ACTIVITIES	EVALUATE ALTERNATIVES FOR CLEANUP	OVERSEE PROGRAM EVALUATIONS
Touch typing	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Understanding principles of data base requirements and baseline techniques	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Using software and applying it to tasks	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Time management	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Weighing costs versus benefits	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Project or program management techniques	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Principles of DOE budget formulations, budget execution and cost accounting, and the procedures involved	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Schedule constraints	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Planning, programming, funding and acquisition management	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Conducting analyses involving complex variables	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Supervising staff/contractors	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Delegating authority and responsibility	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Equal Opportunity program plans	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Analyzing/synthesizing information	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Assessing strengths and weaknesses of alternatives	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Anticipating unintended consequences	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Comparing existing conditions to pre-set standards	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Prioritizing based on criteria	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4

PART 2 - IDEAL SKILLS FOR EACH TASK

TASKS ---> / SKILLS/KNOWLEDGE	OVERSEE DECONTAMINATION & DECOMMISSIONING	OVERSEE QUALITY ASSURANCE/QUALITY CONTROL ACTIVITIES	OVERSEE LAND USE ACTIVITIES	EVALUATE ALTERNATIVES FOR CLEANUP	OVERSEE PROGRAM EVALUATIONS
Identifying relevant material/requirements	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Delegating tasks	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Defining applicable criteria	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Reading technical material for a set purpose	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Speed reading	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Consolidating materials	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Examining trade-offs among alternatives	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Geomapping, remote sensing, and characterization techniques	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Proper engineering/technical standards	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Valid engineering solutions	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Remediation techniques	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Waste treatment/disposal technologies	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Human health impacts	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Radiation effects	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Health and radiological safety impacts and benefits	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Health physics	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Safety and health	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Transportation issues	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Packaging issues	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Biology, zoology, and ecology	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Chemistry	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Nuclear engineering	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4

PART 2 - IDEAL SKILLS FOR EACH TASK

TASKS ---> / SKILLS/KNOWLEDGE	OVERSEE DECONTAMINATION & DECOMMISSIONING	OVERSEE QUALITY ASSURANCE/QUALITY CONTROL ACTIVITIES	OVERSEE LAND USE ACTIVITIES	EVALUATE ALTERNATIVES FOR CLEANUP	OVERSEE PROGRAM EVALUATIONS
Physical sciences	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Geohydrology	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Cartography	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Geophysics	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
D&D techniques	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Cultural diversity issues	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Hazardous, chemical, radioactive and mixed waste management	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
RCRA/CERCLA process	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Natural resources	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Land use	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Wildlife management	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Soils, and minerals	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Aquatic resources	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
NEPA process	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Environmental sciences	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Quality assurance	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Emergency response procedures	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4

PART 2 - IDEAL SKILLS FOR EACH TASK

TASKS ---> / SKILLS/KNOWLEDGE	MANAGE CONTRACTS	EVALUATE CONTRACTORS	OVERSEE INDEPENDENT VERIFICATION	IDENTIFY AND ALLOCATE RESOURCES	PROCURE GOODS & SERVICES
National consensus standards	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Interagency agreements, administration, and process	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Organizing information and present cogent arguments	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Writing succinctly and clearly	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Public speaking (e.g., public presentation, employee/employer interactions)	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Interpersonal facility (e.g., public, media, other employees and special interest groups)	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Negotiating/conflict resolution	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Providing clear guidance and direction to accomplish tasks	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Meeting facilitation/leadership	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
DOE management strategies	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
EM's mission, policies, management plans, procedures, priorities, goals and objectives	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
DOE departmental organization	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Contractor organization and procedures	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Decision analysis	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Conducting library research	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Facility, site, operations and processes	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Defining boundaries of a problem	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Keeping abreast of current developments	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Organizing/categorizing	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4

PART 2 - IDEAL SKILLS FOR EACH TASK

TASKS ---> / SKILLS/KNOWLEDGE	MANAGE CONTRACTS	EVALUATE CONTRACTORS	OVERSEE INDEPENDENT VERIFICATION	IDENTIFY AND ALLOCATE RESOURCES	PROCURE GOODS & SERVICES
Operating equipment (e.g., testing equipment, respirators)	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Operating and using computer	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Touch typing	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Understanding principles of data base requirements and baseline techniques	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Using software and applying it to tasks	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Time management	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Weighing costs versus benefits	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Project or program management techniques	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Principles of DOE budget formulations, budget execution and cost accounting, and the procedures involved	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Schedule constraints	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Planning, programming, funding and acquisition management	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Conducting analyses involving complex variables	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Supervising staff/contractors	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Delegating authority and responsibility	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Equal Opportunity program plans	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Analyzing/synthesizing information	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Assessing strengths and weaknesses of alternatives	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Anticipating unintended consequences	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4

PART 2 - IDEAL SKILLS FOR EACH TASK

TASKS ---> / SKILLS/KNOWLEDGE	MANAGE CONTRACTS	EVALUATE CONTRACTORS	OVERSEE INDEPENDENT VERIFICATION	IDENTIFY AND ALLOCATE RESOURCES	PROCURE GOODS & SERVICES
Comparing existing conditions to pre-set standards	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Prioritizing based on criteria	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Identifying relevant material/requirements	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Delegating tasks	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Defining applicable criteria	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Reading technical material for a set purpose	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Speed reading	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Consolidating materials	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Examining trade-offs among alternatives	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Geomapping, remote sensing, and characterization techniques	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Proper engineering/technical standards	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Valid engineering solutions	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Remediation techniques	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Waste treatment/disposal technologies	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Human health impacts	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Radiation effects	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Health and radiological safety impacts and benefits	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Health physics	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Safety and health	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Transportation issues	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Packaging issues	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4

PART 2 - IDEAL SKILLS FOR EACH TASK

TASKS ---> / SKILLS/KNOWLEDGE	MANAGE CONTRACTS	EVALUATE CONTRACTORS	OVERSEE INDEPENDENT VERIFICATION	IDENTIFY AND ALLOCATE RESOURCES	PROCURE GOODS & SERVICES
Biology, zoology, and ecology	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Chemistry	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Nuclear engineering	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Physical sciences	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Geohydrology	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Cartography	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Geophysics	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
D&D techniques	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Cultural diversity issues	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Hazardous, chemical, radioactive and mixed waste management	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
RCRA/CERCLA process	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Natural resources	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Land use	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Wildlife management	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Soils, and minerals	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Aquatic resources	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
NEPA process	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Environmental sciences	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Quality assurance	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Emergency response procedures	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4

PART 2 - IDEAL SKILLS FOR EACH TASK

TASKS ---> / SKILLS/KNOWLEDGE	OVERSEE COST REVIEWS	FORMULATE, DEFEND, & MODIFY BUDGET	DEVELOP, COORDINATE, & DISSEMINATE PROGRAM MANAGEMENT POLICIES & PROCEDURES	ESTABLISH COST SCHEDULE AND TECHNICAL BASELINES	DEVELOP RESOURCE REQUIREMENTS (BUDGET/FTEs)	DEVELOP NEW/IMPROVE TECHNOLOGIES	OVERSEE RDDT&E ACTIVITIES
National consensus standards	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Interagency agreements, administration, and process	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Organizing information and present cogent arguments	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Writing succinctly and clearly	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Public speaking (e.g., public presentations, employee/employer interactions)	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Interpersonal facility (e.g., public, media, other employees and special interest groups)	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Negotiating/conflict resolution	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Providing clear guidance and direction to accomplish tasks	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Meeting facilitation/leadership	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
DOE management strategies	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
EM's mission, policies, management plans, procedures, priorities, goals and objectives	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
DOE departmental organization	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Contractor organization and procedures	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Decision analysis	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4

PART 2 - IDEAL SKILLS FOR EACH TASK

TASKS ---> / SKILLS/KNOWLEDGE	OVERSEE COST REVIEWS	FORMULATE, DEFEND, & MODIFY BUDGET	DEVELOP, COORDINATE, & DISSEMINATE PROGRAM MANAGEMENT POLICIES & PROCEDURES	ESTABLISH COST SCHEDULE AND TECHNICAL BASELINES	DEVELOP RESOURCE REQUIREMENTS (BUDGET/FTEs)	DEVELOP NEW/IMPROVE TECHNOLOGIES	OVERSEE RDDT&E ACTIVITIES
Conducting library research	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Facility, site, operations and processes	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Defining boundaries of a problem	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Keeping abreast of current developments	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Organizing/categorizing	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Operating equipment (e.g., testing, equipment, respirators)	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Operating and using computer	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Touch typing	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Understanding principles of data base requirements and baseline techniques	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Using software and applying it to tasks	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Time management	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Weighing costs versus benefits	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Project or program management techniques	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Principles of DOE budget formulations, budget execution and cost accounting, and the procedures involved	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Schedule constraints	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4

PART 2 - IDEAL SKILLS FOR EACH TASK

TASKS ---> / SKILLS/KNOWLEDGE	OVERSEE COST REVIEWS	FORMULATE, DEFEND, & MODIFY BUDGET	DEVELOP, COORDINATE, & DISSEMINATE PROGRAM MANAGEMENT POLICIES & PROCEDURES	ESTABLISH COST SCHEDULE AND TECHNICAL BASELINES	DEVELOP RESOURCE REQUIREMENTS (BUDGET/FTEs)	DEVELOP NEW/IMPROVE TECHNOLOGIES	OVERSEE RDDT&E ACTIVITIES
Planning, programming, funding and acquisition management	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Conducting analyses involving complex variables	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Supervising staff/contractors	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Delegating authority and responsibility	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Equal Opportunity program plans	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Analyzing/synthesizing information	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Assessing strengths and weaknesses of alternatives	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Anticipating unintended consequences	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Comparing existing conditions to pre-set standards	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Prioritizing based on criteria	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Identifying relevant material/requirements	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Delegating tasks	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Defining applicable criteria	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Reading technical material for a set purpose	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Speed reading	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Consolidating materials	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4

PART 2 - IDEAL SKILLS FOR EACH TASK

TASKS ---> / SKILLS/KNOWLEDGE	OVERSEE COST REVIEWS	FORMULATE, DEFEND, & MODIFY BUDGET	DEVELOP, COORDINATE, & DISSEMINATE PROGRAM MANAGEMENT POLICIES & PROCEDURES	ESTABLISH COST SCHEDULE AND TECHNICAL BASELINES	DEVELOP RESOURCE REQUIREMENTS (BUDGET/FTE#)	DEVELOP NEW/IMPROVE TECHNOLOGIES	OVERSEE RDDT&E ACTIVITIES
Examining trade-offs among alternatives	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Geomapping, remote sensing, and characterization techniques	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Proper engineering/technical standards	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Valid engineering solutions	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Remediation techniques	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Waste treatment/disposal technologies	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Human health impacts	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Radiation effects	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Health and radiological safety impacts and benefits	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Health physics	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Safety and health	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Transportation issues	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Packaging issues	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Biology, zoology, and ecology	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Chemistry	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Nuclear engineering	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Physical sciences	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Geohydrology	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Cartography	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Geophysics	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4

PART 2 - IDEAL SKILLS FOR EACH TASK

TASKS ---> / SKILLS/KNOWLEDGE	OVERSEE COST REVIEWS	FORMULATE, DEFEND, & MODIFY BUDGET	DEVELOP, COORDINATE, & DISSEMINATE PROGRAM MANAGEMENT POLICIES & PROCEDURES	ESTABLISH COST SCHEDULE AND TECHNICAL BASELINES	DEVELOP RESOURCE REQUIREMENTS (BUDGET/FTEs)	DEVELOP NEW/IMPROVE TECHNOLOGIES	OVERSEE RDDT&E ACTIVITIES
D&D techniques	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Cultural diversity issues	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Hazardous, chemical, radioactive and mixed waste management	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
RCRA/CERCLA process	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Natural resources	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Land use	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Wildlife management	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Soils, and minerals	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Aquatic resources	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
NEPA process	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Environmental sciences	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Quality assurance	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Emergency response procedures	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4

PART 3 - SKILLS

PART 3 - SKILLS

GENERAL KNOWLEDGE AND SKILLS

National consensus standards	1 2 3 4
Interagency agreements, administration, and process	1 2 3 4
Organizing information and present cogent arguments	1 2 3 4
Writing succinctly and clearly	1 2 3 4
Public speaking (e.g., public presentations, employee/employer interactions)	1 2 3 4
Interpersonal facility (e.g., public, media, other employees and special interest groups)	1 2 3 4
Negotiating/conflict resolution	1 2 3 4
Providing clear guidance and direction to accomplish tasks	1 2 3 4
Meeting facilitation/leadership	1 2 3 4
DOE management strategies	1 2 3 4
EM's mission, policies, management plans, procedures, priorities, goals and objectives	1 2 3 4
DOE departmental organization	1 2 3 4
Contractor organization and procedures	1 2 3 4
Decision analysis	1 2 3 4

PART 3 - SKILLS

Conducting library research	1 2 3 4
Facility, site, operations and processes	1 2 3 4
Defining boundaries of a problem	1 2 3 4
Keeping abreast of current developments	1 2 3 4
Organizing/categorizing	1 2 3 4
Operating equipment (e.g., testing equipment, respirators)	1 2 3 4
Operating and using computer	1 2 3 4
Touch typing	1 2 3 4
Understanding principles of data base requirements and baseline techniques	1 2 3 4
Using software and applying it to tasks	1 2 3 4
Time management	1 2 3 4
Weighing costs versus benefits	1 2 3 4
Project or program management techniques	1 2 3 4
Principles of DOE budget formulations, budget execution and cost accounting, and the procedures involved	1 2 3 4
Schedule constraints	1 2 3 4
Planning, programming, funding and acquisition management	1 2 3 4

PART 3 - SKILLS

Conducting analyses involving complex variables	1 2 3 4
Supervising staff	1 2 3 4
Delegating authority and responsibility	1 2 3 4
Equal Opportunity program plans	1 2 3 4
Analyzing information	1 2 3 4
Assessing strengths and weaknesses of alternatives	1 2 3 4
Anticipating unintended consequences	1 2 3 4
Comparing existing conditions to pre-set standards	1 2 3 4
Prioritizing based on criteria	1 2 3 4
Identifying relevant material/requirements	1 2 3 4
Delegating tasks	1 2 3 4
Defining applicable criteria	1 2 3 4
Reading technical material for a set purpose	1 2 3 4
Speed reading	1 2 3 4
Consolidating materials	1 2 3 4
Examining trade-offs among alternatives	1 2 3 4

PART 3 - SKILLS

TECHNICAL KNOWLEDGE

Geomapping, remote sensing techniques	1 2 3 4
Proper engineering/technical standards	1 2 3 4
Valid engineering solutions	1 2 3 4
Remediation techniques	1 2 3 4
Waste treatment/disposal technologies	1 2 3 4
Human health impacts	1 2 3 4
Radiation effects	1 2 3 4
Health and radiological safety impacts and benefits	1 2 3 4
Health physics	1 2 3 4
Safety and Health	1 2 3 4
Transportation issues	1 2 3 4
Packaging issues	1 2 3 4
Biology, zoology, and ecology	1 2 3 4
Chemistry	1 2 3 4
Nuclear engineering	1 2 3 4
Physical sciences	1 2 3 4

PART 3 - SKILLS

Geohydrology	1 2 3 4
Cartography	1 2 3 4
Geophysics	1 2 3 4
D&D techniques	1 2 3 4
Cultural diversity issues	1 2 3 4
Hazardous, chemical, radioactive and mixed waste management	1 2 3 4
RCRA/CERCLA process	1 2 3 4
Natural resources	1 2 3 4
Land use	1 2 3 4
Wildlife management	1 2 3 4
Soils, and minerals	1 2 3 4
Aquatic resources	1 2 3 4
NEPA process	1 2 3 4
Environmental sciences	1 2 3 4
Emergency response procedures	1 2 3 4
Quality assurance	1 2 3 4

PART 3 - SKILLS

REGULATORY KNOWLEDGE

Laws and/or Their Implementing Regulations

American Indian Religious Freedom Act	1 2 3 4
Archaeological and Historic Preservation Act	1 2 3 4
Archaeological Resources Protection Act	1 2 3 4
Atomic Energy Act of 1954 as amended	1 2 3 4
Clean Air Act as Amended in 1990	1 2 3 4
Comprehensive Environmental Response, Compensation and Liability Act	1 2 3 4
Clean Water Act as amended	1 2 3 4
Coastal Zone Management Act	1 2 3 4
Emergency Planning and Community Right-to-Know Act	1 2 3 4
Endangered Species Act	1 2 3 4
Federal Insecticide, Fungicide, and Rodenticide Act	1 2 3 4
Fish and Wildlife Coordination Act	1 2 3 4
International Maritime Act	1 2 3 4
Marine Mammal Protection Act	1 2 3 4

Marine Protection, Research, and Sanctuaries Act	1 2 3 4
Migratory Bird Treaty Act	1 2 3 4
National Environmental Policy Act	1 2 3 4
National Historic Preservation Act	1 2 3 4
National Wildlife Refuge System Administration Act	1 2 3 4
Native American Graves Protection and Repatriation Act	1 2 3 4
Noise Control Act	1 2 3 4
Noxious Weed Act	1 2 3 4
Nuclear Waste Policy Act	1 2 3 4
Occupational Safety and Health Act	1 2 3 4
Oil Pollution Act	1 2 3 4
Pollution Prevention Act	1 2 3 4
Prime Farmland Act	1 2 3 4
Resource Conservation and Recovery Act	1 2 3 4
Repatriation Act	1 2 3 4
Rivers and Harbors Act	1 2 3 4
Safe Drinking Water Act	1 2 3 4

Toxic Substances Control Act		1 2 3 4
Wild and Scenic Rivers Act		1 2 3 4
Wild Horse and Burros Act		1 2 3 4
DOE Orders		
1324.3	Files Management	1 2 3 4
1324.5A	Records Management Program	1 2 3 4
1500.2A	Travel Policy and Procedures	1 2 3 4
1500.3	Foreign Travel Authorization	1 2 3 4
1600.3	Policy on Sexual Harassment	1 2 3 4
1700.1	Freedom of Information Program	1 2 3 4
2200.6A	Financial Accounting	1 2 3 4
2200.7	Cost Accounting	1 2 3 4
2300.1B	Audit Resolution and Follow-up	1 2 3 4
3410.1B	Training	1 2 3 4
3430.3A	Departmental Performance Appraisal System	1 2 3 4
3600.1B	Time and Attendance Reporting	1 2 3 4
3630.1B	Leave Administration	1 2 3 4

PART 3 - SKILLS

3790.2A	Federal Employee Occupational Safety and Health Program	1 2 3 4
4300.1C	Real Property Management	1 2 3 4
4320.1B	Site Development Planning	1 2 3 4
4700.1	Project Management System & Associate Notices	1 2 3 4
5000.3B	Occurrence Reporting and Processing of Operations Information	1 2 3 4
5400.1	General Environmental Protection Program	1 2 3 4
5400.2A	Environmental Compliance Issue Coordination	1 2 3 4
5400.3	Hazardous and Radioactive Mixed Waste Program	1 2 3 4
5400.4	Comprehensive Environmental Response, Compensation and Liability Act Requirements	1 2 3 4
5400.5	Radiation Protection of the Public and the Environment	1 2 3 4
5440.1E	National Environmental Policy Act Compliance Program	1 2 3 4
5480.1B	Environment, Safety and Health Program for Department of Energy Operations	1 2 3 4
5480.3	Safety Requirements for the Packaging and Transportation of Hazardous Materials, Hazardous Substances, and Hazardous Wastes	1 2 3 4

5480.4	Environmental Protection, Safety and Health Protection Standards	1 2 3 4
5480.5	Safety of Nuclear Facilities	1 2 3 4
5480.6	Radiological Control and Radiological Control Manual	1 2 3 4
5480.11	Radiation Protection for Occupational Workers	1 2 3 4
5480.15	Department of Energy Laboratory Accreditation Program for Personnel Dosimetry	1 2 3 4
5480.19	Conduct of Operations Requirements for DOE Facilities	1 2 3 4
5480.22	Technical Safety Requirements	1 2 3 4
5480.23	Nuclear Safety Analysis Reports	1 2 3 4
5481.1B	Safety Analysis and Review System	1 2 3 4
5482.1B	Environment, Safety, and Health Appraisal Program	1 2 3 4
5482.1A	Occupational Safety and Health Program for DOE Contractor Employees at Government-Owned Contractor-Operated Facilities	1 2 3 4
5484.1	Environmental Protection, Safety, and Health Protection Information Reporting Requirements	1 2 3 4
5500.1B	Emergency Management System	1 2 3 4

5500.2B	Emergency Categories, Classes and Notification and Reporting Requirements	1 2 3 4
5700.6C	Quality Assurance	1 2 3 4
5820.2A	Radioactive Waste Management	1 2 3 4
6430.1A	General Design Criteria	1 2 3 4

Executive Orders

11514	Protection and Enhancement of Environmental Quality	1 2 3 4
11593	Protection and Enhancement of the Cultural Environment	1 2 3 4
11738	Providing for the Administration of the Clean Air Act and the Federal Water Pollution Control Act with Respect to Federal Contracts, Grants of Loans	1 2 3 4
11987	Exotic Organisms	1 2 3 4
11988	Floodplain Management	1 2 3 4
11989	Off-Road Vehicles on Public Lands	1 2 3 4
11990	Protection of Wetlands	1 2 3 4
12088	Federal Compliance with Pollution Control Standards	1 2 3 4
12196	Federal Compliance with Occupational Safety and Health Standards	1 2 3 4
12777	Implementation of Section 311 of the Federal	1 2 3 4

Water Pollution Control Act of 1972, as amended, and the Oil Pollution Act of

12780	Federal Agency Recycling and the Council on Federal Recycling and Procurement Policy	1 2 3 4

Secretary of Energy Notices 1 2 3 4

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PART 3 - SKILLS

ADDITIONAL KNOWLEDGE OR SKILLS DESIRED (AND WHY): _____

PART 3 - SKILLS

Training Courses I'd like to take: _____

Training Courses I need to take: _____

APPENDIX B:

MOST CRITICAL SKILLS FOR EACH TASK

TABLE B.1 Most Critical Skills[a] Needed to Prepare Documents

Skills	Score[b]
Writing succinctly and clearly	3.79
Keeping abreast of current developments	3.58
Organizing information and presenting cogent arguments	3.53
EM's mission, policies, management plans, procedures, priorities, goals, and objectives	3.47
Defining boundaries of a problem	3.47
Analyzing information	3.44
Assessing strengths and weaknesses of alternatives	3.44
RCRA/CERCLA process	3.41
Organizing/categorizing	3.39
Time management	3.37
Examining trade-offs among alternatives	3.33
Hazardous, chemical, radioactive, and mixed-waste management	3.29

[a] Skills with the 10 highest scores.

[b] 4-point scale: 1 = irrelevant for task; 2 = minimum level of knowledge needed to perform task; 3 = skill needed to perform task well; and 4 = critical — one cannot perform this task without knowledge or skill in this area.

TABLE B.2 Most Critical Skills[a] Needed to Review Documents

Skills	Score[b]
EM's mission, policies, management plans, procedures, priorities, goals, and objectives	3.53
RCRA/CERCLA process	3.29
Schedule constraints	3.28
Writing succinctly and clearly	3.26
Keeping abreast of current developments	3.26
Time management	3.26
Examining trade-offs among alternatives	3.22
Organizing information and presenting cogent arguments	3.21
Safety and health	3.18
Assessing strengths and weaknesses of alternatives	3.17
Organizing/categorizing	3.16
Human health impacts	3.12
Radiation effects	3.12
Hazardous, chemical, radioactive, and mixed-waste management	3.12

[a] Skills with the 10 highest scores.

[b] 4-point scale: 1 = irrelevant for task; 2 = minimum level of knowledge needed to perform task; 3 = skill needed to perform task well; and 4 = critical — one cannot perform this task without knowledge or skill in this area.

TABLE B.3 Most Critical Skills[a] Needed to Coordinate Document Reviews

Skills	Score[b]
Providing clear guidance and direction to accomplish tasks	3.47
EM's mission, policies, management plans, procedures, priorities, goals, and objectives	3.29
Organizing/categorizing	3.28
Interpersonal facility (e.g., public, media, other employees, and special interest groups)	3.22
Negotiating/conflict resolution	3.18
DOE management strategies	3.18
Time management	3.17
Schedule constraints	3.17
Writing succinctly and clearly	3.11
Meeting facilitation/leadership	3.06
DOE departmental organization	3.00
Interagency agreements, administration, and process	2.89

[a] Skills with the 10 highest scores.

[b] 4-point scale: 1 = irrelevant for task; 2 = minimum level of knowledge needed to perform task; 3 = skill needed to perform task well; and 4 = critical — one cannot perform this task without knowledge or skill in this area.

TABLE B.4 Most Critical Skills[a] Needed to Develop Testimony Questions and Answers

Skills	Score[b]
EM's mission, policies, management plans, procedures, priorities, goals, and objectives	3.71
Keeping abreast of current developments	3.71
Writing succinctly and clearly	3.50
Organizing information and presenting cogent arguments	3.44
Time management	3.29
Identifying relevant material/requirements	3.25
Organizing/categorizing	3.24
DOE management strategies	3.22
Analyzing information	3.19
Consolidating materials	3.19
Defining boundaries of a problem	3.12
Interpersonal facility (e.g., public, media, other employees, and special interest groups)	3.11

[a] Skills with the 10 highest scores.

[b] 4-point scale: 1 = irrelevant for task; 2 = minimum level of knowledge needed to perform task; 3 = skill needed to perform task well; and 4 = critical — one cannot perform this task without knowledge or skill in this area.

TABLE B.5 Most Critical Skills[a] Needed to Conduct Briefings/Presentations

Skills	Score[b]
Meeting facilitation/leadership	3.78
Public speaking (e.g., public presentations, employee/employer interactions)	3.67
Interpersonal facility (e.g., public, media, other employees, and special interest groups)	3.67
Organizing information and presenting cogent arguments	3.59
EM's mission, policies, management plans, procedures, priorities, goals, and objectives	3.56
Organizing/categorizing	3.56
Keeping abreast of current developments	3.50
DOE management strategies	3.47
DOE departmental organization	3.44
Writing succinctly and clearly	3.33
Anticipating unintended consequences	3.24
Negotiating/conflict resolution	3.22

[a] Skills with the 10 highest scores.

[b] 4-point scale: 1 = irrelevant for task; 2 = minimum level of knowledge needed to perform task; 3 = skill needed to perform task well; and 4 = critical — one cannot perform this task without knowledge or skill in this area.

TABLE B.6 Most Critical Skills[a] Needed to Interface with DOE

Skills	Score[b]
Organizing information and presenting cogent arguments	3.40
Interpersonal facility (e.g., public, media, other employees, and special interest groups)	3.40
Negotiating/conflict resolution	3.40
Meeting facilitation/leadership	3.40
EM's mission, policies, management plans, procedures, priorities, goals, and objectives	3.33
Writing succinctly and clearly	3.29
Public speaking (e.g., public presentations, employee/employer interactions)	3.27
DOE management strategies	3.27
Keeping abreast of current developments	3.27
Interagency agreements, administration, and process	3.20
Defining applicable criteria	3.08
Providing clear guidance and direction to accomplish tasks	3.07
DOE departmental organization	3.07
Time management	3.07
Weighing costs versus benefits	3.00
Project or program management techniques	3.00
Schedule constraints	3.00
Anticipating unintended consequences	3.00
Identifying relevant material/requirements	3.00
Defining boundaries of a problem	2.93
Prioritizing based on criteria	2.92

[a] Skills with the 10 highest scores.

[b] 4-point scale: 1 = irrelevant for task; 2 = minimum level of knowledge needed to perform task; 3 = skill needed to perform task well; and 4 = critical — one cannot perform this task without knowledge or skill in this area.

TABLE B.7 Most Critical Skills[a] Needed to Advise, Assist, and Provide Authoritative Guidance

Skills	Score[b]
Providing clear guidance and direction to accomplish tasks	3.73
Defining applicable criteria	3.58
Organizing information and presenting cogent arguments	3.40
Writing succinctly and clearly	3.36
Prioritizing based on criteria	3.25
Examining trade-offs among alternatives	3.25
Anticipating unintended consequences	3.23
Negotiating/conflict resolution	3.20
DOE management strategies	3.20
Keeping abreast of current developments	3.20
Meeting facilitation/leadership	3.13
EM's mission, policies, management plans, procedures, priorities, goals, and objectives	3.13
Identifying relevant material/requirements	3.08
Reading technical material for a set purpose	3.08
RCRA/CERCLA process	3.08
Assessing strengths and weaknesses of alternatives	3.07
Interagency agreements, administration, and process	3.07
Defining boundaries of a problem	3.07

[a] Skills with the 10 highest scores.

[b] 4-point scale: 1 = irrelevant for task; 2 = minimum level of knowledge needed to perform task; 3 = skill needed to perform task well; and 4 = critical — one cannot perform this task without knowledge or skill in this area.

TABLE B.8 Most Critical Skills[a] Needed to Provide Regulatory Analysis and Guidance

Skills	Score[b]
RCRA/CERCLA process	3.64
Providing clear guidance and direction to accomplish tasks	3.57
Interagency agreements, administration, and process	3.50
Assessing strengths and weaknesses of alternatives	3.38
Organizing information and presenting cogent arguments	3.36
EM's mission, policies, management plans, procedures, priorities, goals, and objectives	3.29
Identifying relevant material/requirements	3.27
Defining applicable criteria	3.27
Examining trade-offs among alternatives	3.27
Hazardous, chemical, radioactive, and mixed-waste management	3.27
Defining boundaries of a problem	3.21
Keeping abreast of current developments	3.21
NEPA process	3.18
Writing succinctly and clearly	3.15

[a] Skills with the 10 highest scores.

[b] 4-point scale: 1 = irrelevant for task; 2 = minimum level of knowledge needed to perform task; 3 = skill needed to perform task well; and 4 = critical — one cannot perform this task without knowledge or skill in this area.

TABLE B.9 Most Critical Skills[a] Needed to Implement Regulations and Policy

Skills	Score[b]
Comparing existing conditions to pre-set standards	3.17
EM's mission, policies, management plans, procedures, priorities, goals, and objectives	3.15
Keeping abreast of current developments	3.15
Examining trade-offs among alternatives	3.10
Prioritizing based on criteria	3.09
Project or program management techniques	3.08
Schedule constraints	3.08
Assessing strengths and weaknesses of alternatives	3.08
Anticipating unintended consequences	3.08
Interagency agreements, administration, and process	3.08
Negotiating/conflict resolution	3.08
Writing succinctly and clearly	3.00
Providing clear guidance and direction to accomplish tasks	3.00
DOE management strategies	3.00
RCRA/CERCLA process	3.00
Decision analysis	2.92
Defining boundaries of a problem	2.92
Organizing information and presenting cogent arguments	2.92
Weighing costs versus benefits	2.92
Analyzing information	2.91
Defining applicable criteria	2.91
National consensus standards	2.85
Interpersonal facility (e.g., public, media, other employees, and special interest groups)	2.85
Identifying relevant material/requirements	2.82
Reading technical material for a set purpose	2.82

[a] Skills with the 10 highest scores.

[b] 4-point scale: 1 = irrelevant for task; 2 = minimum level of knowledge needed to perform task; 3 = skill needed to perform task well; and 4 = critical — one cannot perform this task without knowledge or skill in this area.

TABLE B.10 Most Critical Skills[a] Needed to Provide Support to Conduct Permitting/Licensing Activities

Skills	Score[b]
Comparing existing conditions to pre-set standards	3.42
RCRA/CERCLA process	3.27
Keeping abreast of current developments	3.14
Examining trade-offs among alternatives	3.09
Providing clear guidance and direction to accomplish tasks	3.07
National consensus standards	3.00
Prioritizing based on criteria	3.00
Identifying relevant material/requirements	3.00
Defining applicable criteria	3.00
Health and radiological safety impacts and benefits	3.00
Health physics	3.00
Hazardous, chemical, radioactive, and mixed-waste management	3.00
Remediation techniques	2.91
Human health impacts	2.91
Radiation effects	2.91
Safety and health	2.91
Quality assurance	2.91
Interagency agreements, administration, and process	2.86
EM's mission, policies, management plans, procedures, priorities, goals, and objectives	2.86
Defining boundaries of a problem	2.86
Writing succinctly and clearly	2.85
Anticipating unintended consequences	2.83

[a] Skills with the 10 highest scores.

[b] 4-point scale: 1 = irrelevant for task; 2 = minimum level of knowledge needed to perform task; 3 = skill needed to perform task well; and 4 = critical — one cannot perform this task without knowledge or skill in this area.

TABLE B.11 Most Critical Skills[a] Needed to Operate Equipment

Skills	Score[b]
Operating and using computer	3.75
Using software and applying it to tasks	3.25
Touch typing	3.17
Understanding principles of database requirements and baseline techniques	2.17
Emergency response procedures	2.08
Operating equipment (e.g., testing equipment, respirators)	1.92
Time management	1.91
Organizing/categorizing	1.83
Anticipating unintended consequences	1.83
Identifying relevant material/requirements	1.67
Comparing existing conditions to pre-set standards	1.50
Reading technical material for a set purpose	1.50
Conducting library research	1.42
Keeping abreast of current developments	1.42
Prioritizing based on criteria	1.42
Delegating tasks	1.42

[a] Skills with the 10 highest scores.

[b] 4-point scale: 1 = irrelevant for task; 2 = minimum level of knowledge needed to perform task; 3 = skill needed to perform task well; and 4 = critical — one cannot perform this task without knowledge or skill in this area.

TABLE B.12 Most Critical Skills[a] Needed to Manage Files and Records

Skills	Score[b]
Organizing/categorizing	2.92
Consolidating materials	2.75
Operating and using computer	2.67
Using software and applying it to tasks	2.58
Time management	2.27
Identifying relevant material/requirements	2.08
Organizing information and presenting cogent arguments	2.00
Touch typing	1.92
Defining applicable criteria	1.92
Writing succinctly and clearly	1.83
Conducting library research	1.83
Delegating tasks	1.83
Speed reading	1.83
Emergency response procedures	1.83
Understanding principles of database requirements and baseline techniques	1.75

[a] Skills with the 10 highest scores.

[b] 4-point scale: 1 = irrelevant for task; 2 = minimum level of knowledge needed to perform task; 3 = skill needed to perform task well; and 4 = critical — one cannot perform this task without knowledge or skill in this area.

TABLE B.13 Most Critical Skills[a] Needed to Track Correspondence

Skills	Score[b]
Operating and using computer	3.42
Organizing/categorizing	2.42
Using software and applying it to tasks	2.42
Touch typing	2.33
Time management	2.18
Understanding principles of database requirements and baseline techniques	2.08
Schedule constraints	2.00
Writing succinctly and clearly	1.92
Organizing information and presenting cogent arguments	1.83
Identifying relevant material/requirements	1.75
Defining applicable criteria	1.75
Consolidating materials	1.75
Delegating authority and responsibility	1.67
Delegating tasks	1.67
Emergency response procedures	1.67

[a] Skills with the 10 highest scores.

[b] 4-point scale: 1 = irrelevant for task; 2 = minimum level of knowledge needed to perform task; 3 = skill needed to perform task well; and 4 = critical — one cannot perform this task without knowledge or skill in this area.

TABLE B.14 Most Critical Skills[a] Needed to Perform Travel Administration Functions

Skills	Score[b]
Operating and using computer	2.75
Organizing/categorizing	2.33
Touch typing	2.33
Writing succinctly and clearly	2.00
Time management	2.00
Schedule constraints	1.92
Using software and applying it to tasks	1.83
Defining applicable criteria	1.83
Providing clear guidance and direction to accomplish tasks	1.75
Keeping abreast of current developments	1.75
Anticipating unintended consequences	1.75
Identifying relevant material/requirements	1.75
Interpersonal facility (e.g., public, media, other employees, and special interest groups)	1.67
Negotiating/conflict resolution	1.58
EM's mission, policies, management plans, procedures, priorities, goals, and objectives	1.58
Decision analysis	1.58
Consolidating materials	1.50
Defining boundaries of a problem	1.42
Weighing costs versus benefits	1.42
Comparing existing conditions to pre-set standards	1.42
Examining trade-offs among alternatives	1.42

[a] Skills with the 10 highest scores.

[b] 4-point scale: 1 = irrelevant for task; 2 = minimum level of knowledge needed to perform task; 3 = skill needed to perform task well; and 4 = critical — one cannot perform this task without knowledge or skill in this area.

TABLE B.15 Most Critical Skills[a] Needed to Participate in Personnel Training and Development

Skills	Score[b]
EM's mission, policies, management plans, procedures, priorities, goals, and objectives	3.17
Keeping abreast of current developments	3.08
Identifying relevant material/requirements	3.08
DOE departmental organization	2.92
Public speaking (e.g., public presentations, employee/employer interactions)	2.75
Equal Opportunity program plans	2.75
Defining applicable criteria	2.67
Interpersonal facility (e.g., public, media, other employees, and special interest groups)	2.58
Project or program management techniques	2.58
Assessing strengths and weaknesses of alternatives	2.58
Examining trade-offs among alternatives	2.58
Providing clear guidance and direction to accomplish tasks	2.50
DOE management strategies	2.50
Organizing/categorizing	2.50
Analyzing information	2.50
Writing succinctly and clearly	2.42
Meeting facilitation/leadership	2.42
Facility, site, operations and processes	2.42
Comparing existing conditions to pre-set standards	2.42
Defining boundaries of a problem	2.33
Time management	2.33
Schedule constraints	2.33
Planning, programming, funding and acquisition management	2.33
Delegating authority and responsibility	2.33
Anticipating unintended consequences	2.33
Negotiating/conflict resolution	2.25
Contractor organization and procedures	2.25
Principles of DOE budget formulations, budget execution and cost accounting, and the procedures involved	2.25
Reading technical material for a set purpose	2.25
RCRA/CERCLA process	2.25

[a] Skills with the 10 highest scores.

[b] 4-point scale: 1 = irrelevant for task; 2 = minimum level of knowledge needed to perform task; 3 = skill needed to perform task well; and 4 = critical — one cannot perform this task without knowledge or skill in this area.

TABLE B.16 Most Critical Skills[a] Needed to Oversee Data/Information Management

Skills	Score[b]
Operating and using computer	3.25
Organizing/categorizing	3.08
Using software and applying it to tasks	3.08
Understanding principles of database requirements and baseline techniques	2.75
Defining applicable criteria	2.58
Keeping abreast of current developments	2.42
Identifying relevant material/requirements	2.42
Quality assurance	2.42
Writing succinctly and clearly	2.33
Organizing information and presenting cogent arguments	2.25
Comparing existing conditions to pre-set standards	2.25
Time management	2.18
EM's mission, policies, management plans, procedures, priorities, goals, and objectives	2.17
Decision analysis	2.17
Anticipating unintended consequences	2.17
Delegating tasks	2.17
Emergency response procedures	2.17
Touch typing	2.08
Schedule constraints	2.08
Consolidating materials	2.08

[a] Skills with the 10 highest scores.

[b] 4-point scale: 1 = irrelevant for task; 2 = minimum level of knowledge needed to perform task; 3 = skill needed to perform task well; and 4 = critical — one cannot perform this task without knowledge or skill in this area.

TABLE B.17 Most Critical Skills[a] Needed to Address Personnel/Staffing Issues

Skills	Score[b]
EM's mission, policies, management plans, procedures, priorities, goals, and objectives	3.17
Negotiating/conflict resolution	3.00
DOE departmental organization	3.00
Assessing strengths and weaknesses of alternatives	3.00
Anticipating unintended consequences	3.00
Writing succinctly and clearly	2.92
Keeping abreast of current developments	2.92
Equal Opportunity program plans	2.92
Organizing information and presenting cogent arguments	2.83
DOE management strategies	2.83
Analyzing information	2.83
Organizing/categorizing	2.82
Providing clear guidance and direction to accomplish tasks	2.75
Meeting facilitation/leadership	2.75
Supervising staff	2.75
Comparing existing conditions to pre-set standards	2.75
Prioritizing based on criteria	2.75
Identifying relevant material/requirements	2.75
Public speaking (e.g., public presentations, employee/employer interactions)	2.67
Delegating authority and responsibility	2.67
Interpersonal facility (e.g., public, media, other employees, and special interest groups)	2.58
Project or program management techniques	2.58
Delegating tasks	2.58
Defining applicable criteria	2.58
Defining boundaries of a problem	2.50
Weighing costs versus benefits	2.50
Planning, programming, funding and acquisition management	2.42

[a] Skills with the 10 highest scores.

[b] 4-point scale: 1 = irrelevant for task; 2 = minimum level of knowledge needed to perform task; 3 = skill needed to perform task well; and 4 = critical — one cannot perform this task without knowledge or skill in this area.

TABLE B.18 Most Critical Skills[a] Needed to Track and Verify Corrective Actions

Skills	Score[b]
Facility, site, operations and processes	2.92
Identifying relevant material/requirements	2.92
Keeping abreast of current developments	2.83
Comparing existing conditions to pre-set standards	2.83
Interagency agreements, administration, and process	2.82
Organizing/categorizing	2.75
EM's mission, policies, management plans, procedures, priorities, goals, and objectives	2.73
DOE departmental organization	2.73
Defining boundaries of a problem	2.67
Schedule constraints	2.67
Organizing information and presenting cogent arguments	2.64
Providing clear guidance and direction to accomplish tasks	2.64
DOE management strategies	2.64
Project or program management techniques	2.58
Defining applicable criteria	2.58
Planning, programming, funding and acquisition management	2.50
Analyzing information	2.50
Anticipating unintended consequences	2.50
Writing succinctly and clearly	2.45
Decision analysis	2.45

[a] Skills with the 10 highest scores.

[b] 4-point scale: 1 = irrelevant for task; 2 = minimum level of knowledge needed to perform task; 3 = skill needed to perform task well; and 4 = critical — one cannot perform this task without knowledge or skill in this area.

TABLE B.19 Most Critical Skills[a] Needed to Oversee Surveillance/ Monitoring/Inspection Activities

Skills	Score[b]
Facility, site, operations and processes	3.36
Comparing existing conditions to pre-set standards	3.27
Keeping abreast of current developments	3.18
Providing clear guidance and direction to accomplish tasks	3.00
EM's mission, policies, management plans, procedures, priorities, goals, and objectives	3.00
Defining boundaries of a problem	3.00
Project or program management techniques	3.00
Anticipating unintended consequences	3.00
Prioritizing based on criteria	3.00
Identifying relevant material/requirements	3.00
Examining trade-offs among alternatives	3.00
Hazardous, chemical, radioactive, and mixed-waste management	3.00
Quality assurance	3.00
DOE management strategies	2.91
Assessing strengths and weaknesses of alternatives	2.91
Defining applicable criteria	2.91
Remediation techniques	2.91
RCRA/CERCLA process	2.91
Meeting facilitation/leadership	2.82
Organizing/categorizing	2.82
Waste treatment/disposal technologies	2.82
Human health impacts	2.82
Radiation effects	2.82
Health and radiological safety impacts and benefits	2.82
Health physics	2.82
Safety and health	2.82
Decision analysis	2.73
Schedule constraints	2.73
Supervising staff	2.73
Delegating tasks	2.73
D&D techniques	2.73
Writing succinctly and clearly	2.64
DOE departmental organization	2.64

TABLE B.19 (Cont.)

Skills	Score[b]
Conducting analyses involving complex variables	2.64
Delegating authority and responsibility	2.64
Analyzing information	2.64
Valid engineering solutions	2.64
Reading technical material for a set purpose	2.55
Packaging issues	2.55
Emergency response procedures	2.55
Organizing information and presenting cogent arguments	2.45
Interpersonal facility (e.g., public, media, other employees, and special interest groups)	2.45
Proper engineering/technical standards	2.45
Transportation issues	2.45
Environmental sciences	2.45

[a] Skills with the 10 highest scores.

[b] 4-point scale: 1 = irrelevant for task; 2 = minimum level of knowledge needed to perform task; 3 = skill needed to perform task well; and 4 = critical — one cannot perform this task without knowledge or skill in this area.

TABLE B.20 Most Critical Skills[a] Needed to Investigate Complaints, Allegations, and Incidents

Skills	Score[b]
Identifying relevant material/requirements	3.55
Defining boundaries of a problem	3.50
Facility, site, operations and processes	3.40
Analyzing information	3.36
Anticipating unintended consequences	3.36
Comparing existing conditions to pre-set standards	3.27
Defining applicable criteria	3.27
Keeping abreast of current developments	3.20
Organizing/categorizing	3.20
Reading technical material for a set purpose	3.10
Negotiating/conflict resolution	3.09
Providing clear guidance and direction to accomplish tasks	3.09
Assessing strengths and weaknesses of alternatives	3.09
Organizing information and presenting cogent arguments	3.00
Interpersonal facility (e.g., public, media, other employees, and special interest groups)	3.00
Decision analysis	3.00
Examining trade-offs among alternatives	3.00
EM's mission, policies, management plans, procedures, priorities, goals, and objectives	2.91
Prioritizing based on criteria	2.91
Quality assurance	2.91

[a] Skills with the 10 highest scores.

[b] 4-point scale: 1 = irrelevant for task; 2 = minimum level of knowledge needed to perform task; 3 = skill needed to perform task well; and 4 = critical — one cannot perform this task without knowledge or skill in this area.

TABLE B.21 Most Critical Skills[a] Needed to Provide Analyses to Determine Effects of Remediation Projects

Skills	Score[b]
Analyzing information	3.50
Remediation techniques	3.50
Decision analysis	3.42
Assessing strengths and weaknesses of alternatives	3.40
Organizing information and presenting cogent arguments	3.33
RCRA/CERCLA process	3.27
Writing succinctly and clearly	3.25
Identifying relevant material/requirements	3.20
Defining applicable criteria	3.20
Examining trade-offs among alternatives	3.20
EM's mission, policies, management plans, procedures, priorities, goals, and objectives	3.17
Facility, site, operations and processes	3.17
Keeping abreast of current developments	3.17
Prioritizing based on criteria	3.11
Weighing costs versus benefits	3.10
Valid engineering solutions	3.10
Waste treatment/disposal technologies	3.10

[a] Skills with the 10 highest scores.

[b] 4-point scale: 1 = irrelevant for task; 2 = minimum level of knowledge needed to perform task; 3 = skill needed to perform task well; and 4 = critical — one cannot perform this task without knowledge or skill in this area.

TABLE B.22 Most Critical Skills[a] Needed to Review Remediation Projects and Their Progress

Skills	Score[b]
Remediation techniques	3.60
RCRA/CERCLA process	3.45
Prioritizing based on criteria	3.33
Identifying relevant material/requirements	3.30
EM's mission, policies, management plans, procedures, priorities, goals, and objectives	3.27
Defining applicable criteria	3.20
Proper engineering/technical standards	3.20
Waste treatment/disposal technologies	3.20
Organizing/categorizing	3.18
Comparing existing conditions to pre-set standards	3.10
Valid engineering solutions	3.10
Interagency agreements, administration, and process	3.09
Decision analysis	3.00
Facility, site, operations and processes	3.00
Defining boundaries of a problem	3.00
Project or program management techniques	3.00
Schedule constraints	3.00
Examining trade-offs among alternatives	3.00
Human health impacts	3.00
Radiation effects	3.00
Health and radiological safety impacts and benefits	3.00

[a] Skills with the 10 highest scores.

[b] 4-point scale: 1 = irrelevant for task; 2 = minimum level of knowledge needed to perform task; 3 = skill needed to perform task well; and 4 = critical — one cannot perform this task without knowledge or skill in this area.

TABLE B.23 Most Critical Skills[a] Needed to Recommend Actions to Correct Remedial Problems

Skills	Score[b]
Remediation techniques	3.60
Assessing strengths and weaknesses of alternatives	3.50
Analyzing information	3.40
Providing clear guidance and direction to accomplish tasks	3.36
EM's mission, policies, management plans, procedures, priorities, goals, and objectives	3.36
RCRA/CERCLA process	3.36
Organizing information and presenting cogent arguments	3.33
Planning, programming, funding and acquisition management	3.30
Anticipating unintended consequences	3.30
Keeping abreast of current developments	3.27
Defining boundaries of a problem	3.25
Defining applicable criteria	3.20
Examining trade-offs among alternatives	3.20
Organizing/categorizing	3.18

[a] Skills with the 10 highest scores.

[b] 4-point scale: 1 = irrelevant for task; 2 = minimum level of knowledge needed to perform task; 3 = skill needed to perform task well; and 4 = critical — one cannot perform this task without knowledge or skill in this area.

TABLE B.24 Most Critical Skills[a] Needed to Identify and Document Deficiencies

Skills	Score[b]
Interagency agreements, administration, and process	3.45
Identifying relevant material/requirements	3.30
Analyzing information	3.20
Defining applicable criteria	3.20
Examining trade-offs among alternatives	3.20
EM's mission, policies, management plans, procedures, priorities, goals, and objectives	3.18
Organizing/categorizing	3.18
Assessing strengths and weaknesses of alternatives	3.10
Comparing existing conditions to pre-set standards	3.10
Decision analysis	3.09
Providing clear guidance and direction to accomplish tasks	3.00
Defining boundaries of a problem	3.00
Weighing costs versus benefits	3.00
Project or program management techniques	3.00
Anticipating unintended consequences	3.00
Writing succinctly and clearly	2.91
Keeping abreast of current developments	2.91
RCRA/CERCLA process	2.91
Schedule constraints	2.90
Prioritizing based on criteria	2.90
Reading technical material for a set purpose	2.90
Remediation techniques	2.90
Organizing information and presenting cogent arguments	2.82

[a] Skills with the 10 highest scores.

[b] 4-point scale: 1 = irrelevant for task; 2 = minimum level of knowledge needed to perform task; 3 = skill needed to perform task well; and 4 = critical — one cannot perform this task without knowledge or skill in this area.

TABLE B.25 Most Critical Skills[a] Needed to Set Schedules

Skills	Score[b]
Planning, programming, funding and acquisition management	3.73
Weighing costs versus benefits	3.18
Conducting analyses involving complex variables	3.10
Principles of DOE budget formulations, budget execution and cost accounting, and the procedures involved	3.09
EM's mission, policies, management plans, procedures, priorities, goals, and objectives	3.08
Operating equipment (e.g., testing equipment, respirators)	3.00
Comparing existing conditions to pre-set standards	3.00
Identifying relevant material/requirements	3.00
Delegating tasks	2.90
DOE management strategies	2.83
Schedule constraints	2.82
Assessing strengths and weaknesses of alternatives	2.80

[a] Skills with the 10 highest scores.

[b] 4-point scale: 1 = irrelevant for task; 2 = minimum level of knowledge needed to perform task; 3 = skill needed to perform task well; and 4 = critical — one cannot perform this task without knowledge or skill in this area.

TABLE B.26 Most Critical Skills[a] Needed to Identify and Conduct Facility Acceptance

Skills	Score[b]
EM's mission, policies, management plans, procedures, priorities, goals, and objectives	3.17
Comparing existing conditions to pre-set standards	3.09
Providing clear guidance and direction to accomplish tasks	3.08
Facility, site, operations and processes	3.08
Writing succinctly and clearly	3.00
Identifying relevant material/requirements	3.00
DOE management strategies	2.92
Analyzing information	2.92
Anticipating unintended consequences	2.91
Prioritizing based on criteria	2.91
Examining trade-offs among alternatives	2.91
Keeping abreast of current developments	2.83
Planning, programming, funding and acquisition management	2.83
Defining applicable criteria	2.82
Organizing information and presenting cogent arguments	2.75
Negotiating/conflict resolution	2.75
DOE departmental organization	2.75
Decision analysis	2.75
Organizing/categorizing	2.75
D&D techniques	2.73
RCRA/CERCLA process	2.73

[a] Skills with the 10 highest scores.

[b] 4-point scale: 1 = irrelevant for task; 2 = minimum level of knowledge needed to perform task; 3 = skill needed to perform task well; and 4 = critical — one cannot perform this task without knowledge or skill in this area.

TABLE B.27 Most Critical Skills[a] Needed to Oversee Assessments for Cleanup

Skills	Score[b]
RCRA/CERCLA process	3.50
Providing clear guidance and direction to accomplish tasks	3.45
Remediation techniques	3.40
Interagency agreements, administration, and process	3.36
Defining applicable criteria	3.30
Writing succinctly and clearly	3.27
Identifying relevant material/requirements	3.20
Examining trade-offs among alternatives	3.20
Organizing information and presenting cogent arguments	3.18
EM's mission, policies, management plans, procedures, priorities, goals, and objectives	3.18
Keeping abreast of current developments	3.18
Supervising staff	3.18
Anticipating unintended consequences	3.10
Prioritizing based on criteria	3.10
Proper engineering/technical standards	3.10
DOE management strategies	3.00
Facility, site, operations and processes	3.00
Schedule constraints	3.00
Planning, programming, funding and acquisition management	3.00
Delegating authority and responsibility	3.00
Comparing existing conditions to pre-set standards	3.00
Human health impacts	3.00
Safety and health	3.00
NEPA process	3.00
Environmental sciences	3.00

[a] Skills with the 10 highest scores.

[b] 4-point scale: 1 = irrelevant for task; 2 = minimum level of knowledge needed to perform task; 3 = skill needed to perform task well; and 4 = critical — one cannot perform this task without knowledge or skill in this area.

TABLE B.28 Most Critical Skills[a] Needed to Oversee Environmental Restoration Activities

Skills	Score[b]
RCRA/CERCLA process	3.82
Interagency agreements, administration, and process	3.50
Remediation techniques	3.45
Organizing information and presenting cogent arguments	3.33
Providing clear guidance and direction to accomplish tasks	3.33
Writing succinctly and clearly	3.25
EM's mission, policies, management plans, procedures, priorities, goals, and objectives	3.25
Keeping abreast of current developments	3.25
Anticipating unintended consequences	3.20
Defining applicable criteria	3.18
Examining trade-offs among alternatives	3.18
DOE management strategies	3.17
Identifying relevant material/requirements	3.09
Proper engineering/technical standards	3.09
Human health impacts	3.09
Environmental sciences	3.09
Facility, site, operations and processes	3.08
Planning, programming, funding and acquisition management	3.08
Supervising staff	3.08

[a] Skills with the 10 highest scores.

[b] 4-point scale: 1 = irrelevant for task; 2 = minimum level of knowledge needed to perform task; 3 = skill needed to perform task well; and 4 = critical — one cannot perform this task without knowledge or skill in this area.

TABLE B.29 Most Critical Skills[a] Needed to Oversee Waste Management Activities

Skills	Score[b]
RCRA/CERCLA process	3.55
Waste treatment/disposal technologies	3.27
Providing clear guidance and direction to accomplish tasks	3.17
EM's mission, policies, management plans, procedures, priorities, goals, and objectives	3.17
Keeping abreast of current developments	3.08
Interagency agreements, administration, and process	3.00
Organizing information and presenting cogent arguments	3.00
DOE management strategies	3.00
Facility, site, operations and processes	3.00
Defining applicable criteria	3.00
Examining trade-offs among alternatives	3.00
Proper engineering/technical standards	3.00
Human health impacts	3.00
Packaging issues	3.00
Hazardous, chemical, radioactive, and mixed-waste management	3.00
Writing succinctly and clearly	2.92
Decision analysis	2.92
Organizing/categorizing	2.92
Planning, programming, funding and acquisition management	2.92
Comparing existing conditions to pre-set standards	2.91
Prioritizing based on criteria	2.91
Identifying relevant material/requirements	2.91
Valid engineering solutions	2.91
Remediation techniques	2.91
Safety and health	2.91
Transportation issues	2.91
Environmental sciences	2.91
Negotiating/conflict resolution	2.83
Meeting facilitation/leadership	2.83
Schedule constraints	2.83
Supervising staff	2.83
Analyzing information	2.83
Assessing strengths and weaknesses of alternatives	2.82
Anticipating unintended consequences	2.82
Delegating tasks	2.82
Radiation effects	2.82

TABLE B.29 (Cont.)

Skills	Score[b]
Health physics	2.82
Chemistry	2.82
DOE departmental organization	2.75
Defining boundaries of a problem	2.75

[a] Skills with the 10 highest scores.

[b] 4-point scale: 1 = irrelevant for task; 2 = minimum level of knowledge needed to perform task; 3 = skill needed to perform task well; and 4 = critical — one cannot perform this task without knowledge or skill in this area.

TABLE B.30 Most Critical Skills[a] Needed to Oversee Toxic and Hazardous Management Activities

Skills	Score[b]
RCRA/CERCLA process	3.45
Providing clear guidance and direction to accomplish tasks	3.18
EM's mission, policies, management plans, procedures, priorities, goals, and objectives	3.18
Waste treatment/disposal technologies	3.18
DOE management strategies	3.00
Facility, site, operations and processes	3.00
Keeping abreast of current developments	3.00
Defining applicable criteria	3.00
Examining trade-offs among alternatives	3.00
Proper engineering/technical standards	3.00
Human health impacts	3.00
Hazardous, chemical, radioactive, and mixed-waste management	3.00
Organizing information and presenting cogent arguments	2.91
Writing succinctly and clearly	2.91
Decision analysis	2.91
Planning, programming, funding and acquisition management	2.91
Analyzing information	2.91
Safety and health	2.91
Packaging issues	2.91
Environmental sciences	2.91
Prioritizing based on criteria	2.90
Identifying relevant material/requirements	2.90
Interagency agreements, administration, and process	2.82
Meeting facilitation/leadership	2.82
DOE departmental organization	2.82
Organizing/categorizing	2.82
Schedule constraints	2.82
Supervising staff	2.82
Delegating tasks	2.82
Valid engineering solutions	2.82
Remediation techniques	2.82
Radiation effects	2.82
Health physics	2.82

TABLE B.30 (Cont.)

Skills	Score[b]
Transportation issues	2.82
Assessing strengths and weaknesses of alternatives	2.80
Anticipating unintended consequences	2.80
Comparing existing conditions to pre-set standards	2.80
National consensus standards	2.73
Delegating authority and responsibility	2.73
Geomapping, remote sensing techniques	2.73
Health and radiological safety impacts and benefits	2.73
Chemistry	2.73
Land use	2.73
NEPA process	2.73
Emergency response procedures	2.73
Negotiating/conflict resolution	2.64
Defining boundaries of a problem	2.64
Understanding principles of database requirements and baseline techniques	2.64
Reading technical material for a set purpose	2.64
Consolidating materials	2.64
Natural resources	2.64
Soils, and minerals	2.64
Quality assurance	2.64
Public speaking (e.g., public presentations, employee/employer interactions)	2.55
Physical sciences	2.55
Geohydrology	2.55
Aquatic resources	2.55

[a] Skills with the 10 highest scores.

[b] 4-point scale: 1 = irrelevant for task; 2 = minimum level of knowledge needed to perform task; 3 = skill needed to perform task well; and 4 = critical — one cannot perform this task without knowledge or skill in this area.

TABLE B.31 Most Critical Skills[a] Needed to Oversee Water Quality Activities

Skills	Score[b]
Project or program management techniques	3.50
Planning, programming, funding and acquisition management	3.50
Principles of DOE budget formulations, budget execution and cost accounting, and the procedures involved	3.33
Schedule constraints	3.25
EM's mission, policies, management plans, procedures, priorities, goals, and objectives	3.20
Comparing existing conditions to pre-set standards	3.18
Aquatic resources	3.18
Identifying relevant material/requirements	3.09
Environmental sciences	3.09
Keeping abreast of current developments	3.00
Assessing strengths and weaknesses of alternatives	3.00
Anticipating unintended consequences	3.00
Defining applicable criteria	3.00
Examining trade-offs among alternatives	2.91
Proper engineering/technical standards	2.91
Physical sciences	2.91
Hazardous, chemical, radioactive, and mixed-waste management	2.91
Natural resources	2.91
Emergency response procedures	2.91
DOE management strategies	2.90
Defining boundaries of a problem	2.90
Waste treatment/disposal technologies	2.82
Biology, zoology, and ecology	2.82
Chemistry	2.82
Land use	2.82

[a] Skills with the 10 highest scores.

[b] 4-point scale: 1 = irrelevant for task; 2 = minimum level of knowledge needed to perform task; 3 = skill needed to perform task well; and 4 = critical — one cannot perform this task without knowledge or skill in this area.

TABLE B.32 Most Critical Skills[a] Needed to Oversee Air Quality Activities

Skills	Score[b]
Project or program management techniques	3.50
Schedule constraints	3.50
Planning, programming, funding and acquisition management	3.25
Analyzing information	3.25
EM's mission, policies, management plans, procedures, priorities, goals, and objectives	3.20
Comparing existing conditions to pre-set standards	3.18
Identifying relevant material/requirements	3.09
Keeping abreast of current developments	3.00
Principles of DOE budget formulations, budget execution and cost accounting, and the procedures involved	3.00
Assessing strengths and weaknesses of alternatives	3.00
Anticipating unintended consequences	3.00
Defining applicable criteria	3.00
Environmental sciences	3.00
Examining trade-offs among alternatives	2.91
Proper engineering/technical standards	2.91
DOE management strategies	2.90
Defining boundaries of a problem	2.90
Chemistry	2.82
Providing clear guidance and direction to accomplish tasks	2.80
Decision analysis	2.80
Facility, site, operations and processes	2.80
Organizing/categorizing	2.80
Physical sciences	2.80
Natural resources	2.80
Emergency response procedures	2.80

[a] Skills with the 10 highest scores.

[b] 4-point scale: 1 = irrelevant for task; 2 = minimum level of knowledge needed to perform task; 3 = skill needed to perform task well; and 4 = critical — one cannot perform this task without knowledge or skill in this area.

TABLE B.33 Most Critical Skills[a] Needed to Oversee Cultural Resources Management Activities

Skills	Score[b]
Schedule constraints	3.50
Natural resources	3.30
Project or program management techniques	3.25
Planning, programming, funding and acquisition management	3.25
Cultural diversity issues	3.20
EM's mission, policies, management plans, procedures, priorities, goals, and objectives	3.10
Comparing existing conditions to pre-set standards	3.10
Identifying relevant material/requirements	3.10
Land use	3.10
Defining boundaries of a problem	3.00
Keeping abreast of current developments	3.00
Analyzing information	3.00
Assessing strengths and weaknesses of alternatives	3.00
Defining applicable criteria	3.00
DOE management strategies	2.90
Facility, site, operations and processes	2.90
Examining trade-offs among alternatives	2.90
Writing succinctly and clearly	2.80
Negotiating/conflict resolution	2.80
Providing clear guidance and direction to accomplish tasks	2.80
Decision analysis	2.80
Proper engineering/technical standards	2.80
Time management	2.75
Principles of DOE budget formulations, budget execution and cost accounting, and the procedures involved	2.75
Delegating authority and responsibility	2.75
Anticipating unintended consequences	2.75
Interagency agreements, administration, and process	2.70
Organizing information and presenting cogent arguments	2.70
Meeting facilitation/leadership	2.70
Prioritizing based on criteria	2.70
Waste treatment/disposal technologies	2.70
Human health impacts	2.70

[a] Skills with the 10 highest scores.

[b] 4-point scale: 1 = irrelevant for task; 2 = minimum level of knowledge needed to perform task; 3 = skill needed to perform task well; and 4 = critical — one cannot perform this task without knowledge or skill in this area.

TABLE B.34 Most Critical Skills[a] Needed to Oversee Radiation Protection Activities

Skills	Score[b]
Project or program management techniques	3.50
Schedule constraints	3.50
Planning, programming, funding and acquisition management	3.25
Analyzing information	3.25
Anticipating unintended consequences	3.25
Radiation effects	3.20
EM's mission, policies, management plans, procedures, priorities, goals, and objectives	3.10
Comparing existing conditions to pre-set standards	3.10
Identifying relevant material/requirements	3.10
Health physics	3.10
Facility, site, operations and processes	3.00
Keeping abreast of current developments	3.00
Organizing/categorizing	3.00
Principles of DOE budget formulations, budget execution and cost accounting, and the procedures involved	3.00
Assessing strengths and weaknesses of alternatives	3.00
Defining applicable criteria	3.00
Examining trade-offs among alternatives	3.00
National consensus standards	2.90
DOE management strategies	2.90
Defining boundaries of a problem	2.90
Proper engineering/technical standards	2.90
Human health impacts	2.90
Health and radiological safety impacts and benefits	2.90
Safety and health	2.90
Hazardous, chemical, radioactive, and mixed-waste management	2.90
Environmental sciences	2.90
Quality assurance	2.90
Providing clear guidance and direction to accomplish tasks	2.80
Decision analysis	2.80
Waste treatment/disposal technologies	2.80
D&D techniques	2.80

TABLE B.34 (Cont.)

Skills	Score[b]
Delegating authority and responsibility	2.75
Prioritizing based on criteria	2.70
Biology, zoology, and ecology	2.70
Physical sciences	2.70
Emergency response procedures	2.70
Writing succinctly and clearly	2.60
Negotiating/conflict resolution	2.60
Meeting facilitation/leadership	2.60
Reading technical material for a set purpose	2.60
Valid engineering solutions	2.60
RCRA/CERCLA process	2.60

[a] Skills with the 10 highest scores.

[b] 4-point scale: 1 = irrelevant for task; 2 = minimum level of knowledge needed to perform task; 3 = skill needed to perform task well; and 4 = critical — one cannot perform this task without knowledge or skill in this area.

TABLE B.35 Most Critical Skills[a] Needed to Oversee NEPA Activities

Skills	Score[b]
NEPA process	3.82
Schedule constraints	3.50
Identifying relevant material/requirements	3.36
Assessing strengths and weaknesses of alternatives	3.33
Anticipating unintended consequences	3.33
Keeping abreast of current developments	3.30
Defining applicable criteria	3.27
Defining boundaries of a problem	3.22
Negotiating/conflict resolution	3.20
EM's mission, policies, management plans, procedures, priorities, goals, and objectives	3.20
Organizing/categorizing	3.20
Comparing existing conditions to pre-set standards	3.18
Examining trade-offs among alternatives	3.18
RCRA/CERCLA process	3.18
Writing succinctly and clearly	3.10
Providing clear guidance and direction to accomplish tasks	3.10
Decision analysis	3.10

[a] Skills with the 10 highest scores.

[b] 4-point scale: 1 = irrelevant for task; 2 = minimum level of knowledge needed to perform task; 3 = skill needed to perform task well; and 4 = critical — one cannot perform this task without knowledge or skill in this area.

TABLE B.36 Most Critical Skills[a] Needed to Oversee Decontamination and Decommissioning

Skills	Score[b]
D&D techniques	3.64
EM's mission, policies, management plans, procedures, priorities, goals, and objectives	3.27
Weighing costs versus benefits	3.27
Project or program management techniques	3.27
Radiation effects	3.27
Health and radiological safety impacts and benefits	3.27
Safety and health	3.27
Schedule constraints	3.18
Identifying relevant material/requirements	3.18
DOE management strategies	3.09
Facility, site, operations and processes	3.09
Keeping abreast of current developments	3.09
Planning, programming, funding and acquisition management	3.09
Defining applicable criteria	3.09
Examining trade-offs among alternatives	3.09
Health physics	3.09
NEPA process	3.09
Writing succinctly and clearly	3.00
Providing clear guidance and direction to accomplish tasks	3.00
Defining boundaries of a problem	3.00
Organizing/categorizing	3.00
Principles of DOE budget formulations, budget execution and cost accounting, and the procedures involved	3.00
Analyzing information	3.00
Anticipating unintended consequences	3.00
Prioritizing based on criteria	3.00
Waste treatment/disposal technologies	3.00
Human health impacts	3.00
Hazardous, chemical, radioactive, and mixed-waste management	3.00
Quality assurance	3.00
Assessing strengths and weaknesses of alternatives	2.91
Comparing existing conditions to pre-set standards	2.91
Reading technical material for a set purpose	2.91
Valid engineering solutions	2.91

TABLE B.36 (Cont.)

Skills	Score[b]
Remediation techniques	2.91
RCRA/CERCLA process	2.91
Organizing information and presenting cogent arguments	2.90
Proper engineering/technical standards	2.90
Time management	2.82
Emergency response procedures	2.82
Interagency agreements, administration, and process	2.73
DOE departmental organization	2.73
Negotiating/conflict resolution	2.73
Environmental sciences	2.73
National consensus standards	2.64
Consolidating materials	2.64
Transportation issues	2.64
Packaging issues	2.64
Physical sciences	2.64

[a] Skills with the 10 highest scores.

[b] 4-point scale: 1 = irrelevant for task; 2 = minimum level of knowledge needed to perform task; 3 = skill needed to perform task well; and 4 = critical — one cannot perform this task without knowledge or skill in this area.

TABLE B.37 Most Critical Skills[a] Needed to Oversee Quality Assurance and Quality Control

Skills	Score[b]
Emergency response procedures	3.50
Comparing existing conditions to pre-set standards	3.20
Defining applicable criteria	3.20
Providing clear guidance and direction to accomplish tasks	3.10
DOE management strategies	3.10
EM's mission, policies, management plans, priorities, goals, and objectives	3.10
Keeping abreast of current developments	3.10
Project or program management techniques	3.10
Identifying relevant material/requirements	3.10
Writing succinctly and clearly	3.00
Defining boundaries of a problem	3.00
Organizing/categorizing	3.00
Weighing costs versus benefits	3.00
Analyzing information	3.00
Prioritizing based on criteria	3.00
Facility, site, operations and processes	2.90
Schedule constraints	2.90
Planning, programming, funding and acquisition management	2.90
Assessing strengths and weaknesses of alternatives	2.90
Examining trade-offs among alternatives	2.90
Proper engineering/technical standards	2.90
National consensus standards	2.80
Principles of DOE budget formulations, budget execution and cost accounting, and the procedures involved	2.80
Valid engineering solutions	2.80
Waste treatment/disposal technologies	2.80
Radiation effects	2.80
RCRA/CERCLA process	2.80
Negotiating/conflict resolution	2.70
Anticipating unintended consequences	2.70
Remediation techniques	2.70
Health and radiological safety impacts and benefits	2.70
Human health impacts	2.70
Safety and health	2.70

TABLE B.37 (Cont.)

Skills	Score[b]
NEPA process	2.70
Quality assurance	2.70
Hazardous, chemical, radioactive, and mixed-waste management	2.67
Decision analysis	2.60
Time management	2.60
Delegating tasks	2.60
Reading technical material for a set purpose	2.60
Consolidating materials	2.60
Health physics	2.60
D&D techniques	2.60
Meeting facilitation/leadership	2.50
DOE departmental organization	2.50
Supervising staff	2.50

[a] Skills with the 10 highest scores.

[b] 4-point scale: 1 = irrelevant for task; 2 = minimum level of knowledge needed to perform task; 3 = skill needed to perform task well; 4 = critical — one cannot perform this task without knowledge or skill in this area.

TABLE B.38 Most Critical Skills[a] Needed to Oversee Land Use Activities

Skills	Score[b]
Land use	3.64
Examining trade-offs among alternatives	3.55
Defining applicable criteria	3.45
Providing clear guidance and direction to accomplish tasks	3.40
EM's mission, policies, management plans, priorities, and objectives	3.40
Identifying relevant material/requirements	3.36
Writing succinctly and clearly	3.30
DOE management strategies	3.30
Defining boundaries of a problem	3.30
Keeping abreast of current developments	3.30
Interagency agreements, administration, and process	3.20
Weighing costs versus benefits	3.20
Assessing strengths and weaknesses of alternatives	3.20
Prioritizing based on criteria	3.20
Negotiating/conflict resolution	3.10
Meeting facilitation/leadership	3.10
Analyzing information	3.10
Anticipating unintended consequences	3.10
Organizing information and presenting cogent arguments	3.00
Facility, site, operations and processes	3.00
Organizing/categorizing	3.00
Schedule constraints	3.00
RCRA/CERCLA process	3.00
Natural resources	3.00
NEPA process	3.00
Cultural diversity issues	2.91
Hazardous, chemical, radioactive, and mixed-waste management	2.91

[a] Skills with the 10 highest scores.

[b] 4-point scale: 1 = irrelevant for task; 2 = minimum level of knowledge needed to perform task; 3 = skill needed to perform task well; and 4 = critical — one cannot perform this task without knowledge or skill in this area.

TABLE B.39 Most Critical Skills[a] Needed to Evaluate Alternatives for Cleanup

Skills	Score[b]
Assessing strengths and weaknesses of alternatives	3.78
Examining trade-offs among alternatives	3.70
Weighing costs versus benefits	3.67
Identifying relevant material/requirements	3.50
RCRA/CERCLA process	3.50
Keeping abreast of current developments	3.44
Schedule constraints	3.44
Prioritizing based on criteria	3.44
Remediation techniques	3.40
Human health impacts	3.40
Writing succinctly and clearly	3.33
Providing clear guidance and direction to accomplish tasks	3.33
Organizing/categorizing	3.33
Project or program management techniques	3.33
Planning, programming, funding and acquisition management	3.33
Analyzing information	3.33
Defining applicable criteria	3.30
Safety and health	3.30
National consensus standards	3.22
Interagency agreements, administration, and process	3.22
EM's mission, policies, management plans, procedures, priorities, goals, and objectives	3.22
Principles of DOE budget formulations, budget execution and cost accounting, and the procedures involved	3.22
Anticipating unintended consequences	3.22
Comparing existing conditions to pre-set standards	3.22
Proper engineering/technical standards	3.20
Waste treatment/disposal technologies	3.20
Health and radiological safety impacts and benefits	3.20

[a] Skills with the 10 highest scores.

[b] 4-point scale: 1 = irrelevant for task; 2 = minimum level of knowledge needed to perform task; 3 = skill needed to perform task well; and 4 = critical — one cannot perform this task without knowledge or skill in this area.

TABLE B.40 Most Critical Skills[a] Needed to Oversee Program Evaluations

Skills	Score[b]
Project or program management techniques	3.44
EM's mission, policies, management plans, procedures, priorities, goals, and objectives	3.33
Principles of DOE budget formulations, budget execution and cost accounting, and the procedures involved	3.33
DOE management strategies	3.22
Schedule constraints	3.22
Planning, programming, funding and acquisition management	3.22
Assessing strengths and weaknesses of alternatives	3.22
Identifying relevant material/requirements	3.20
Defining applicable criteria	3.20
Providing clear guidance and direction to accomplish tasks	3.11
Defining boundaries of a problem	3.11
Keeping abreast of current developments	3.11
Organizing/categorizing	3.11
Comparing existing conditions to pre-set standards	3.11
Examining trade-offs among alternatives	3.10
Writing succinctly and clearly	3.00
DOE departmental organization	3.00
Weighing costs versus benefits	3.00
Analyzing information	3.00
Prioritizing based on criteria	3.00
RCRA/CERCLA process	2.90
Delegating authority and responsibility	2.89
Anticipating unintended consequences	2.89
Facility, site, operations and processes	2.78
Time management	2.78
Conducting analyses involving complex variables	2.78
Supervising staff	2.78

[a] Skills with the 10 highest scores.

[b] 4-point scale: 1 = irrelevant for task; 2 = minimum level of knowledge needed to perform task; 3 = skill needed to perform task well; and 4 = critical — one cannot perform this task without knowledge or skill in this area.

TABLE B.41 Most Critical Skills[a] Needed to Manage Contracts

Skills	Score[b]
Planning, programming, funding and acquisition management	3.40
EM's mission, policies, management plans, procedures, priorities, goals, and objectives	3.30
DOE management strategies	3.20
Principles of DOE budget formulations, budget execution and cost accounting, and the procedures involved	3.20
Identifying relevant material/requirements	3.20
Writing succinctly and clearly	3.10
Contractor organization and procedures	3.10
Keeping abreast of current developments	3.10
Project or program management techniques	3.10
Supervising staff	3.10
Defining applicable criteria	3.10
Negotiating/conflict resolution	3.00
Providing clear guidance and direction to accomplish tasks	3.00
Defining boundaries of a problem	3.00
Organizing/categorizing	3.00
Schedule constraints	3.00
Analyzing information	3.00
Assessing strengths and weaknesses of alternatives	3.00
DOE departmental organization	2.90
Anticipating unintended consequences	2.90
Interpersonal facility (e.g., public, media, other employees, and special interest groups)	2.80
Weighing costs versus benefits	2.80
Delegating authority and responsibility	2.80
Delegating tasks	2.80
Meeting facilitation/leadership	2.70
Comparing existing conditions to pre-set standards	2.70
Prioritizing based on criteria	2.70
Organizing information and presenting cogent arguments	2.60
Facility, site, operations and processes	2.60
Time management	2.60
Examining trade-offs among alternatives	2.60
Public speaking (e.g., public presentations, employee/employer interactions)	2.50
Proper engineering/technical standards	2.50

[a] Skills with the 10 highest scores.

[b] 4-point scale: 1 = irrelevant for task; 2 = minimum level of knowledge needed to perform task; 3 = skill needed to perform task well; and 4 = critical — one cannot perform this task without knowledge or skill in this area.

TABLE B.42 Most Critical Skills[a] Needed to Evaluate Contractors

Skills	Score[b]
Contractor organization and procedures	3.30
EM's mission, policies, management plans, procedures, priorities, goals, and objectives	3.20
Organizing/categorizing	3.10
Project or program management techniques	3.10
Schedule constraints	3.10
Planning, programming, funding and acquisition management	3.10
Supervising staff	3.10
Defining applicable criteria	3.10
Writing succinctly and clearly	3.00
Providing clear guidance and direction to accomplish tasks	3.00
Defining boundaries of a problem	3.00
Keeping abreast of current developments	3.00
Principles of DOE budget formulations, budget execution and cost accounting, and the procedures involved	3.00
Analyzing information	3.00
Assessing strengths and weaknesses of alternatives	3.00
Comparing existing conditions to pre-set standards	3.00
DOE management strategies	2.90
Organizing information and presenting cogent arguments	2.80
Interpersonal facility (e.g., public, media, other employees, and special interest groups)	2.80
Negotiating/conflict resolution	2.80
Weighing costs versus benefits	2.80
Delegating authority and responsibility	2.80
Anticipating unintended consequences	2.80
Identifying relevant material/requirements	2.80
Meeting facilitation/leadership	2.70
Facility, site, operations and processes	2.70
Prioritizing based on criteria	2.70
Delegating tasks	2.70
Examining trade-offs among alternatives	2.70
DOE departmental organization	2.60
Decision analysis	2.60
Time management	2.50
Reading technical material for a set purpose	2.50
Public speaking (e.g., public presentations, employee/employer interactions)	2.40

[a] Skills with the 10 highest scores.

[b] 4-point scale: 1 = irrelevant for task; 2 = minimum level of knowledge needed to perform task; 3 = skill needed to perform task well; and 4 = critical — one cannot perform this task without knowledge or skill in this area.

TABLE B.43 Most Critical Skills[a] Needed to Oversee Independent Verification

Skills	Score[b]
EM's mission, policies, management plans, priorities, goals, and objectives	3.30
Providing clear guidance and direction to accomplish tasks	3.10
Defining boundaries of a problem	3.10
Organizing/categorizing	3.10
Analyzing information	3.10
Comparing existing conditions to pre-set standards	3.10
Defining applicable criteria	3.10
Writing succinctly and clearly	3.00
Facility, site, operations and processes	3.00
Keeping abreast of current developments	3.00
Identifying relevant material/requirements	3.00
Negotiating/conflict resolution	2.90
DOE management strategies	2.90
Contractor organization and procedures	2.90
Project or program management techniques	2.90
Schedule constraints	2.90
Assessing strengths and weaknesses of alternatives	2.90
Anticipating unintended consequences	2.90
Organizing information and presenting cogent arguments	2.80
Supervising staff	2.80
Prioritizing based on criteria	2.80
Delegating tasks	2.80
D&D techniques	2.73
Interpersonal facility (e.g., public, media, other employees, and special interest groups)	2.70
Meeting facilitation/leadership	2.70
DOE departmental organization	2.70
Weighing costs versus benefits	2.70
Delegating authority and responsibility	2.70
Remediation techniques	2.70
Public speaking (e.g. public presentations, employee/employer interactions)	2.60
Decision analysis	2.60
Time management	2.60
Planning, programming, funding and acquisition management	2.60
Reading technical material for a set purpose	2.60
Examining trade-offs among alternatives	2.60

TABLE B.43 (Cont.)

Skills	Score[b]
Proper engineering/technical standards	2.60
Valid engineering solutions	2.60
Waste treatment/disposal technologies	2.60
Safety and health	2.60
Principles of DOE budget formulations, budget execution and cost accounting, and the procedures involved	2.50
Radiation effects	2.50
Consolidating materials	2.40
Health and radiological safety impacts and benefits	2.40
Health physics	2.40

[a] Skills with the 10 highest scores.

[b] 4-point scale: 1 = irrelevant for task; 2 = minimum level of knowledge needed to perform task; 3 = skill needed to perform task well; and 4 = critical — one cannot perform this task without knowledge or skill in this area.

TABLE B.44 Most Critical Skills[a] Needed to Identify and Allocate Resources

Skills	Score[b]
EM's mission, policies, management plans, procedures, priorities, goals, and objectives	3.30
Planning, programming, funding and acquisition management	3.20
Weighing costs versus benefits	3.10
Principles of DOE budget formulations, budget execution and cost accounting, and the procedures involved	3.10
Identifying relevant material/requirements	3.10
DOE departmental organization	3.00
Defining boundaries of a problem	3.00
Organizing/categorizing	3.00
Facility, site, operations and processes	2.90
Keeping abreast of current developments	2.90
Project or program management techniques	2.90
Defining applicable criteria	2.90
DOE management strategies	2.80
Schedule constraints	2.80
Analyzing information	2.80
Anticipating unintended consequences	2.80
Examining trade-offs among alternatives	2.80
Writing succinctly and clearly	2.70
Negotiating/conflict resolution	2.70
Providing clear guidance and direction to accomplish tasks	2.70
Time management	2.70
Delegating authority and responsibility	2.70
Assessing strengths and weaknesses of alternatives	2.70
Prioritizing based on criteria	2.70
Contractor organization and procedures	2.60
Decision analysis	2.60
Interpersonal facility (e.g., public, media, other employees, and special interest groups)	2.50
Supervising staff	2.50
Delegating tasks	2.50
Organizing information and presenting cogent arguments	2.40
Public speaking (e.g., public presentations, employee/employer interactions)	2.40
Meeting facilitation/leadership	2.40
Understanding principles of database requirements and baseline techniques	2.40
Consolidating materials	2.40

[a] Skills with the 10 highest scores.

[b] 4-point scale: 1 = irrelevant for task; 2 = minimum level of knowledge needed to perform task; 3 = skill needed to perform task well; 4 = critical — one cannot perform this task without knowledge or skill in this area.

TABLE B.45 Most Critical Skills[a] Needed to Provide Goods and Services

Skills	Score[b]
Planning, programming, funding and acquisition management	3.10
Weighing costs versus benefits	2.90
Principles of DOE budget formulations, budget execution and cost accounting, and the procedures involved	2.90
EM's mission, policies, management plans, procedures, priorities, goals, and objectives	2.80
Keeping abreast of current developments	2.80
Organizing/categorizing	2.80
Schedule constraints	2.80
Providing clear guidance and direction to accomplish tasks	2.70
Defining boundaries of a problem	2.70
Identifying relevant material/requirements	2.70
Defining applicable criteria	2.70
Writing succinctly and clearly	2.60
Facility, site, operations and processes	2.60
Prioritizing based on criteria	2.60
Negotiating/conflict resolution	2.50
DOE departmental organization	2.50
Time management	2.50
Project or program management techniques	2.50
Analyzing information	2.50
Anticipating unintended consequences	2.50
Examining trade-offs among alternatives	2.50
DOE management strategies	2.40
Contractor organization and procedures	2.40
Understanding principles of database requirements and baseline techniques	2.40
Supervising staff	2.40
Delegating authority and responsibility	2.40
Comparing existing conditions to pre-set standards	2.40
Meeting facilitation/leadership	2.30
Assessing strengths and weaknesses of alternatives	2.30
Delegating tasks	2.30
Interpersonal facility (e.g., public, media, other employees, and special interest groups)	2.20

TABLE B.45 (Cont.)

Skills	Score[b]
Decision analysis	2.20
Reading technical material for a set purpose	2.10
Proper engineering/technical standards	2.10
Valid engineering solutions	2.10

[a] Skills with the 10 highest scores.

[b] 4-point scale: 1 = irrelevant for task; 2 = minimum level of knowledge needed to perform task; 3 = skill needed to perform task well; and 4 = critical — one cannot perform this task without knowledge or skill in this area.

TABLE B.46 Most Critical Skills[a] Needed to Oversee Cost Reviews

Skills	Score[b]
Weighing costs versus benefits	3.20
Project or program management techniques	3.20
EM's mission, policies, management plans, procedures, priorities, goals, and objectives	3.10
Planning, programming, funding and acquisition management	3.10
Identifying relevant material/requirements	3.10
Examining trade-offs among alternatives	3.10
Principles of DOE budget formulations, budget execution and cost accounting, and the procedures involved	3.00
Providing clear guidance and direction to accomplish tasks	2.90
Facility, site, operations and processes	2.90
Defining boundaries of a problem	2.90
Schedule constraints	2.90
Analyzing information	2.90
Prioritizing based on criteria	2.90
Defining applicable criteria	2.90
DOE management strategies	2.80
Decision analysis	2.80
Keeping abreast of current developments	2.80
Organizing/categorizing	2.80
Writing succinctly and clearly	2.70
Negotiating/conflict resolution	2.70
Meeting facilitation/leadership	2.70
Assessing strengths and weaknesses of alternatives	2.70
Comparing existing conditions to pre-set standards	2.70
Organizing information and presenting cogent arguments	2.60
Supervising staff	2.60
Delegating authority and responsibility	2.60
Anticipating unintended consequences	2.60
DOE departmental organization	2.50
Contractor organization and procedures	2.50
Reading technical material for a set purpose	2.50
Consolidating materials	2.50
Proper engineering/technical standards	2.50
Valid engineering solutions	2.50

TABLE B.46 (Cont.)

Skills	Score[b]
Remediation techniques	2.50
Interpersonal facility (e.g., public, media, other employees, and special interest groups)	2.40
Understanding principles of database requirements and baseline techniques	2.40
Delegating tasks	2.40
D&D techniques	2.36

[a] Skills with the 10 highest scores.

[b] 4-point scale: 1 = irrelevant for task; 2 = minimum level of knowledge needed to perform task; 3 = skill needed to perform task well; and 4 = critical — one cannot perform this task without knowledge or skill in this area.

TABLE B.47 Most Critical Skills[a] Needed to Formulate, Defend, and Modify Budget

Skills	Score[b]
Principles of DOE budget formulations, budget execution and cost accounting, and the procedures involved	3.90
EM's mission, policies, management plans, procedures, priorities, goals, and objectives	3.70
Identifying relevant material/requirements	3.50
Planning, programming, funding and acquisition management	3.40
Assessing strengths and weaknesses of alternatives	3.40
Prioritizing based on criteria	3.40
Examining trade-offs among alternatives	3.40
Writing succinctly and clearly	3.30
Providing clear guidance and direction to accomplish tasks	3.30
DOE management strategies	3.30
Project or program management techniques	3.30
Schedule constraints	3.30
Weighing costs versus benefits	3.20
Analyzing information	3.20
Anticipating unintended consequences	3.20
Defining applicable criteria	3.20
Organizing information and presenting cogent arguments	3.10
Interpersonal facility (e.g., public, media, other employees, and special interest groups)	3.10
Negotiating/conflict resolution	3.10
Decision analysis	3.10
Keeping abreast of current developments	3.10
Organizing/categorizing	3.10
Interagency agreements, administration, and process	3.00
Meeting facilitation/leadership	3.00
DOE departmental organization	3.00
Defining boundaries of a problem	3.00
Comparing existing conditions to pre-set standards	3.00
Consolidating materials	2.90
Reading technical material for a set purpose	2.80
Remediation techniques	2.80

[a] Skills with the 10 highest scores.

[b] 4-point scale: 1 = irrelevant for task; 2 = minimum level of knowledge needed to perform task; 3 = skill needed to perform task well; and 4 = critical — one cannot perform this task without knowledge or skill in this area.

TABLE B.48 Most Critical Skills[a] Needed to Develop, Coordinate, and Disseminate Program Management Policies and Procedures

Skills	Score[b]
Project or program management techniques	3.60
EM's mission, policies, management plans, procedures, priorities, goals, and objectives	3.30
Examining trade-offs among alternatives	3.20
Providing clear guidance and direction to accomplish tasks	3.10
DOE management strategies	3.10
Principles of DOE budget formulations, budget execution and cost accounting, and the procedures involved	3.10
Identifying relevant material/requirements	3.10
Writing succinctly and clearly	3.00
DOE departmental organization	3.00
Schedule constraints	3.00
Planning, programming, funding and acquisition management	3.00
Analyzing information	3.00
Assessing strengths and weaknesses of alternatives	3.00
Comparing existing conditions to pre-set standards	3.00
Prioritizing based on criteria	3.00
Defining applicable criteria	3.00
Decision analysis	2.90
Organizing/categorizing	2.90
Delegating authority and responsibility	2.90
Interpersonal facility (e.g., public, media, other employees, and special interest groups)	2.80
Negotiating/conflict resolution	2.80
Meeting facilitation/leadership	2.80
Defining boundaries of a problem	2.80
Keeping abreast of current developments	2.80
Anticipating unintended consequences	2.80
Organizing information and presenting cogent arguments	2.70
Weighing costs versus benefits	2.70
Interagency agreements, administration, and process	2.60
Facility, site, operations and processes	2.60
Supervising staff	2.60
Reading technical material for a set purpose	2.60
RCRA/CERCLA process	2.55

[a] Skills with the 10 highest scores.

[b] 4-point scale: 1 = irrelevant for task; 2 = minimum level of knowledge needed to perform task; 3 = skill needed to perform task well; and 4 = critical — one cannot perform this task without knowledge or skill in this area.

TABLE B.49 Most Critical Skills[a] Needed to Establish Cost Schedule and Technical Baselines

Skills	Score[b]
EM's mission, policies, management plans, procedures, priorities, goals, and objectives	3.30
Anticipating unintended consequences	3.30
Project or program management techniques	3.20
Planning, programming, funding and acquisition management	3.20
DOE management strategies	3.10
Principles of DOE budget formulations, budget execution and cost accounting, and the procedures involved	3.10
Identifying relevant material/requirements	3.10
Examining trade-offs among alternatives	3.10
Keeping abreast of current developments	3.00
Organizing/categorizing	3.00
Prioritizing based on criteria	3.00
Remediation techniques	3.00
D&D techniques	2.91
Writing succinctly and clearly	2.90
Providing clear guidance and direction to accomplish tasks	2.90
Decision analysis	2.90
Defining boundaries of a problem	2.90
Schedule constraints	2.90
Analyzing information	2.90
Defining applicable criteria	2.90
Interagency agreements, administration, and process	2.80
Facility, site, operations and processes	2.80
Weighing costs versus benefits	2.80
Waste treatment/disposal technologies	2.80
RCRA/CERCLA process	2.73
Organizing information and presenting cogent arguments	2.70
Negotiating/conflict resolution	2.70
Understanding principles of database requirements and baseline techniques	2.70
Assessing strengths and weaknesses of alternatives	2.70
Comparing existing conditions to pre-set standards	2.70
Valid engineering solutions	2.70
Hazardous, chemical, radioactive, and mixed-waste management	2.64

[a] Skills with the 10 highest scores.

[b] 4-point scale: 1 = irrelevant for task; 2 = minimum level of knowledge needed to perform task; 3 = skill needed to perform task well; and 4 = critical — one cannot perform this task without knowledge or skill in this area.

TABLE B.50 Most Critical Skills[a] Needed to Develop Resource Requirements (Budgets/FTEs)

Skills	Score[b]
Principles of DOE budget formulations, budget execution and cost accounting, and the procedures involved	3.50
Planning, programming, funding and acquisition management	3.50
Identifying relevant material/requirements	3.50
EM's mission, policies, management plans, procedures, priorities, goals, and objectives	3.40
Prioritizing based on criteria	3.30
Examining trade-offs among alternatives	3.30
Writing succinctly and clearly	3.20
DOE management strategies	3.20
DOE departmental organization	3.20
Schedule constraints	3.20
Analyzing information	3.20
Assessing strengths and weaknesses of alternatives	3.20
Anticipating unintended consequences	3.20
Defining applicable criteria	3.20
Interpersonal facility (e.g., public, media, other employees, and special interest groups)	3.10
Providing clear guidance and direction to accomplish tasks	3.10
Keeping abreast of current developments	3.10
Defining boundaries of a problem	3.00
Organizing/categorizing	3.00
Project or program management techniques	3.00
Comparing existing conditions to pre-set standards	3.00
Consolidating materials	3.00
Interagency agreements, administration, and process	2.90
Organizing information and presenting cogent arguments	2.90
Negotiating/conflict resolution	2.80
Decision analysis	2.80
Weighing costs versus benefits	2.80
Remediation techniques	2.80
Public speaking (e.g., public presentations, employee/employer interactions)	2.70
Meeting facilitation/leadership	2.70
Supervising staff	2.70
Waste treatment/disposal technologies	2.70
RCRA/CERCLA process	2.64

[a] Skills with the 10 highest scores.

[b] 4-point scale: 1 = irrelevant for task; 2 = minimum level of knowledge needed to perform task; 3 = skill needed to perform task well; and 4 = critical — one cannot perform this task without knowledge or skill in this area.

TABLE B.51 Most Critical Skills[a] Needed to Develop New/ Improve Technologies

Skills	Score[b]
Keeping abreast of current developments	3.50
Assessing strengths and weaknesses of alternatives	3.40
Identifying relevant material/requirements	3.40
Examining trade-offs among alternatives	3.40
Prioritizing based on criteria	3.30
EM's mission, policies, management plans, procedures, priorities, goals, and objectives	3.20
Anticipating unintended consequences	3.20
Defining applicable criteria	3.20
Reading technical material for a set purpose	3.20
Remediation techniques	3.20
Defining boundaries of a problem	3.10
Weighing costs versus benefits	3.10
Analyzing information	3.10
Waste treatment/disposal technologies	3.10
DOE management strategies	3.00
Comparing existing conditions to pre-set standards	3.00
Geomapping, remote sensing techniques	3.00
Proper engineering/technical standards	3.00
Valid engineering solutions	3.00
Hazardous, chemical, radioactive, and mixed-waste management	2.91
Writing succinctly and clearly	2.90
Providing clear guidance and direction to accomplish tasks	2.90
DOE departmental organization	2.90
Decision analysis	2.90
Schedule constraints	2.90
Conducting analyses involving complex variables	2.90
D&D techniques	2.82
RCRA/CERCLA process	2.82
Emergency response procedures	2.82
Organizing information and presenting cogent arguments	2.80
Interpersonal facility (e.g., public, media, other employees, and special interest groups)	2.80
Facility, site, operations and processes	2.80
Organizing/categorizing	2.80

TABLE B.51 (Cont.)

Skills	Score[b]
Principles of DOE budget formulations, budget execution and cost accounting, and the procedures involved	2.80
Planning, programming, funding and acquisition management	2.80
Human health impacts	2.80

[a] Skills with the 10 highest scores.

[b] 4-point scale: 1 = irrelevant for task; 2 = minimum level of knowledge needed to perform task; 3 = skill needed to perform task well; and 4 = critical — one cannot perform this task without knowledge or skill in this area.

TABLE B.52 Most Critical Skills[a] Needed to Oversee Research, Development, Demonstration, Testing, and Evaluation Activities

Skills	Score[b]
Keeping abreast of current developments	3.40
Identifying relevant material/requirements	3.30
Reading technical material for a set purpose	3.30
EM's mission, policies, management plans, procedures, priorities, goals, and objectives	3.20
Assessing strengths and weaknesses of alternatives	3.20
Prioritizing based on criteria	3.20
Examining trade-offs among alternatives	3.20
Anticipating unintended consequences	3.10
Defining applicable criteria	3.10
DOE management strategies	3.00
Organizing/categorizing	3.00
Analyzing information	3.00
Proper engineering/technical standards	3.00
Valid engineering solutions	3.00
Remediation techniques	3.00
Organizing information and presenting cogent arguments	2.90
Writing succinctly and clearly	2.90
Providing clear guidance and direction to accomplish tasks	2.90
Defining boundaries of a problem	2.90
Schedule constraints	2.90
Comparing existing conditions to pre-set standards	2.90
Geomapping, remote sensing techniques	2.90
Waste treatment/disposal technologies	2.90
Negotiating/conflict resolution	2.80
DOE departmental organization	2.80
Decision analysis	2.80
Facility, site, operations and processes	2.80
Weighing costs versus benefits	2.80
Planning, programming, funding and acquisition management	2.80
Conducting analyses involving complex variables	2.80
Interpersonal facility (e.g., public, media, other employees, and special interest groups)	2.70
Meeting facilitation/leadership	2.70
Project or program management techniques	2.70
Principles of DOE budget formulations, budget execution and cost accounting, and the procedures involved	2.70

TABLE B.52 (Cont.)

Skills	Score[b]
Delegating tasks	2.70
Health and radiological safety impacts and benefits	2.70
Hazardous, chemical, radioactive, and mixed-waste management	2.64
Human health impacts	2.60
Radiation effects	2.60
Safety and health	2.60
Transportation issues	2.60

[a] Skills with the 10 highest scores.

[b] 4-point scale: 1 = irrelevant for task; 2 = minimum level of knowledge needed to perform task; 3 = skill needed to perform task well; and 4 = critical — one cannot perform this task without knowledge or skill in this area.

APPENDIX C:

SKILLS WITH HIGHEST AND LOWEST AVERAGE SCORES

TABLE C.1 10 Highest Average Scores on General Knowledge/Skills

General Skill	Average[a]	Wide Range of Abilities	Common Skills
Organizing/categorizing	3.14	✓	✓
Analyzing information	3.14		✓
Conducting library research	3.05		
Organizing information and presenting cogent arguments	3.05		✓
Operating and using computer	3.05		
Assessing strengths and weaknesses of alternatives	3.05		✓
Prioritizing based on criteria	3.05		✓
Writing succinctly and clearly	2.95		✓
Providing clear guidance and direction to accomplish tasks	2.95		✓
Keeping abreast of current developments	2.95	✓	✓
Consolidating materials	2.95		
Project or program management techniques	2.90	✓	✓
Schedule constraints	2.90		✓
Examining trade-offs among alternatives	2.90		✓
Defining boundaries of a problem	2.86		
Weighing costs versus benefits	2.86	✓	
Reading technical material for a set purpose	2.85	✓	
Anticipating unintended consequences	2.81		
Identifying relevant materials/requirements	2.81		
Delegating tasks	2.81		
Public speaking (e.g., public presentations, employee/employer interactions)	2.80	✓	
Meeting facilitation/leadership	2.76	✓	
DOE departmental organization	2.76		
Comparing existing conditions to preset standards	2.76		
Time management	2.75		
Defining applicable criteria	2.75		✓

[a] Average score is based on a 4-point scale: 1 = no/little knowledge; 2 = heard of/familiar with; 3 = proficient; 4 = expert.

TABLE C.2 10 Lowest Average Scores on General Knowledge/Skills

General Skill	Average[a]	Wide Range of Abilities	Common Skills
Understanding principles of database requirements and baseline techniques	2.62		
Decision analysis	2.60		
Planning, programming, funding, and acquisition management	2.52		✓
Facility, site, operations and processes	2.43	✓	
DOE management strategies	2.38		✓
Conducting analyses involving complex variables	2.38		
Operating equipment (e.g., testing equipment, respirators)	2.14	✓	
Contractor organization and procedures	2.10		
Touch typing	1.95	✓	
Equal Opportunity Program plans	1.95	✓	
National consensus standards	1.68		
Speed reading	1.67	✓	

[a] Average score is based on a 4-point scale: 1 = no/little knowledge; 2 = heard of/familiar with; 3 = proficient; 4 = expert.

TABLE C.3 10 Highest Average Scores on Technical Knowledge

General Skill	Average[a]	Wide Range of Abilities	Common Skills
RCRA/CERCLA process	2.95	✓	✓
NEPA process	2.67	✓	
Environmental sciences	2.67	✓	
Remediation techniques	2.62	✓	✓
Physical sciences	2.57	✓	
Hazardous, chemical, radioactive, and mixed waste management	2.57	✓	
Valid engineering solutions	2.40	✓	
Biology, zoology, and ecology	2.38	✓	
Waste treatment/disposal technologies	2.33	✓	
Natural resources	2.33	✓	
Radiation effects	2.29	✓	
Safety and health	2.24		
Transportation issues	2.24		
Chemistry	2.24		
Emergency response procedures	2.24	✓	
Quality assurance	2.24		
D&D techniques	2.19	✓	
Land use	2.19	✓	

[a] Average score is based on a 4-point scale: 1 = no/little knowledge; 2 = heard of/familiar with; 3 = proficient; 4 = expert.

TABLE C.4 10 Lowest Average Scores on Technical Knowledge

General Skill	Average[a]	Wide Range of Abilities	Common Skills
D&D techniques	2.19	✓	
Land use	2.19	✓	
Proper engineering/technical standards	2.14		
Health and radiological safety impacts and benefits	2.14	✓	
Human health impacts	2.10		
Health physics	2.05	✓	
Geohydrology	1.95	✓	
Aquatic resources	1.95	✓	
Cultural diversity issues	1.90	✓	
Soils and minerals	1.90	✓	
Packaging issues	1.86		
Wildlife management	1.86	✓	
Geophysics	1.81		
Nuclear engineering	1.76		
Cartography	1.76	✓	
Geomapping, remote sensing techniques	1.67	✓	

[a] Average score is based on a 4-point scale: 1 = no/little knowledge; 2 = heard of/familiar with; 3 = proficient; 4 = expert.

TABLE C.5 10 Highest Average Scores on Regulatory Knowledge

General Skill	Average[a]	Wide Range of Abilities	Common Skills
Comprehensive Environmental Response, Compensation and Liability Act	2.90	✓	
National Environmental Policy Act	2.86	✓	
Resource Conservation and Recovery Act	2.81	✓	
DOE Order 5400.4 Comprehensive Environmental Response, Compensation and Liability Act Requirements	2.71	✓	
DOE Order 5440.1E National Environmental Policy Act Compliance Program	2.52	✓	
Occupational Safety and Health Act	2.33	✓	
Clean Water Act, as amended	2.25		
DOE Order 5000.3B Occurrence Reporting and Processing of Operations Information	2.24		
Emergency Planning and Community Right-to-Know Act	2.19	✓	
Toxic Substances Control Act	2.19	✓	
DOE Order 4700.1 Project Management System and Associated Notices	2.15	✓	

[a] Average score is based on a 4-point scale: 1 = no/little knowledge; 2 = heard of/familiar with; 3 = proficient; 4 = expert.

TABLE C.6 10 Lowest Average Scores on Regulatory Knowledge

General Skill	Average[a]
DOE Order 5482.1B Environment, Safety, and Health Appraisal Program	1.50
DOE Order 1500.3 Foreign Travel Authorization	1.48
DOE Order 5484.1 Environmental Protection, Safety, and Health Protection Information Reporting Requirements	1.48
DOE Order 5500.1B Emergency Management System	1.48
DOE Order 5500.2B Emergency Categories, Classes, and Notification and Reporting Requirements	1.48
Coastal Zone Management Act	1.43
Fish and Wildlife Coordination Act	1.43
DOE Order 4300.1C Real Property Management	1.43
Executive Order 12088 Federal Compliance with Pollution Control Standards	1.43
Executive Order 12780 Federal Agency Recycling and the Council on Federal Recycling and Procurement Policy	1.43
Marine Mammal Protection Act	1.40
Noise Control Act	1.38
Prime Farmland Act	1.38
Archaeological Resources Protection Act	1.33
National Wildlife Refuge System Administration Act	1.33
DOE Order 5480.15 Department of Energy Laboratory Accreditation Program for Personnel Dosimetry	1.33
Executive Order 11514 Protection and Enhancement of Environmental Quality	1.33
Executive Order 11593 Protection and Enhancement of the Cultural Environment	1.33
Executive Order 12777 Implementation of Section 311 of the Federal Water Pollution Control Act of 1972, as amended, and the Oil Pollution Act of 1990	1.33
Rivers and Harbors Act	1.29
DOE Order 4320.1B Site Development Planning	1.29
Marine Protection, Research, and Sanctuaries Act	1.24
Oil Pollution Act	1.24
Executive Order 11738 Providing for the Administration of the Clean Air Act and the Federal Water Pollution Control Act with Respect to Federal Contracts, Grants, or Loans	1.24
American Indian Religious Freedom Act	1.19
International Maritime Act	1.19
Migratory Bird Treaty Act	1.19
Wild Horse and Burros Act	1.19
Executive Order 11989 Off-Road Vehicles on Public Lands	1.19
Native American Graves Protection and Repatriation Act	1.14
Noxious Weed Act	1.14
Repatriation Act	1.14
Executive Order 11987 Exotic Organisms	1.14

[a] Average score is based on a 4-point scale: 1 = no/little knowledge; 2 = heard of/familiar with; 3 = proficient; 4 = expert.