TAC Management Plan

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**TECHNICAL ASSISTANCE CONTRACTOR
MANAGEMENT PLAN**

August 1995

**Prepared for
U.S. Department of Energy
Environmental Restoration Division
UMTRA Project Team
Albuquerque, New Mexico**

**Prepared by
Jacobs Engineering Group Inc.
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MASTER

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LIST OF ACRONYMS

<u>Acronym</u>	<u>Definition</u>
ABC	activity based costing
ADS	activity data sheet
AGRA	AGRA Earth and Environmental, Inc.
ANSI	American National Standards Institute
ATLAS	Automated Travel Logging and Awareness System
BLM	Bureau of Land Management
BLRA	baseline risk assessment
BOE	basis of estimate
CAM	control account manager
CARD	Characterization and Remedial Design
CCB	Change Control Board
COR	contracting officer's representative
CPM	critical path method
CR/PIP	Cost Reduction/ Productivity Improvement Program
CSE	cost/schedule engineer
DAD	detailed activity description
DAR	DOE acquisition regulation
DCO	data collection objective
DCPPM	divisional computer protection program manager
DID	deliverable item description
DMA	Data Management and Assessment
DOE	U.S. Department of Energy
DOE-AL	DOE Albuquerque Operations Office
DOE-HQ	DOE Headquarters
DQO	data quality objective
EA	environmental assessment
EM	Office of Environmental and Restoration and Waste Management
EPA	U.S. Environmental Protection Agency
ES&H	environment, safety, and health
FAR	federal acquisition regulation
FTR	federal travel regulation
G&M	Geraghty & Miller, Inc.
GJPO	Grand Junction Projects Office
ICE	independent cost estimate
IPMS	integrated Project Management System
ISPS	information systems planning and support
ITR	Independent technical review
JEG	Jacobs Engineering Group Inc.
LAN	local area network
LOE	level-of-effort
LTSP	long-term surveillance plan
MPCE	major project cost estimate
NARA	National Archives and Records Administration

LIST OF ACRONYMS (Concluded)

<u>Acronym</u>	<u>Definition</u>
NEPA	National Environmental Policy Act
NRC	U.S. Nuclear Regulatory Commission
OSHA	Occupational Safety and Health Act
PC	personal computer
PERC	Paper Evaluation and Review Committee
PMCS	Program Management Control System
PMPR	Project Manager's progress report
PTS	progress tracking system
PUBS	Publications Services
QA	quality assurance
QAIP	QA implementaion plan
QAPP	QA program plan
QIS	quality improvement suggestion
QIT	quality improvement team
RAC	remedial action contractor
RAP	remedial action plan
RFW	Roy F. Weston, Inc.
RIF	reduction in force
RPM	resource planning meeting
SOP	standard operating procedure
SOW	scope of work
SOWP	site observational work plan
TAC	Technical Assistance Contractor
TAD	<i>Technical Approach Document</i>
TAGR	<i>Technical Approach to Groundwater Restoration</i>
TAM	TAC action memo
TAS	Technical Assignment System
TEC	TAC total estimated cost
TPC	total Project cost
TQM	total quality management
TRAIN	Training Records Administration and Information Network
UMTRA	Uranium Mill Tailings Remedial Action
UMTRCA	Uranium Mill Tailings Radiation Control Act
UPDCC	UMTRA Project Document Control Center
VP	vicinity property
WBS	work breakdown structure
WSAP	water sampling and analysis plan

1.0 INTRODUCTION

1.1 OVERVIEW

The Technical Assistance Contractor (TAC) for the Uranium Mill Tailings Remedial Action (UMTRA) Project comprises Jacobs Engineering Group Inc. (JEG) as the prime contractor and three teaming partner subcontractors: Roy F. Weston, Inc. (RFW), AGRA Earth and Environmental, Inc. (AGRA), and Geraghty & Miller, Inc. (G&M). The first three companies (JEG, RFW, and AGRA) have worked together effectively on the UMTRA Project in similar roles for more than 10 years. With the initiation of the UMTRA Ground Water Project in April 1991, a need arose to increase the TAC's ground water technical breadth and depth, so G&M was brought in to augment the team's capabilities.

The TAC contract's scope is to provide technical, analytical, environmental, engineering, design, inspection, and management support services to the U.S. Department of Energy (DOE) for both Surface and Ground Water Projects. The TAC team supports the DOE in completing surface remedial action and initiating ground water remediation work for start-up, characterization, compliance planning, design, construction oversight, and remedial operations.

The TAC provides the DOE UMTRA Project Team with a dedicated management, scientific, and technical resource base in Albuquerque, New Mexico, which is supplemented by corporate resources. A carefully developed and maintained staff of technical experts is available to assess, analyze, develop, and execute cost-effective solutions to the demanding technical and institutional problems presented by the UMTRA Project.

The UMTRA Project is a mature DOE project that has evolved over the past decade and has developed a multitude of systems and stakeholders operating in an extremely complex infrastructure. The TAC role in this structure requires that it be constantly aware of all Project activities and keep the DOE Project Team apprised of all issues. Therefore, a key feature of the TAC's management approach is an extensive set of communication systems implemented for the UMTRA Project. These systems assist the functional disciplines in performing UMTRA Project tasks associated with management, technical support, administrative support, and financial/Project controls.

The TAC currently supports the DOE Albuquerque Operations Office (DOE-AL) Project Team in planning and executing both the Ground Water and Surface Projects. However, in October 1995, the DOE management of the Ground Water Project will transition to the DOE's Grand Junction Projects Office (GJPO). In July of 1996, the DOE plans to transition the execution of the TAC role to a new contract under the GJPO. These transitions will result in numerous challenges, which the TAC team is committed to accomplish in order to help assure successful accomplishment of DOE's objectives.

This TAC management plan summarizes the management and technical approaches used by TAC to ensure continued efficient, high-quality support to the DOE. The plan also describes the TAC organization and the systems used to control administrative and technical activities.

1.2 TAC VISION AND MISSION STATEMENTS

The following vision and mission statements serve as guiding principles and provide the highest level of direction for establishing management goals, policies, plans, procedures, and systems. They also serve as a basis for TAC self-assessment.

1.2.1 Vision statement

The UMTRA TAC team will be a world leader in the environmental restoration of uranium mining and milling operations and will continue to help maintain the UMTRA Project's reputation as the most successful cleanup project in the DOE complex. The TAC will employ leading experts knowledgeable about all environmental disciplines and actively contribute to advance the state of the art. Innovative, timely, and high-quality management and technical services will be provided to the DOE UMTRA Project in a climate that encourages employee teamwork, creativity, and productivity while serving the DOE and public stakeholders.

1.2.2 Mission statement

The UMTRA Project TAC team's mission is to provide technical and management support for DOE remediation of uranium mill tailing sites. This includes planning, cost and schedule controls, site characterization, remedial action design, regulatory compliance services, quality assurance (QA), and public affairs. The mission will be accomplished in a timely, cost-effective, and technically sound manner in full compliance with applicable regulatory standards through the completion of the Surface Project and will include supporting the efficient transfer of the Ground Water Project to the DOE GJPO.

1.3 TAC GOALS

The following goals, developed from the vision and mission statements, are organized within a framework reflecting various Project dimensions that must be addressed.

1.3.1 Management

To foster open and productive communication among all UMTRA Project participants and to meet the client's overall expectations:

- Provide a framework and tools for the TAC staff and UMTRA Project Team staff to understand all Project issues.

- Create a working environment encouraging innovation and a free exchange of ideas, opinions, and concerns among management, employees, and the Project Team.

1.3.2 Environment, safety, and health

To conduct activities in an environmentally sound and safe manner to minimize risks to the environment and to minimize worker and public exposure to radiological and nonradiological hazards:

- Comply with the letter and spirit of all applicable environment, safety, and health (ES&H) statutes, regulations, and standards, and strive for continuous improvement beyond minimum compliance.
- Provide the UMTRA Project Team with sound ES&H support by determining the applicability of ES&H requirements and identifying options for complying with applicable requirements in a prompt and efficient manner.

1.3.3 Quality

To achieve total customer satisfaction by striving for excellence in all endeavors:

- Instill total commitment in both management and employees to top-quality products and services.
- Meet or exceed UMTRA Project Team expectations by emphasizing continuous improvement of all TAC processes.

1.3.4 Technical

To conduct all technical support activities in a timely, effective manner in compliance with regulatory requirements:

- Commit to the technical problem-solving process.
- Drive all decisions through truth and thoughtful judgment.
- Employ an interdisciplinary approach to ensure integration of natural/social sciences and visual/written arts in planning and implementing activities affecting the environment.

1.3.5 Communications

To secure informed public support for the DOE's environmental restoration mission by ensuring that all stakeholders have access to timely, factual information about the Project, its mission, goals, and progress:

- Ensure participation of the affected public in the decision-making process involving critical Project issues.
- Request and consider public input before making important decisions.
- Increase employee knowledge and motivation through the effective use of internal information and personal recognition.
- Create a working environment encouraging a free exchange of ideas, opinions, and concerns among employees, management, and the DOE.

1.3.6 People

To provide all employees a safe, comfortable, and pleasant working environment:

- Ensure that each employee has the tools necessary to perform the job effectively.
- Ensure that all employees enhance their professional development through participation in training courses, seminars, symposiums, and workshops and through membership in professional societies.
- Encourage employee career development by recognizing individual performance and potential, providing challenging assignments, and promoting top performers.
- Foster an informed TAC team that can efficiently downsize TAC personnel as the Surface Project efforts are completed and the Ground Water Project efforts are transitioned. This goal is intended to be met through attrition rather than by specific reduction in force (RIF).

2.0 ORGANIZATION AND FUNCTIONS

2.1 TEAMING PARTNERS

JEG and its subcontractors (RFW, G&M, and AGRA) provide the resources and expertise to accomplish the TAC's responsibilities and goals. The TAC team is a fully integrated and dedicated Project team. Personnel assigned to the UMTRA Project report up through the Project's functional management structure; each employee's respective company handles salary administration, employee performance reviews, and employee benefits. Regardless of corporate affiliation, input is obtained from the employee's UMTRA Project functional manager for employee performance reviews.

Table 2.1 illustrates the resources and strengths of each of the four corporations on the TAC team. The following paragraphs provide additional information on each teaming partner's strengths and contribution to the UMTRA Project.

2.1.1 Jacobs Engineering Group Inc.

JEG, headquartered in Pasadena, California, is a full-service architect-engineering firm providing a complete spectrum of environmental project implementation services, including environmental studies, feasibility studies, permitting assistance, engineering and design, procurement, construction, and operations and maintenance. JEG has 20 offices worldwide, housing more than 4500 professional, technical, scientific, and support personnel and 8000 field construction employees.

As the prime contractor on the UMTRA Project, JEG provides overall Project management and support and a variety of other administrative services to the UMTRA Project Team. These include management services to support the DOE Project Team oversight of all other DOE contractors, contract/procurement, facilities, computer support, public relations, construction safety, and design engineering.

2.1.2 Roy F. Weston, Inc.

RFW, headquartered in West Chester, Pennsylvania, is a multidisciplinary consulting firm engaged in all aspects of environmental management, including regulatory compliance, environmental engineering, and health and safety services. RFW maintains a staff of more than 2800 professionals in more than 40 offices nationwide under a variety of disciplines, including chemical, civil, and environmental engineering, biological sciences, computer technology, construction management, ecology, fluid mechanics, geosciences, hydrology, computer simulation and modeling, toxicology, industrial hygiene, health physics, and systems engineering.

Table 2.1 Teaming partner resources and strengths

Jacobs Engineering Group Inc.	Roy F. Weston, Inc.	Geraghty & Miller, Inc.	AGRA Earth and Environmental, Inc.
Program management	Ground water remediation	Ground water remediation engineering	Geotechnical engineering
Project controls	Liquid waste treatment		Geology
Quality assurance/quality control	Mixed waste feasibility development	Ground water protection/ restoration	Site characterization
Health and safety	Hazardous waste treatment (remediation)	Regulatory analysis/compliance	Hydrogeology/modeling
Regulatory compliance	Process systems	Specialty groups-modeling risk assessment, air quality, geophysics	Geomorphic assessments
Risk assessment	Health and safety		Surface facility remediation
Cost/benefit optimization	Risk assessment	Technical management	Seismic evaluations
Safety analysis	Regulatory compliance		Aquifer restoration
Environmental documentation	Environmental documentation		Risk assessment
Geotechnical engineering	Program management		Civil engineering
Technical management	Technical management		
Process systems	Project controls		

RFW supports JEG in overall Project and technical management. RFW also adds to the team its extensive experience in regulatory compliance evaluation, health physics, National Environmental Policy Act (NEPA) services, and contamination investigation and modeling.

2.1.3 Geraghty & Miller, Inc.

G&M, a wholly owned and independently operated company of Heidemij NV, has operating headquarters in Denver, Colorado, and corporate headquarters in New York. G&M is a multimedia, full-service environmental firm established in 1957; G&M has a staff of more than 1200 (professional, technical, and support) in 50 offices across the United States.

G&M supports the TAC effort by providing expertise in ground water contamination investigations, ground water modeling, risk assessment, restoration feasibility studies, and ground water remediation.

2.1.4 AGRA Earth & Environmental, Inc.

AGRA is a progressive and innovative environmental, geotechnical, and materials engineering organization headquartered in Kirtland, Washington. AGRA maintains a staff of more than 600 employees consisting of registered professional engineers, environmental specialists, risk assessors, geologists, hydrogeologists, engineering geophysicists, laboratory and field technicians, drillers, and support personnel at offices in the western United States, Alaska, and Mexico. AGRA's contributions to the UMTRA Project are in the areas of ground water hydrology, geotechnical engineering, risk assessment, and field technical support.

2.2 PROJECT ORGANIZATION STRUCTURE

The TAC maintains a streamlined, flexible, and responsive organization (Figure 2.1) to meet the needs of both surface and ground water remedial action projects. Key technical and management personnel have been assigned to the UMTRA Project as dedicated full-time employees from each of the teaming partners. The current TAC organization chart (Figure 2.1) reflects the elimination of one of the senior management positions, the assistant Project manager for Site Management.

Future TAC downsizing will result in additional streamlining and cost-cutting measures. As organization changes occur, the TAC will update this plan.

A matrix management structure will continue to provide support to the Surface and Ground Water Projects. Required technical personnel from respective functional departments are assigned on a site-by-site basis, reporting to site managers, to provide the expertise to complete assigned site-related activities.

FIGURE 2.1
UMTRA PROJECT TECHNICAL ASSISTANCE CONTRACTOR

The TAC organizational structure reflects the multidisciplinary nature of its assigned scope of work (SOW). The following sections describe in more detail each TAC department's mission, internal organization, and responsibilities.

2.3 PROJECT MANAGEMENT

The TAC Management staff tracks and meets the needs and requests of the DOE; the U.S. Nuclear Regulatory Commission (NRC), the licensing agency for the UMTRA Project; affected states and tribes; other cooperating agencies; local governments; the U.S. Congress; and other Project stakeholders. Through this continuing assessment of UMTRA Project requirements, both short- and long-term guidance is provided to the functional departments.

2.3.1 Project Manager

The TAC Project Manager develops the TAC's vision, mission, and policy and conveys them to all staff through regular meetings, face-to-face discussions, and other communication means. Endorsing DOE ES&H and ensuring compliance with ES&H laws and regulations are top priorities. The Project Manager attempts to inspire by example, continually applying quality management practices.

The TAC Project Manager develops strategies for Project planning and problem solving, and ensures the establishment and effective use of adequate systems, controls, baselines, and other management tools. The Project Manager also must ensure that operations comply with applicable statutes, regulations, and standards to minimize risks to the environment and public health.

Other roles of the TAC Project Manager are:

- Maintaining an appropriate and effective TAC organizational structure.
- Fostering, encouraging, and facilitating effective DOE communications at all levels.
- Planning and implementing constructive improvements in operations to better serve the DOE's needs.
- Measuring DOE satisfaction and conveying the level of satisfaction to the TAC staff with appropriate follow-up.
- Ensuring availability of adequate staff, appropriately trained to meet Project needs.
- Maintaining staff morale and commitment to quality throughout the Project.

2.3.2 Deputy Project Manager

A Deputy Project Manager assists the Project Manager to ensure management continuity. The Deputy Project Manager serves in the Project Manager's absence, assuming the same roles and responsibilities described above. The Deputy Project Manager also oversees the activities of the site managers, vicinity property manager, and other site management support specialists. Other Deputy Project Manager responsibilities include:

- Serving as the liaison between the TAC and the NRC.
- Communicating with and supporting DOE and the Remedial Action Contractor (RAC) Deputy Project Managers.
- Ensuring site-specific objectives are accomplished, including satisfying DOE deliverable requirements, Project and site planning, and site cost/schedule performance.
- Managing TAC support to the vicinity property (VP) program, real estate acquisition, and site licensing coordination.
- Coordinating the initiation, TAC and DOE review, and presentation of UMTRA Project technical papers.
- Coordinating the development of special studies with TAC and DOE review and ensuring meeting special studies goals.
- Initiating and coordinating independent technical reviews with appropriate follow-up for corrective actions.
- Coordinating program briefing preparations.

2.3.3 Resource Coordinator

The Resource Coordinator is responsible for facilitating efficient use of staff resources to meet Project deliverable requirements. This will be accomplished in both a short-range and a long-range manner.

Short-range activities will focus on obtaining adequate numbers of appropriately skilled staff from the various teaming partners' dedicated and corporate support staffs to meet near-term Project requirements. The coordinator will work closely with control account managers (CAM) and department managers, utilizing data from the Project control system and the Technical Assignment System (TAS), to ensure staff support of deliverable schedules and established priorities.

Long-range activities include extracting and analyzing planning data from the TAC's Project Management Control System (PMCS), forecasting specific discipline needs, and recommending staffing changes based on current discipline mix, teaming partner capabilities, and teaming agreements.

The Resource Coordinator has the following specific responsibilities:

- Overseeing maintenance and potential enhancements of TAS and other resource forecasting, trending, and assignment tools.
- Coordinating a periodic update of TAS from the PMCS and identifying near-term issues.
- Facilitating the resolution of resource conflicts, shortages, and over staffing with CAMs, department managers, and Project management staff on a daily basis.
- Ensuring the effective utilization of dedicated staff; providing advanced identification of corporate support needs; and coordinating with designated teaming partner representatives to obtain needed resources.
- Extracting information and reports from the PMCS and TAS; analyzing the data; and presenting issues, trends, and recommendations to TAC managers and staff.
- Maintaining status and trending for teaming partner contributions to the total labor expenditure of the TAC and making recommendations for actions to maintain balance among the partners in accordance with teaming agreements.

2.3.4 Ground Water Project transition coordinator

The Ground Water Project transition coordinator will be responsible for planning, scheduling, coordinating, and executing TAC activities to ensure the successful transition of the Ground Water Project to the GJPO.

The Ground Water Project transition coordinator has the following specific responsibilities:

- Providing the DOE client a focal point for transition-related tasks.
- Developing and maintaining Ground Water Project transition-related plans that support the DOE's technical, cost, and schedule guidance, consistent with established UMTRA Project priorities.

- Directing the planning and execution of all Ground Water Project transition-related activities requested by the DOE to ensure effective performance and integration of technical, support, and management efforts.
- Coordinating with TAC technical managers and support managers to obtain adequate resources to accomplish Ground Water Project transition-related objectives.
- Serving as the TAC focal point for Ground Water Project transition-related communications, both internal and external.

2.3.5 Assistant Project managers

The assistant Project managers support the Project by managing the operations and staff of the Technical Services and Management Services organizations. They share the following responsibilities:

- Supervising staff to meet organizational assignments, providing technical and management support and expertise to the DOE, and developing strong personal working relationships with DOE and RAC counterparts.
- Endorsing the DOE's policy to give top priority to ES&H issues and ensuring compliance with applicable ES&H laws and regulations.
- Ensuring development and application of adequate and appropriate planning systems, controls, baselines, and other management tools.
- Identifying, encouraging, and implementing innovative and cost-saving approaches to UMTRA Project challenges. Motivating staff to use best management practices, striving for continuous quality improvement, and integrating quality initiatives into normal operations.
- Developing staff succession plans and serving as staff mentors to use succession and required training resources as staff members pursue their career development goals. Actively promoting the development of staff managerial skills and seeking opportunities for staff members to be given responsibility and commensurate authority to accomplish specified tasks.
- Coordinating with other Project management staff to maintain overall UMTRA Project priorities and ensuring smooth integration of technical services, site management, health and safety, and Project controls.
- Ensuring that Project records are captured and maintained in an appropriate manner for future use.
- Performing duties of the control account manager for assigned accounts: planning, scheduling, and budgeting; directing work scheduled; measuring

and evaluating cost, scheduling, and technical performance; and informing the Project Manager of cost and schedule variances promptly.

The assistant Project manager for Technical Services has the following specific duties:

- Providing technical leadership for planning, staffing, and executing TAC activities.
- Hiring and developing technical services staff with the knowledge and expertise in required disciplines to support and achieve UMTRA Project objectives.
- Ensuring compliance of in-house and field operations personnel with applicable statutes, regulations, and standards to minimize risks to the environment and public health.
- Coordinating and directing the activities of the technical managers in their preparation of integrated, time-phased budgets for each assigned task. Providing requested support in preparing federal budgets, baseline budgets, and independent cost estimate (ICE) reviews.
- Ensuring that the technical quality of the work produced by the technical staff meets the high standards of the UMTRA Project by conducting the necessary monitoring, peer review, and technical review of documents and presentations.
- Serving as a member of the Paper Evaluation and Review Committee (PERC).

The assistant Project manager for Management Services has the following specific duties:

- Developing, maintaining, and operating the formal planning, performance measurement, and reporting systems used by the DOE and the TAC.
- Ensuring the development and application of adequate and appropriate management systems and controls, baselines, and other management tools.
- Ensuring the inclusion of labor hours, travel, and subcontract requirements for integrated, time-phased budgets for each UMTRA Project task.
- Informing the Project Manager, Deputy Project Manager, and other assistant Project managers in a timely manner of cost and schedule variances.
- Maintaining system documentation and providing TAC staff with earned value planning, budgeting, performance reporting systems and support,

critical path method (CPM) scheduling, periodic contract reports, and integrated budget/schedule projections.

- Administering the cost reduction program, maintaining systems documentation, and developing new and innovative methods, systems, and practices.
- Coordinating comprehensive programmatic support to the UMTRA Project Team in preparing federal budgets. Preparing materials for baseline budget reviews, budget validation reviews, and ICE reviews; performance reporting; Project scheduling; change control; and estimating.
- Coordinating the provision of hardware, software, training, planning, local area network (LAN) administration, and custom software development services for all TAC and UMTRA Project Team operations.

2.4 SITE MANAGEMENT

The Site Management functions provide management focus, coordination, and direction for planning and executing all site-related activities in compliance with applicable requirements and supports the DOE site managers' line management role. To achieve this, the TAC site managers act as Project managers for assigned sites supporting a DOE site manager counterpart. The other site management specialists described below support TAC and DOE site managers.

The site managers and site management specialists report directly to the Deputy Project Manager.

2.4.1 Site managers

The TAC site managers have the responsibility and authority to plan, initiate, and take such actions as may be necessary to ensure the successful completion of site activities authorized under the fiscal year task plans. They provide a single focus for all aspects of site work to attain established technical, cost, and schedule objectives. In addition, it is the policy of the TAC that all site-specific external interactions and commitments by the TAC are made by, or through, the site managers.

The site managers accomplish these requirements by coordinating with and relying upon the support of their counterparts and peers, the technical and support managers within the TAC's matrix structure. Through a continuous and often intense process of communication, coordination, and detailed planning, appropriately skilled technical and support staff are identified for site teams; specific assignments are made to site team members; technical issues are resolved; and control of cost and schedule performance is maintained through the conclusion of each specified activity.

Following are specific responsibilities of the site managers:

- Developing and maintaining site-specific plans that support the DOE's technical, cost, and schedule guidance, consistent with established UMTRA Project priorities.
- Supporting the development of overall Project plans and approaches, ensuring appropriate consideration of site-specific factors.
- Coordinating with TAC technical managers and support managers to obtain adequate resources to accomplish site objectives.
- Directing the planning and execution of all site activities to ensure effective performance and integration of technical, EH&S, regulatory, public information, and QA efforts.
- Serving as the TAC focal point for site-related communications, both internal and external.
- Ensuring the establishment and maintenance of adequate and effective day-to-day Site Management systems and communications.
- Reviewing and approving site-specific reports, technical documents, and plans to ensure that applicable technical, political, cultural, and historical issues and perspectives have been appropriately addressed.
- Identifying risks to technical, cost, and schedule objectives; performing variance analyses and formulating corrective action plans when performance deviates significantly from plan; developing periodic updates to cost and schedule forecasts; and providing timely reporting of work status and issues to TAC management and the DOE.

2.4.2 Real estate support

The TAC assists the DOE in real estate acquisition and access activities by identifying requirements; developing, supporting, and coordinating execution of plans; and reporting the status of ongoing activities. The majority of this assistance is provided by a dedicated real estate specialist who reports to the Deputy Project Manager and is responsible for coordinating all facets of real estate management support. The TAC's real estate responsibilities include the following:

- Identifying site-specific real estate work to be performed and drafting work orders that describe the work to be accomplished.

- Obtaining monitor well agreements and ensuring access to properties on which monitor wells will be constructed and maintained for the purpose of long-term sampling.
- Acquiring licenses and permits, including use agreements, rights-of-way, rights-of-entry for construction, and railroad crossing licenses.
- Preparing plans for acquiring real property with full consideration of economy, efficiency, programmatic need, and all applicable laws and regulations.
- Coordinating with the Bureau of Land Management (BLM) for the administrative withdrawal and jurisdictional transfer of public land from the BLM to the DOE, and ensuring permanent rights-of-entry to disposal cells from state or county roads.
- Coordinating with the BLM, U.S. Army Corps of Engineers, and private property owners to extinguish existing unpatented mining claims, acquire patented mining claims, and obtain waivers on grazing permits.
- Coordinating with the DOE's Office of Chief Counsel, private land owners, and corporations to prepare and secure remedial action agreements to conduct remedial action.
- Coordinating with intergovernmental agencies to complete the requirements for the transfer of title for disposal sites from the states to the federal government.
- Ensuring that all practices relating to the acquisition and management of real property conform with DOE Order 4300.1C, Real Property Management, and applicable regulations.

2.4.3 Vicinity property manager

The VP manager and support staff provide management and administrative support to the DOE's VP manager for all VP activities, including updating Project critical issues, providing data for property owner and DOE headquarters requests, and drafting required correspondence. As the TAC focal point for all VP-related tasks, the VP manager performs VP planning, scheduling, and statusing for all 24 UMTRA Project sites. The VP manager reports to the Deputy Project Manager. Other responsibilities of the VP staff include:

- Reviewing all VP-related documents to ensure consistency and to determine if U.S. Environmental Protection Agency (EPA) standards were met and tracking the progress of these documents to ensure timely completion.

- Coordinating all VP meetings between the DOE and the RAC and maintaining the resultant action items list.
- Collecting, interpreting, validating, and entering RAC data into the Vicinity Property Data Management System to provide the DOE a central repository of location-specific critical data.
- Serving as the focal point for data needs and requests for those data maintained at other facilities.
- Maintaining and updating the *Vicinity Property Management and Implementation Manual*, which specifies guidelines for all VP tasks, to ensure Project-wide consistency.

2.5 TECHNICAL SERVICES

The Technical Services group comprises four separate functional departments: Characterization and Remedial Design (CARD), Data Management and Assessment (DMA), TAC Regulatory Compliance (REG), and Publications Services (PUBS). These four departments are the TAC's primary point of production and management of technical documents such as health and safety plans, site observational work plans (SOWP), long-term surveillance plans (LTSP), baseline risk assessments (BLRA), remedial action plans (RAP), water sampling and analysis plans (WSAP), and environmental assessments (EA). A description of each department's purpose and function is presented in the following sections.

2.5.1 Characterization and Remedial Design Department

Mission

The CARD Department provides technical expertise in engineering (process, civil, and geotechnical), hydrology (ground water modeling and hydrogeology), and health physics in accordance with accepted industry standards, standard operating procedures (SOP), and programmatic guidance documents. The department is the focal point for site characterization and remediation strategies development for the Ground Water Project using the observational approach. The department also develops ground water protection strategies and conceptual designs, develops and implements WSAPs, and performs design reviews for the Surface Project. Department personnel conduct special studies of pertinent technical issues, develop technical position papers, and support Project-related outside studies at the UMTRA Project Team's request.

Organization

All CARD personnel report directly to the department manager for administrative and technical matters. Staff members might lead individual efforts as either a

task leader or senior reviewer. Department personnel are assigned to site teams as part of the TAC's matrix management approach under the day-to-day direction of a site manager.

Responsibilities

- Develop site-specific documents as needed, including RAPs, annual WSAPs for all ground water and surface water monitoring, and SOWPs, selecting appropriate characterization activities and the preferred remedial alternative for ground water restoration.
- Provide engineering review of designs prepared by the RAC for the Surface Project.
- Provide engineering design for Ground Water Project remedial actions.
- Provide senior and peer technical reviewers for specific documents of the Surface and Ground Water Projects, ensuring the technical accuracy of each document. This includes engineering, geologic, and hydrologic input on all Surface and Ground Water Project documents, such as LTSPs, BLRAs, and EAs.
- Maintain and implement programmatic guidance documents, including the *Technical Approach Document (TAD)*, the *Guidance Document for Preparing Water Sampling and Analysis Plans for UMTRA Sites*, and the *Technical Approach to Ground Water Restoration (TAGR)*.
- Coordinate technical activities with the Project engineer and the assistant Project manager for Technical Services to ensure that programmatic technical issues are addressed, including maintenance of appropriate site technical files for the Surface and Ground Water Projects.
- Review and implement SOPs for engineering design, modeling, and field work.

Operational controls

The CARD Department conducts its operations in accordance with accepted industry standards, SOPs, and programmatic guidance documents. The engineering SOPs are found in Sections 8.0, 10.0, 15.0, 16.0, and 17.0 of the *Albuquerque Operations Manual*. The major programmatic guidance documents followed as part of department operations include the *Guidance Document for Preparing Water Sampling and Analysis Plans* (Draft 1995), the TAD (1989), the *Technical Approach to Groundwater Restoration (TAGR)* (1993), and the *Quality Assurance Project Plan (QAPP)* (1994), the *UMTRA Project Technical Assistance Contractor Quality Assurance Implementation Plan* (1994), the *NRC Standard Format and Content for Documentation of Remedial Action at Title I Uranium*

Mill Tailings Sites (1989), Guidance for Implementing the UMTRA Project Long-Term Surveillance Program (1992), and the Risk Assessment Guidance Document for the UMTRA Project Groundwater Remediation Phase (1992).

2.5.2 Data Management and Assessment Department

Mission

The DMA Department integrates the disciplines of risk assessment, geochemistry, data management, statistics, and water sampling to generate defensible environmental data, technically sound data interpretations, and interpretative documents, including risk assessments. These activities help in identifying surface and ground water remedies to protect human health and the environment.

Organization

The DMA Department is divided into five groups: risk assessment, geochemistry, water sampling, data management, and statistics. Each group has a leader who reports to the department's technical manager.

Responsibilities

- Research and produce site-specific human health and ecological BLRAs and conduct ecological sampling in conjunction with the REG Department.
- Participate in the preparation of WSAPs in conjunction with the CARD Department.
- Prepare reports covering geochemical interpretation of ore materials, tailings, soil, and water quality and perform geochemical experiments to support UMTRA Project needs, including field experiments to evaluate the potential or feasibility of possible remedies using geochemical manipulation.
- Develop and implement QA practices and procedures associated with environmental data acquisition, storage, and manipulation. This includes development of sampling methodologies, periodic surveillance of sampling crews, review of field sampling forms, conducting laboratory systems audits and performance evaluations, verification of compliance with the analytical services statement of work, analytical data validation, manual data entry and automated data download verification, and software development oversight for data manipulation and reporting programs.
- Review the accuracy of chemical analysis data and the data entry process through evaluation of a sophisticated statistical report of suspected anomalies.

- Manage requests for changes to database programs, and work with information systems planning and support (ISPS) staff to prioritize programming tasks and monitor progress.
- Design and manage the environmental database to facilitate final data at Project closeout and transfer the data to a new or additional Project site.
- Manage a staging facility for field operations.
- Plan the sampling schedule for 6 to 12 months in the future, and communicate that schedule to all staff members contributing to the event-specific work orders. Review all work orders, and work with staff members to correct deficiencies and ensure that QA requirements are met. Plan each sampling event in detail and provide all needed sampler instructions and equipment.
- Conduct statistical evaluations of chemical analysis data, and perform Monte Carlo simulations in support of BLRAs and other risk documents.

Operational controls

The DMA Department conducts its operations in accordance with accepted industry standards, SOPs, and programmatic guidance documents. The SOPs that guide the DMA Department activities are included in the *Albuquerque Operations Manual*, Section 16.0. The major programmatic guidance documents followed as part of department operations include the *Risk Assessment Guidance for Superfund* (1989), *Human Health Risk Assessment Methodology for the UMTRA Ground Water Project* (1994), the *Guidance Document for Preparing Water Sampling and Analysis Plans for UMTRA Sites* (1993), *Quality Assurance Implementation Plan* (Rev. 1 Sept 1994), *EPA Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW-846* (1986 and subsequent revisions), *EPA Laboratory Data Validation Functional Guidelines for Evaluating Inorganics Analyses* (1988), and *DOE HAZWRAP QA and QC guidance* (1987 and 1990).

2.5.3 Regulatory Compliance Department

Mission

The TAC REG Department ensures that the UMTRA Project complies with applicable DOE and other federal, state, and local ES&H regulations and guidance for the planning of site characterization activities through the implementation of remedial action and subsequent licensing phases. This is accomplished through research, field activities, analyses, and document preparation to support and verify compliance.

Organization

The REG Department is organized into the following areas: ES&H regulatory compliance support; NEPA compliance support; permitting, access, and licensing support; ES&H surveillance and auditing; and ES&H training and program administration.

Responsibilities

- ES&H regulatory compliance support: Conduct research, surveys, and analyses for environmental compliance evaluations; provide direct support to the DOE in preparing programmatic ES&H planning and guidance documentation; maintain the UMTRA Project ES&H regulatory operating envelope database; coordinate implementation of DOE ES&H policy and guidance to ensure they are applied promptly and consistently on UMTRA Project activities and in the work place; evaluate the applicability of ES&H laws, regulations, and DOE requirements other than the NEPA to the UMTRA Project; coordinate UMTRA Project ES&H Committee meetings and actions; and coordinate preparation of the annual environmental report for the UMTRA Project.
- NEPA compliance support: Prepare NEPA documentation for the UMTRA Project, including environmental impact statements, EAs, records of decision, and findings of no significant impact; support public hearings and evaluate and respond to comments on NEPA documents; determine applicability of categorical exclusions to UMTRA activities; prepare *Federal Register* notices and mitigation plans; and conduct environmental evaluations and assessments required to support NEPA document preparation.
- Permitting, access, and licensing support: Assist in completing permit applications for site characterization; plan and integrate permit and access activities for timely implementation of UMTRA Project site activities; provide technical staff support to site licensing and long-term surveillance and maintenance planning.
- ES&H surveillance and auditing: Assist the DOE in conducting ES&H appraisals of the RAC by performing health and safety, radiological, and environmental surveillances and audits at UMTRA Project sites during remedial action; assist DOE in conducting operational readiness evaluations of the RAC; conduct internal ES&H surveillances and audits of TAC field activities; prepare surveillance and audit reports identifying areas of noncompliance with regulations and make recommendations for improvement, as appropriate; review corrective action plans and make recommendations to DOE; determine findings trends; and track corrective action status.

- ES&H training and program administration: Administer the TAC ES&H program, including developing and maintaining TAC ES&H procedures; develop and conduct ES&H training, including 40-hour Occupational Safety and Health Act (OSHA) training, 8-hour refresher training, office safety training, and hazard communication training; develop and maintain a system for identifying and tracking TAC staff safety and health training requirements; conduct safety and health inspections of DOE and TAC offices; and coordinate the Occurrence Reporting and Processing System for the DOE and the TAC.

Operational controls

The TAC REG Department conducts its operations in accordance with environmental and occupational health and safety congressional acts and their implementing regulations, DOE Orders, accepted industry standards, SOPs, and programmatic guidance documents.

Congressional acts and their implementing regulations that guide the activities of the department include, but are not limited to, the *Uranium Mill Tailings Radiation Control Act* (UMTRCA), the *Atomic Energy Act*, the NEPA, the OSHA, and the *Hazardous Materials Transportation Act*.

DOE Orders followed or implemented by the department include 5400.1, General Environmental Protection Program (11/9/88); 5400.2A, Environmental Compliance Issue Coordination (1/7/93); 5440.1E, National Environmental Policy Act Compliance Program (11/10/92); 5000.3B, Occurrence Reporting and Processing of Operations Information (1/19/93); 5400.5, Radiation Protection of the Public and the Environment (1/7/93); 5480.9, Construction Project Safety and Health Management (4/13/94); 5480.10, Contractor Industrial Hygiene Program (06/26/95); and 5480.11, Radiation Protection for Workers (6/17/92).

The SOPs maintained and updated by the REG activities are found in Sections 7.0 and 11.0 of the *Albuquerque Operations Manual* (JEG, n.d.).

Major guidance documents used include the *UMTRA Project ES&H Plan*, *UMTRA Project ES&H Regulatory Implementation Plan*, *Recommendations for the Preparation of Environmental Assessments and Environmental Impact Statements*, *Guidance for Implementing the UMTRA Project Long-term Surveillance Program*, and *Secretarial Policy on the National Environmental Policy Act*.

2.5.4 Publications Services Department

Mission

The PUBS Department produces and distributes documents and presentation materials for the UMTRA Project. It is the mission of the department to produce high-quality technical documents and presentation materials in the most cost-

effective manner possible. The PUBS Department includes the UMTRA Project Document Control Center (UPDCC), which is responsible for capturing, classifying, storing, safeguarding, and retrieving all documents produced or used on the UMTRA Project; interfacing with other government entities to provide intergovernment availability of scientific and technical information produced by the UMTRA Project; and inventorying, scheduling, and retiring all records generated in the course of UMTRA Project activities.

Organization

The PUBS Department comprises five functional groups: technical editing, word processing, graphics/mapping, production, and the UPDCC.

Responsibilities

- The technical editing staff coordinates the department's processing of UMTRA Project documents from rough draft to camera-ready copy. The staff coordinates document preparation and production activities with the authors, document coordinators, word processing (in-house and vendors), graphics/mapping, and production to ensure that the publication process is completed promptly and the product is of the highest quality possible. The staff also ensures that each document meets the DOE's standards and requirements for format, style, and quality.
- Word processing staff, under the direction of the assigned technical editor, performs end-to-end text processing, creates backup disks of all required versions of document files, and labels and stores those disk files in locked file cabinets to ensure their protection against destruction or loss of data.
- The graphics/mapping staff produces illustrations, drawings, some photographs, covers, spines, and maps for inclusion in UMTRA Project technical documents. The staff prepares materials, including transparencies, slides, and posters, for UMTRA Project presentations. Graphics/mapping personnel coordinate with the authors and document coordinators to establish the purpose of each graphic representation and decide the best medium for each illustration/map. The graphics/mapping lead also coordinates vendor production when needed for oversized plates, some color graphics, and the like. Files of computer-generated graphics and original hand-drawn illustrations are maintained by the graphics staff.
- Under the direction of the assigned technical editor, the production staff uses the camera-ready originals to reproduce, assemble, and bind the required number of copies for distribution to the DOE. The staff checks the final appearance of the document (e.g., copies are clean, properly oriented, and properly assembled).

- The UPDCC controls UMTRA DOE Project Team and TAC technical reports, correspondence, videos, field and laboratory data, VP files, aerial photographs, and design documents. Although the center is managed by the TAC, it is a direct support organization to the DOE. The activities of the center are also under the direction of the DOE records management officer. The UPDCC also acquires and maintains reference materials in support of UMTRA Project research, including monographs, periodicals, and topographic and other maps. See Section 4.5 for discussion of the document control function on the Project.

Operational controls

The PUBS Department conducts its operations in accordance with accepted industry standards, regulations and orders, SOPs, and programmatic guidance documents. To capture all of these many processes and distill them for all TAC staff who contribute to the publication of documents, the PUBS Department maintains a desktop guide. Annual training in the TAC publications processes is provided for all TAC staff. The following requirements meet the implementing guidance contained in the TAC desktop publications guide:

- Document production: DOE Orders 1430.2A, Scientific and Technical Information; 5700.6C, Quality Assurance; UMTRA-DOE/AL-150127.000, Procedures for Preparation, Printing, and Distribution of UMTRA Project National Environmental Policy Act Documents; and DOE/AL-1325.1A, DOE-AL Correspondence Manual and General Information.
- UPDCC: DOE Orders 1324.2A, Records Disposition; 1324.3, Files Management; 1324.4A, Micrographics Management; 1324.5A, Records Management Program; DOE Supplemental Directive AL 1324.5A, Records Management Program; 1324.6, Automated Office Electronic Recordkeeping; 1324.6A, Electronics Records Management Program; 1324.8, Rights and Interests Records Protection Program; DOE Notice 1324.13, Disposition of Personal Papers and Official Records; 1330.1D, Computer Software Management; 1430.1C, Management of Scientific and Technical Information; 1430.4A, Library Services; and 1700.1, Freedom of Information Program for the UPDCC.
- Regulations include 36 CFR Part 12, National Archives and Records Administration, and 41 Subchapter B, Archives and Records for the UPDCC.
- The SOPs used, maintained, and updated by the PUBS Department include 6.2.8, Preparation of Citations Used in UMTRA Project Reports; 8.1.2, Project Document Preparation; 6.1, UMTRA Project Document Control System Manual; 6.2.3, Transfer/Delivery of Project Documents to PDCC; 6.2.4, Correspondence Control; 6.2.5, Location, Access, and Borrowing Documents from PDCC; and 6.2.6, Procurement of Reference Materials, of the Albuquerque Operations Manual JEG.

- The major guidance documents used by the department are the American National Standards Institute (ANSI) Standard Z39.23-1190, Technical Report Number Format and Creation; DOE/AL Contract No. DE-AC04-91AL62350, UMTRA Technical and Management Support Contract; ANSI/NQA-1, Quality Assurance Program Requirements for Nuclear Facilities; the PUBS Department desktop guide to publications; DOE/AL/62350-12, Style and Format Guidelines for UMTRA Project Documents; *The Gregg Reference Manual*; *The Chicago Manual of Style*; *The Government Printing Office Style Manual*; and *Webster's Collegiate Dictionary, Tenth Edition*.

2.6 MANAGEMENT SERVICES

The Management Services group operates at two distinct levels. The PMCS Department provides support to the TAC organization only; the Integrated Project Management System (IPMS) Department provides support to the DOE customer directly at the Project Team level; and the ISPS Department provides support to both the TAC and the DOE Project Team organization.

The TAC, in response to the DOE Headquarters (DOE-HQ) budget validation review team's recommendations, implemented several changes to the work breakdown structure (WBS), installed activity based costing (ABC), upgraded the PMCS system software, and changed the estimating methodology. These extensive changes resulted in the TAC defining a new system and completely implementing it over a 6-month period. The results of implementing the ABC concept in addition to the WBS changes and other enhancements will be used in future detail planning. The major goal of implementing these changes was to optimize cost, schedule, and deliverable visibility at the activity, deliverable, or process level; increase the logic for the basis of estimate; and isolate level-of-effort type activity.

In general, the Management Services group provides planning, budgeting, performance reporting, and information systems support for the UMTRA Project at the levels described above. The primary level covers planning and executing work that TAC is assigned in the annual task plans. Additionally, support is provided directly to the customer at the Project Team level. Project controls, computer training, planning facilitation, and coordination are also provided to individual TAC staff members and to interfacing teaming partners and customer organizations as required to facilitate TAC and Project operations.

2.6.1 Project Management Control Systems Department

Mission

The PMCS mission is to provide TAC Project control support for the UMTRA Project using Project control software, hardware, procedures, and trained cost schedulers. The PMCS department uses a comprehensive scheduling, resource

planning, and earned-value-based system to fulfill TAC contractual requirements for monthly reporting on the UMTRA Project.

Organization

The PMCS organization exists as a support organization within the Management Services group. The PMCS organization is staffed with professional cost/schedule engineers (CSE) and cost analysts and is organized into three major functional groups: performance analysis and work measurement, federal budgeting and cost estimating, and TAC master scheduling. Individual CSEs are responsible for site-specific and technical and management support cost, schedule, baseline maintenance, and change control.

Responsibilities

The PMCS organization is responsible for operation, maintenance, and enhancements to a comprehensive earned-value-based system that includes detailed site-specific and level-of-effort (LOE) schedules, activities, logic ties (CPM), budget estimates, actuals, accruals, earned value, cost and schedule variances, and change control logs. Other responsibilities include support for federal budget reviews and audits, and maintenance or revisions to the *TAC Management Plan*.

The TAC PMCS organization planned resources based on Task Plan deliverable schedules, using the ABC methodology. ABC has become the foundation for the TAC's performance measurement baseline. Detail planning has been enhanced specifically by the use of ABC. Cost accumulation at the activity, deliverable, or process level is one of the most beneficial aspects of the ABC process. ABC implementation directly affects planning for ongoing tasks and similar tasks in the future.

The TAC PMCS Department gathers and publishes data in accordance with cost/schedule control system criteria and in conjunction with applicable DOE Orders and Notices. The PMCS Department provides TAC management and the DOE Project Office with timely and auditable cost, schedule, and technical information to facilitate management decisions regarding program direction. Other PMCS responsibilities are listed below:

- The CSEs serve as the CAM's and/or site and technical manager's liaison between the Project control system software, DOE, and UMTRA TAC Project guidance criteria and policies governing Project controls. CSEs are assigned to support several site/control account managers and work as team members to monitor cost, schedule, and technical progress and reporting.
- Integrate TAC Task Plans, deliverables, target costs, and schedule into the performance measurement baseline. (See Appendix A for an example listing of the FY95 Task Plan deliverables.)

- Provide objective assessment and measurement, including earned-value calculations (work accomplished against the baseline plan).
- Provide status and visibility to the TAC Project Manager, Deputy Project Manager, assistant Project manager, functional group managers, and CAMs of progress and variance exceptions to the performance measurement baseline.
- Perform variance analysis and report significant deviations from planned cost, schedule, and technical baseline to TAC management.
- Prepare cost reports, including estimates to completion and TAC total Project cost (TPC) estimates to support specific contract reporting requirements, federal budgeting, validations, DOE-HQ reviews, and audits.
- Prepare schedule reports, including monthly issuance of the Project master schedule, site-specific detailed CPM schedules, and various levels of milestone/activity reports.
- Provide traceability from the lowest WBS element to the highest, including "unique" summaries to support the federal budget process, progress tracking system (PTS), and activity data sheet (ADS) funds tracking (Figure 2.2). The CSEs serve as the interface between their respective areas of responsibilities in supporting the CAMs and the IPMS function.
- Prepare detailed task plans on an annual basis. Each TAC task plan contains a detailed narrative description, cost plan, labor plan, and listed deliverables with due dates.
- The CSEs serve as the interface with accounting, PMCS, and the site/control account managers in assuring actual costs and accruals reflect accurate cost criteria (see Section 2.9.3).

Operational controls

The PMCS Department conducts its operations in accordance with accepted industry standards, regulations and orders, SOPs, and programmatic guidance documents as follows:

- DOE Orders 4700.1, Program Management System; N4700.5, Project Control System Guidelines and Implementation Reference Manual; DOE/MA-0195, Summary Description; DOE/MA-0203, Implementation Guide; DOE/MA-01195, Summary Description; DOE/MA-0203, Implementation Guide; DOE/MA-0040, Work Breakdown Structure Guide; DOE/MA-0221, Data Analysis Guide; DOE/MA-0047, Systems Review/Surveillance Guide; and 1332.1A, Uniform Reporting System.

FIGURE 2.2
UMTRA SCHEDULING HIERARCHY SITE-RELATED WORK

- The SOPs used, maintained, and updated by the PMCS Department include 13.5.1, TAC/PMCS-1 Contract Work Breakdown Structure Maintenance; 13.5.2, TAC/PMCS-2 Development of Cost Account/Work Packages and Work Authority; 13.5.3., TAC/PMCS-3 Out-Year Cost Amount Planning; 13.5.4, TAC/PMCS-4 Data Accumulation; 13.5.5, TAC/PMCS-5 Variance Analysis and Corrective Action Planning; 13.5.6, TAC/PMCS-6 Estimate at Completion; 13.5.7, TAC/PMCS-7 Performance Reporting; 13.5.8, TAC/PMCS-8 Schedule Control; 13.5.9, TAC/PMCS-9 Budget Change Control; 13.5.10, TAC/PMCS-10 Overhead Control; and 13.5.11, TAC/PMCS-11 Cost Accruals for Subcontracts (JEG, n.d.).
- The UMTRA Project TAC *Project Management Control System Description* is the major guidance document used by the department.

2.6.2 Integrated Project Management Systems Department

Mission

The IPMS Department provides support to the DOE customer directly at the Project Team level. The IPMS Department mission involves a dedicated staff to support the annual federal budget preparation process, overall Project performance measurement (TAC, RAC, RUST Geotech, and all other contractors), preparation of major system acquisition and major Project documentation, preparation of state billings and reimbursements, coordination of total Project baseline control and administration of the Environmental Restoration and Waste Management PTS.

Organization

The IPMS organization exists as a dedicated support organization within the Management Services group. The IPMS Department is staffed with various disciplines, including cost analysts, budget analysts, master schedulers, and administrative support employees. Under DOE Project Team direction, the IPMS organization provides guidance to contractors; coordinates risk assessment meetings and establishes contingency requirements; supports DOE bottom-up reviews, ICE reviews, and major project cost estimate (MPCE) audits; and performs various other "what-if" planning scenarios.

Responsibilities

The IPMS group is responsible for interfacing with the DOE UMTRA Project Team and all major Project contractors to integrate and coordinate several aspects of Project management control. IPMS Project-level support includes responsibility for the following major functions:

- Provide guidance to all UMTRA Project contractors, risk assessment meeting coordination, bottom-up review support, ICE review support, budget validation support, various possible planning scenarios, development of the field budget, maintenance of budget data through a budget management system for both Surface and Ground Water Projects, Project-level estimating support, and administration of the UMTRA Project Cost Reduction/Productivity Improvement Program (CR/PIP).
- Maintain Project performance measurement system for both surface and ground water including the areas of baseline establishment, change control, IPMS level schedule, PTS, quarterly Project Manager's progress report (PMPR), monthly reporting, baseline change proposal, Energy System Acquisition Advisory Board/Program Secretarial Officer briefings, and data maintenance.
- Prepare documents as required by DOE Order 4700.1, Project Management Systems, and DOE Notice 4700.5, Project Control System Guidelines and Implementation Reference Manual, for both Surface and Ground Water Projects such as the Project Plan, Project Management Plan, IPMS Description, Project Schedule and Cost Estimate Report, and other documentation as may be required to support the DOE Project Team.

Specifically, the IPMS group interfaces with the DOE Project Team and all major Project contractors to integrate and coordinate total Project management control in the following areas:

- Preparation of all data and documents in support of federal budget development.
- Data collection and maintenance of a Project-level performance measurement system.
- Status and coordination of a Project-level master schedule.
- Preparation of monthly DOE environmental management PTS reports, which include the quarterly PMPR.
- Support for management reviews, Change Control Board (CCB), and critical issues meetings.
- Preparation of documentation as required by DOE Orders in the 4700 series.
- Support for the cost reduction program, billings and reimbursements to the various states and Indian tribes, and independent construction cost estimating.

Operational controls

The IPMS Department conducts its operations in accordance with accepted industry standards, regulations and orders, SOPs, and programmatic guidance documents as follows:

- DOE Orders 4700.1, Program Management System; N4700.5, Project Control System Guidelines and Implementation Reference Manual; DOE/MA-0195, Summary Description; DOE/MA-0203, Implementation Guide; DOE/MA-0040, Work Breakdown Structure Guide; DOE/MA-0221, Data Analysis Guide; DOE/MA-0047, Systems Review/Surveillance Guide; and 1332.1A, Uniform Reporting System.
- The SOPs used, maintained, and updated by the IPMS Department include 13.2.1, Project Progress Report Preparation; 13.2.2, Project Management Plan Preparation; 13.2.3, Project Plan Update; 13.2.7, Project Manager's Progress Report Preparation; 13.2.8, Project Schedule and Cost Estimate Report Preparation; 13.2.9, Site Progress Report Preparation; 13.2.11, Change Control Board Support; 13.3.1, IPMS Trend Report Maintenance; 13.3.3, IPMS Schedule Report Generation; 13.3.4, IPMS Schedule Update; 13.3.11, Master Schedule Maintenance; 13.3.12, IPMS Schedule/Logic Generation; 13.4.2, Remedial Action Estimate Review; 13.4.4, Cost Estimating; and 13.4.5, Project Risk Assessment/Contingency Budgeting.
- Another major guidance document used for reporting progress is the PTS. Specific guidance is issued by DOE-HQ via the DOE Environmental Management Office of Waste Management *Implementation Guide*.

2.6.3 Information Systems Planning and Support Department

Mission

The mission of the ISPS Department is to provide a reliable, responsive, effective, easy to use, and consistent computing environment along with a wide range of services to the UMTRA Project. This mission allows users to focus on their primary responsibilities, increase staff productivity, and improve product quality. ISPS services include information systems resource planning, custom application development, end-user support/help desk, data entry and management, end-user training, computer security, and technical support for all office computer systems, including an office-wide LAN.

Organization

The ISPS Department exists as a LOE support organization in the Management Services Group on the UMTRA Project. The department provides support personnel in three major areas: administrative, technical, and software development. The ISPS Department consists of computer/network support

technicians, application programmers, data entry personnel, and administrative/management staff to support all areas of the UMTRA Project including the TAC, UMTRA DOE Project Team, and other remote UMTRA Project and DOE-related operations. The ISPS Department also provides dedicated information systems support staff to three specific Project departments: DMA, IPMS, and PMCS.

Responsibilities

- **Technical planning and support:** Technical support includes hardware maintenance, hardware and software upgrades, and purchasing and installation of new data processing equipment and software. An ongoing responsibility of the technical support staff includes ensuring the functionality, availability, and reliability of the business critical interconnecting software on the LAN, such as electronic mail, used throughout the TAC and DOE offices.
- **End user support:** Department staff meetings are held weekly to discuss the status and progress of action items, development efforts, and end-user support issues. ISPS Department development staff members meet regularly with various end-user Project teams to discuss Project development planning and Project status.
- **The ISPS Department staff meets weekly to brainstorm and develop ideas** on ways to improve the quality and productivity of information systems throughout the UMTRA Project. This meeting is a proactive effort to support the ISPS Department mission of providing a reliable, responsive, effective, easy-to-use, and consistent computing environment.

ISPS Department staff regularly conducts informal meetings with end-users to assist with processing requirements, answer questions, and solve technical problems. Electronic mail, an on-line help/request system, phones, and memos are employed in regular communications with end-users.

- **Network planning and support:** The UMTRA Project LAN connects all microcomputers and printers together to provide a platform for sharing data, centralized data backups, shared printers/plotters, shared modems, and other computer resources. The Novell network/ethernet environment provides a reliable and secure computing platform. The ISPS Department technical staff monitors LAN utilization and recommends system upgrades based on file server usage, disk drive capacity, and LAN speed and performance. The ISPS Department staff establishes and maintains network user identifications and provides orientation training for new users.
- **Applications programming and development:** Applications development encompasses systems analysis, applications programming, system documentation, end-user documentation, training, and problem solving for

many disciplines on the Project. Major support efforts include the following systems:

- **SPEAR/SEE_UMTRA** (used by the DMA Department) - The technical environmental information database for all site-specific geotechnical, geohydrological, radiological, and engineering data collected and analyzed on the UMTRA Project. The existing system (SPEAR), developed in the 1980s, is being replaced by a client-server implementation SPEAR/SEE_UMTRA. The ORACLE client-server architecture represents a substantial enhancement. SEE_UMTRA will efficiently handle large amounts of Project data and will allow end users to perform a variety of searches as well as data handling, reporting, and mapping tasks that previously required a system programmer. The new system will provide a direct link to many off-the-shelf applications such as Microsoft ACCESS and EXCEL as well as graphics and visualization packages.
- **COBRA and Open Plan** (PMCS Department)—PMCS Department software and database management support for managing the Project's cost and scheduling information base.
- **IPMS Department**—IPMS Department programmatic information management assimilation, analysis, and reporting.
- **Data entry and management support:** Site technical data are entered, verified, and maintained in the SPEAR system by ISPS Department data entry personnel. Some data are entered manually and some are submitted electronically by the subcontracting laboratories. A tracking log is maintained of all data loaded into the SPEAR/SEE_UMTRA system.
- **Computer security:** The ISPS Department is responsible for computer security training and implementation of DOE Orders relating to computer security on the UMTRA Project for the TAC. This includes appointment of a divisional computer protection program manager (DCPPM) and an alternate DCPPM. Annual computer security training, required for all UMTRA Project staff members, is provided by the ISPS Department. Computer security audits are performed on each UMTRA Project computer every 3 years. A LAN security plan and security plans for each microcomputer on the Project are completed and submitted to the DOE-AL computer security site manager. The ISPS Department determines and controls access rights to all software and data on the network.
- **End-user training:** The ISPS Department provides in-house training on the network, microcomputer workstations, computer security, end-user software tools, and specialized application software. In some cases, the ISPS Department simply coordinates scheduling for end-users with outside training facilities. The Training Records Administration and Information

Network (TRAIN) database is maintained to track all training classes that end-users attend.

- Administrative planning and support: The ISPS Department is responsible for writing and implementing personal computer (PC) upgrade and rotation plans for the TAC, administering computer supplies, controlling data processing equipment inventory, and preparing and administering a budget. The software library, diskettes, and documentation are maintained by ISPS Department staff as well. In addition, the ISPS Department is responsible for writing and maintaining certain UMTRA Project SOPs. Software evaluations, recommendations, justifications, and approvals are performed by the ISPS Department. A travel laptop computer checkout procedure is monitored and maintained by the ISPS Department for UMTRA Project staff who travel and require a computer off the site.

Operational controls

The ISPS Department conducts its operations in accordance with accepted industry standards, DOE Orders and standards, UMTRA Project SOPs, and ISPS internal standards as follows:

- DOE Orders 5631.5, Violation of Laws, Losses, and Incidents of Security Concerns; 1330.1C, Computer Software Management; 1360.1A, Acquisition and Management of Computing Resources; 1360.2B, Unclassified Computer Security Program; 1360.4A, Scientific and Technical Computer Software; 1360.3B, Automated Data Processing Standards; and 0108, Standard for Fire Protection of Computer Equipment.
- The SOPs used, maintained, and updated by the ISPS Department include 8.2.2, Coded Data Definitions; 8.2.3, Technical Software Library Organization and Access; 8.2.5, Microcomputer Software and Copyright Control; 8.2.6, Data Entry, Verification, and Archiving in the DART System; 8.2.7, Word Processing Guidelines; and 13.5.13, Local Area Network Files.
- The UMTRA Project, Technical Assistance Contractor, *Project Management Control System Description* is the major guidance document used by the department.

2.7 PUBLIC AFFAIRS

Mission

The Public Affairs Department provides professional communications support to the DOE UMTRA Project Team and its supporting contractors. This includes public affairs planning and counseling, community relations, public participation, media relations, employee information, and communications training.

The department staff assists the UMTRA Project Team in keeping the public informed about the Project's status through the release of accurate, timely information as required by DOE policy. The staff also plays a key role in helping DOE comply with the UMTRCA. Section 111 of that law requires DOE, NRC, and EPA to encourage public participation actively in implementing the provisions of UMTRCA, including the holding of public meetings in states where processing and disposal sites exist.

Organization

The Public Affairs Department reports directly to the TAC Project Manager. The department provides overall guidance and direction for the UMTRA Project public affairs program. Site-specific support is provided by individual public affairs specialists. Special events and projects are assigned to members of the department on a case-by-case basis.

Responsibilities

The responsibilities of the Public Affairs Department include:

- Annually reviewing and updating the UMTRA Project *Public Affairs Plan*.
- Writing and distributing the UMTRA annual report to stakeholders.
- Writing, producing, and distributing an UMTRA Project annual video report.
- Preparing individual communications plans for major Project events.
- Providing public affairs advice to Project Team, TAC, and RAC management and staff.
- Keeping stakeholders apprised of Project goals and progress through regular mailings of factual information.
- Planning, coordinating, and supporting the public participation and involvement program for the UMTRA Project.
- Assisting DOE site managers and other key Project officials in preparing for and effectively conducting public meetings.
- Reviewing and evaluating the sufficiency of published Project public information materials, recommending revisions to existing materials, and preparing new materials.
- Preparing fact sheets, news releases, information brochures, special subject video tapes, and other products for distribution to both the news media and members of the public.

- Assisting DOE spokespersons in conducting telephone and in-person media interviews.
- Assisting Project Team members in answering media inquiries.
- Keeping DOE, RAC, and TAC employees informed about the Project and its accomplishments through the production and distribution of a monthly newsletter, *UMTRA Update*.
- Providing formal communications training to key DOE Project Team, TAC, and RAC personnel.
- Planning and executing public affairs programs designed specifically for site communities on tribal lands and developing information materials, as appropriate, to address the cultural needs of Native American stakeholders.
- Providing timely response to written and telephone requests from stakeholders for Project information.
- Identifying public stakeholder concerns and issues so they can be addressed in Project decisions.
- Preparing speeches, briefings, and displays.

Operational controls

The Public Affairs Department conducts its operations in accordance with accepted industry standards, regulations and orders, and programmatic guidance documents as follows:

- The DOE Orders applicable to Public Affairs operations are 1220.1A, Congressional and Intergovernmental Affairs; 1230.2, American Indian Tribal Governmental Policy; 1240.2B, Unclassified Visits and Assignments by Foreign Nationals; 1340.1B, Management of Public Communications Publications, and Scientific, Technical, and Engineering Publications; 1350.1, Audiovisual and Exhibits Management; 1430.1 Scientific and Technical Information Management; 1700.1, Freedom of Information Program; 1800.1A, Privacy Act; 5400.1, General Environmental Protection Program; 5440.1E, National Environmental Policy Act Compliance Program; 5500.4A, Public Affairs Policy and Planning Requirements for Emergencies; 5500.5A, Public Affairs Policy and Planning Requirements for a Fuel Supply Disruption Emergency; and DOE-P-1210.1, Public Participation.
- Other major guidance documents used in conducting Public Affairs Department operations are Secretary of Energy memorandum, *Guidance on Implementation of the Department's Public Participation Policy*, 1994; Office of Environmental Restoration and Waste Management (EM) *Public*

Participation Guidance for Environmental Restoration and Waste Management; EM Public Participation Policy for Environmental Restoration and Waste Management, 1992; and UMTRCA.

Day-to-day operations are guided by DOE-AL/62350-154, Rev. 0, UMTRA Public Affairs Plan, and written Public Affairs Department operating instructions.

2.8 QUALITY ASSURANCE

Mission

The TAC is committed to providing the DOE with quality products and services. In keeping with this commitment, the TAC management has identified two missions that have been integrated into the Project in an interdisciplinary manner. These missions are 1) QA support to the DOE in the form of audits, federal acquisition regulations (FAR) reviews, etc., and 2) quality improvements of the TAC operations in the form of self-assessments and quality improvement suggestions (QIS). The TAC QA Department is responsible for developing and managing a QA program that integrates these missions into planned and controlled Project activities and for assisting in the monitoring and implementation of these activities. The TAC total quality management (TQM) ethic encourages all personnel, both management and staff, to accept the responsibility for the individual and collective quality of work on the Project as well as for implementation and compliance with the stated mission and goals for the Project. The UMTRA Project philosophy focuses on quality through leadership and organizational commitment.

Organization

Operational independence of the QA function is provided by a reporting structure that requires the QA manager to report to the JEG Albuquerque Operations Manager and to a senior JEG executive rather than the TAC Project Manager.

Responsibilities

The QA personnel interface with all levels of management, supervisors, and staff in the implementation, overview, evaluation, and feedback associated with the QA and TQM programs. In developing and managing the QA program, the QA Department has the following responsibilities:

- Maintaining the status of audits in the TAC action memo logging system (TAILS) database system. TAILS entries are used to update audits as well as corrective actions.
- Developing and maintaining the TAC QAPP and the TAC QA implementation plan (QAIP) for surface and ground water.

- The QAPP describes how the TAC will ensure the quality of all aspects of its operation.
- Establishing and implementing a QA orientation and training program. Technical personnel training consists of an initial orientation followed by periodic updates on areas of interest.
- Reviewing procurement documents to ensure that they contain the applicable quality requirements.
- Reviewing SOPs for activities affecting the quality and defensibility of data and analyses provided to the DOE.
- Reviewing RAPs and remedial action inspection plans, in conjunction with the site managers and technical staff.
- Reviewing nonconformances and participating in the implementation of corrective actions.
- Establishing and implementing the QA audit/surveillance programs for TAC activities in support of the Project Manager.
- Representing Project QA matters, including resolution of quality problems.
- Evaluating quality results and performing trend analyses for TAC and subcontractor performance.
- Informing management on the status and statistics of the QA program findings.
- Providing QA-related support to the UMTRA Project Team QA manager by participating in the development of the UMTRA Project Team QAPP and conducting QA audits or surveillance of the RAC for the UMTRA Project Team.
- Developing the final audit report for the Project Team to submit to the NRC as part of the final licensing package for disposal cells.

In developing and managing the TQM program, the QA Department has the following responsibilities:

- Prepare lessons learned for TAC activities as directed by the DOE or TAC management.
- Assist senior TAC managers in the development of quality improvement plans. These plans contain the specific goals, actions, and manager plans to continue to improve the service their organization provides the DOE.

- Assist in the formation of quality improvement teams (QIT) by providing process consultation, team building, and meeting management and facilitation.
- Serve as the TAC liaison with the DOE-AL Office of Quality Management and other external offices on quality issues and communicate information about the organization's quality activities.
- Serve as the source of information on quality matters, such as training opportunities, conferences, resource materials, and status tracking of effectiveness of quality improvements.
- Develop UMTRA-specific TQM training.

Operational controls

The QA Department conducts its operations in accordance with accepted industry standards, regulations and orders, SOPs, and programmatic guidance documents as follows:

- The primary DOE Order applicable to the QA operations is DOE 5700.6C, Quality Assurance. The requirements of this order have been codified in 10 CFR 830.120, Nuclear Safety.
- The QA Program is documented in the UMTRA Project TAC QAPP and the UMTRA Project TAC QAIP for surface and ground water. These programmatic-level documents are supported by the following SOPs: 8.1.1, Preparation of Standard Operating Procedures; 9.2.1, Qualification of Audit Personnel; 9.2.2, Quality Audits; 9.2.3, Training; 9.2.4, In-Process Construction Surveillances; 9.2.5, Controlled Documents; 9.2.10, Remedial Action Close-Out Inspection; and 9.2.11, Inspection of Subcontractors Operations.

SOP 17.3.2 Technical Approach Document Checklist for UMTRA document review has been subsumed by the PUBS Department's desktop guide.

- The primary guidance document used in conducting operations is 10 CFR §830.120, Nuclear Safety Management.

2.9 ADMINISTRATIVE SUPPORT

The administrative support departments discussed in this section report directly to the JEG Albuquerque Operations manager who reports, in turn, directly to JEG corporate headquarters in Pasadena, California. Administrative support is provided to the UMTRA Project following the matrix management approach. None of the administrative support staff members are dedicated 100 percent to the UMTRA Project. However, using the matrix management approach allows

greater flexibility to the UMTRA Project when scarcity of resources or certain skill codes occur during short work requirements or peak loading, keeping the costs of subcontract labor down.

Use of other corporate members of the TAC team is not practicable in the administrative sections. This effort is supported entirely by JEG.

2.9.1 Contracts and Procurement

Mission

The mission of the Contracts Department is to ensure that the TAC has all the supplies and specialized support necessary to perform the contract. The Contracts Department operates through a DOE-approved purchasing system that fully complies with FAR requirements as implemented by the DOE acquisition regulations (DAR). The Contracts Department receives requisitions from various members of the TAC technical staff, and makes the necessary purchases through small purchase actions, purchase orders, or subcontracts as appropriate for the size and complexity of the requirement. The Contracts Department ensures that the purchases are appropriate for the contract and the costs incurred are allowable under the guidance in FARs.

Organization

The Contracts organization consists of buyers and contract administrators. The Contracts Department reports directly to JEG corporate headquarters and indirectly to the manager of the JEG Albuquerque Operations office. Support to the TAC is provided through a matrix organization that permits staff to be assigned as necessary to meet the UMTRA Project work load.

Responsibilities

The Contracts Department is responsible for the following major activities:

- Administering the prime UMTRA Project contract.
- Preparing and submitting scheduled reports, including a semiannual report of plant and capital equipment, subcontracting report for individual contracts, summary subcontract report, and labor escalation rate report.
- Providing counsel and guidance to Project Manager and staff with regard to contractual matters or cost allowability issues.
- Monitoring cost expenditures and provide funding notification to the DOE contracting officer pursuant to the "limitation of cost" clause.

- Purchasing all supplies and equipment needed in support of the UMTRA Project.
- Soliciting, negotiating, awarding, monitoring, and closing out all subcontracts for supplies and services needed in support of the contract. This process includes development of source lists, preparation of requests for proposals and quotations, review of proposals for responsiveness and responsibility, analysis of cost and price, preparation of the negotiation memorandum, and preparation of the subcontract document.
- Preparing documentation for contracting officer consent to various classes of subcontracts.
- Processing delivery orders under various subcontracts awarded in support of the Project.
- Monitoring cost performance of teaming partners' subcontracts through review of charges invoiced.
- Continuing the award process for new soil and water analysis subcontracts.
- Providing the Accounting Department with subcontract commitment data.
- Processing invoices for all subcontracts.
- Assisting the Accounting Department with invoice and payment problems.
- Providing purchasing and subcontracting training to TAC staff.

Operational controls

The Contracts Department conducts its operations in accordance with accepted industry standards, regulations, SOPs, and programmatic guidance documents, as follows:

- The SOPs used, maintained, and upgraded by the Contracts Department include 2.4, Pre-Negotiation Objectives of Cost Proposals, and 8.1.4, Management and Administration of Subcontracts for Acquisition and Review of Technical Data.
- Other applicable major guidance documents used in conducting Contracts Department operations include both the FARs and the DARs.

2.9.2 Human Resources

Mission

The mission of the Human Resource Departments at JEG and at each of the teaming partners of the TAC is to provide timely and quality resources that fulfill the resource requirements for the duration of the UMTRA Surface and Ground Water Projects. The TAC JEG Human Resources Department works closely with UMTRA Project Management to ensure adequate TAC staffing, coordination of health and safety staff members to ensure a safe work environment, and to guarantee equal employment opportunity compliance, tracking, and reporting.

Organization

The monthly resource planning process is conducted by the TAC and is coordinated through the Human Resource organizations at each of the teaming partners. Careful scrutiny is applied by the TAC and its teaming partners to execute cost-effective solutions in the application of staff and corporate resources to satisfy UMTRA Project needs. Support of the TAC is provided through a matrix organization that permits staff to be assigned as necessary to meet the UMTRA Project work load.

Responsibilities

The separate corporate Human Resource Departments of each of the teaming partners are responsible for new employee orientation and for benefits coordination and distribution.

In addition, the JEG Human Resources Department is responsible for the following:

- Assigning security badges to permanent and temporary employees and to visitors.
- Developing emergency evacuation procedures and training.

Operational controls

Human Resources conducts its operations in accordance with accepted industry standards, SOPs, and programmatic guidance documents as follows:

- The SOPs used, maintained, and updated by the Human Resources Department include 2.1, Albuquerque Operations Office Security Badging System; 4.0, UMTRA TAC New Employee Orientation; 4.1, Corporate Administrative Policies; 4.2, Smoking in the Work Place; 4.3, Affirmative

Action Plan; 4.4, Reporting of Pregnancies; 4.5; Interviewing Process for TAC Vacancies; and 4.6, TAC Employee Career Planning Process.

- Other applicable major guidance documents used in conducting Human Resource Department activities are JEG minimal accepted procedures and the JEG annual affirmative action plan.

2.9.3 Accounting

Mission

The mission of the Accounting Department is to provide accounting support to all disciplines of the TAC team by assuring timely payment of purchases and services, accurate maintenance of historical cost records, accurate actuals and accrual cost calculations, and timely preparation and submission of the monthly UMTRA Project invoice to the DOE.

With the adoption of the ABC method, the Accounting Department initiated a focused effort to ensure that actual costs are recorded accurately against the more complex accounting structure employed to meet the ABC requirement. Weekly efforts concentrate on the immediate correction of errors or invalid charges to ensure ABC accuracy.

Organization

The Accounting organization consists of accountants, accounting clerks, and administrative support. The Accounting Department reports directly to the JEG corporate headquarters and indirectly to the manager of the JEG Albuquerque Operations office. Support to the TAC is provided through a matrix organization that permits staff to be assigned as necessary to meet the UMTRA Project work load.

Responsibilities

The Accounting Department is responsible for maintaining all accounting records for the UMTRA Project (Figure 2.3). The Accounting Department is responsible for day-to-day coordination of several key elements:

- JEG corporate accounting (Pasadena) to assure timely and accurate processing of labor, subcontract, and other direct cost data through the JEG accounting system.
- UMTRA teaming partners respective account representatives to assure receipt of applicable actual and accrual cost data.
- Project control updates, including weekly actual cost data and monthly accruals data, for incorporation into the PMCS monthly status report.

FIGURE 2.3
ACCOUNTING DATA FLOW AND ANALYSIS

- DOE Project Team monthly estimated cost incurred and funding level reconciliation by ADS.
- Preparation of monthly UMTRA Project invoices through JEG corporate accounting.

Organizational controls

The Accounting Department conducts its operations in accordance with accepted industry standards, regulations and orders, SOPs, and programmatic guidance documents as follows:

- DOE Orders 4700.1, Program Management System; N4700.5, Project Control System Guidelines and Implementation Reference Manual; DOE/MA-0221, Data Analysis Guide; and DOE/MA-0047, Systems Review Surveillance Guide.
- The governing SOP is 5.1, Corporate Accounting Procedures.
- The major guidance documents used by the Accounting Department are the FARs, DARs, and rules and regulations promulgated by the Defense Contract Audit Agency.

2.9.4 Facilities

Mission

The Facilities Department mission is to provide office space, furniture, equipment, and any other tools necessary to perform the UMTRA Project SOW. The mission also includes office security, security scanner maintenance for UMTRA Project Team space, and telephone and paging system support.

Organization

The Facilities organization consists of a single point of contact coordinator. The facilities coordinator reports directly to the manager of the JEG Albuquerque Operations Office. Support to the TAC is provided through a matrix function that permits facilities coordination to meet the UMTRA Project work load.

Responsibilities

JEG is responsible for providing facilities management and support to the UMTRA Project. Facilities management responsibilities include the following:

- Providing work space, office furniture, and telephones to all TAC employees.

- Providing floor directories.
- Furnishing door name tags.
- Printing business cards for all TAC employees.
- Coordinating UMTRA-related office moves.
- Ensuring that UMTRA Project facilities are in adequate working condition.
- Controlling office climate (heating and cooling).
- Ensuring the availability of adequate office equipment (copiers, fax machines, and the like).

Operational controls

The Facilities Department conducts its operations in accordance with accepted industry standards, regulations and orders, SOPs, and programmatic guidance documents as follows:

- The SOPs used, maintained, and updated by the Facilities Department include 6.1, UMTRA Project Document Control Systems Manual; 6.2.1, Administrative Control of UMTRA Project Documents; and 6.2.7, Transfer of Projects to Remote Storage Facilities.
- Other applicable major guidance documents used in conducting facilities operations are 36 CFR Parts 1220 - 1238, National Archives and Records Administration, and DOE Order 1324.5.

3.0 MANAGEMENT PLANNING AND CONTROLS

The PMCS Group integrates tasks and milestones with the required resources. Progress towards meeting task and milestone schedules is assessed through the application of performance measurement devices to the areas or tasks considered of a critical need or to tasks that may impact a site or Project critical path if not completed. By assigning resources to tasks over the scheduled tasks' durations, the federal budget profiles are determined along with funding requirements.

The TAC, in response to DOE-HQ budget validation review team recommendations, implemented several changes to the WBS, installed ABC, upgraded the PMCS system software, and changed the estimating methodology. These extensive changes resulted in the TAC's defining a new system, and completely implementing it over a 6-month period. The results of implementing the ABC concept, in addition to the WBS changes and other enhancements, will be used in future detail planning.

The graded approach prescribed in DOE N4700.5 (provides guidelines for DOE Project Teams and contractors to use a risk-based graded approach to determine degree of risk on segments of the Project and to determine what type and level of Project controls to employ at the contractor level to mitigate risk and report progress) is in use on the Ground Water Project. The Surface Project continues to use the system reviewed during the June 1992 compliance review. The graded approach application on the ground water portion of the Project is described in more detail in the TAC's UMTRA Project Management Control System Description (DOE, 1992).

3.1 COST PLANNING AND CONTROL

The TAC plans, budgets, and controls its work to meet the schedule milestones and funding constraints set up by the DOE Project Team. Major milestones and related budgets are traceable from the UMTRA Project master schedule to the TAC control account and work package level schedules. The lowest level of the master schedule resides within the control account as the work package and/or milestone and sums up the schedule hierarchy to the master schedule. Similarly, estimates and budgets are detailed at the work package level within the control account. All planning of schedules and budgets is performed in a manner consistent with the contract WBS, the TAC organization, and authorized funding limits (IPMS description, Sections 4.0, Budget Development, and 3.3, Schedule Component of the Baseline [DOE, 1993a], and PMCS description, Sections III-B and C [DOE, 1992]).

The integration of the scope of work, schedule, and budget is accomplished within the control account at the work package level. (The work package is where resource loading occurs and sums up to the control account level and on up each level of the WBS to the total Project WBS level I.) This provides the formal means for planning, budgeting, and establishing the basis for performance measurement and variance analysis and reporting status to the TAC and the Project Team.

3.2 TASK PLANNING AND FUNDS MANAGEMENT

The TAC provides task planning and funds management for obtaining, using, and controlling UMTRA Project funds (IPMS Description, Section 3.0, Work Authorization, and Section 7.0, Funds Management [DOE, 1993]). Upon receipt of the DOE task assignment, the TAC prepares the annual task plan. The task plans contain detailed TAC plans and schedules, including cost and labor plans, and deliverable plans to perform the work required in each task assignment. The task plans are then submitted to the DOE for approval within 10 calendar days of receiving the task assignments from the DOE. After negotiations between the TAC and the contracting officer, the UMTRA Project Team approves the funding for part or all of the task assignment. Approval to proceed is transmitted to the TAC, which specifies and documents the authorized funding. The TAC Project Manager then allocates the authorized funds among the tasks.

During each task assignment period of performance, remaining funds are reviewed to determine if they are sufficient to perform the authorized work. The TAC accounting section submits a monthly estimated cost-incurred report containing information on billed costs and funding status. If changes to the task plan result in modification to the negotiated task assignment value, the cost plan and task plan is revised based on approved contract changes.

While not all elements of the work covered in the annual risk assignment from DOE to the TAC result in published deliverables, many do. Appendix A lists most of these planned and general deliverables and describes their intent, scope, and audience.

3.3 SCHEDULE PLANNING AND CONTROL

The TAC scheduling system is based on the hierarchy of Project schedules that are traceable, in increasing detail, from the UMTRA Project master schedule to the TAC detailed work package schedules.

The UMTRA Project master schedule (Section 2.6.2) is the highest level in the schedule hierarchy (Figures 3.1 and 3.2). This schedule includes major site activities and is updated monthly to track and report progress at DOE-conducted review meetings.

The contracting officer's representative's (COR) schedule is the TAC top-level schedule and serves as the task assignment schedule baseline. It contains the planned dates for delivery of the other products and services required during the task assignment and in accordance with the annual task plans to support the UMTRA Project schedule. Task plan milestones, deliverables, and required accomplishments are coded in the scheduling system for ease in tracking and reporting. Task plan requirements are also tracked weekly in the TAILS (Section 4.3.1) to ensure proper focus is maintained on DOE requirements. All task plan

REMEDIAL ACTION

	PLANNING & DESIGN, NEPA		NRC LICENSE
	REMEDIAL ACTION		TRANSFER TO GJPO LTSP
	ENGINEERING		
	GRAND JUNCTION CELL CLOSURE EXTENSION		

(VP REMEDIAL ACTION INCLUDED IN PROCESSING SITES,
EXCEPT FOR GRAND JUNCTION, RIFLE AND
FALLS CITY)

FIGURE 3.1
UMTRA SURFACE PROJECT SCHEDULE (CURRENT PLANNING)

A Front end of compliance strategy implementation includes bid cycle.

B "Post Compliance" activity includes, where appropriate, Certification Report, Confirmation Report, LTSP Mod, and/or licensing. For NFACD sites, this activity occurs immediately following the publishing of the RAP.

NOTES: 1. THE ABOVE SCHEDULE DOES NOT IMPLY ANY PREDECISION TO THE PEIS.
2. THE ABOVE SCHEDULE REPRESENTS WORKING DATES.

FIGURE 3.2
UMTRA GROUND WATER PROJECT SITES SCHEDULE

deliverables are coded in TAILS as either a planned listed deliverable item or a planned general deliverable item if not listed specifically as a deliverable.

TAC site schedules contain the time-phased plan to produce site-related documents and services. The TAC site schedules are used to integrate, manage, and monitor detailed site activities. Traceability of key site activities is maintained throughout the schedule hierarchy by the appropriate WBS codes and by retaining milestones in lower-level, detailed schedules that support similar milestones in higher-level schedules. Updates are performed via the CSEs and the CAMs; status provided at the work package level is in turn summed up the WBS to the highest level schedule.

3.4 PERFORMANCE MEASUREMENT

Each month, site managers and department managers are required to review site and non-site schedule status. This review is the basis for providing updates to the COR and updating the fiscal year deliverables list, site schedules, and Project schedule. An analysis of the period's schedule performance is provided to TAC management for review and necessary corrective actions. The PMCS description and procedures describe the methods and assign responsibilities for maintaining and operating the budgeting and scheduling system.

As part of performance measurement, the TAC reviews the employee timecard charges at the control account level on a weekly basis. The performance measurement system includes a validation program that, based on certain criteria, generates a listing of actual charges that may be considered invalid. CAMs and CSEs review this invalid listing to ensure that only valid and correct charges are made. Changes/corrections to the actuals are then sent to the Accounting Department for proper posting in the accounting system.

This process is an iterative, continuing series of planning, authorizing, performance measurement, and baseline management activities. Numerous management reports such as the planned, working, and actual schedule dates report (P_Sched) and variance analysis reports (VAR), Format I cost performance reports and analyses are prepared and distributed to the CAMs, technical manager, assistant Project managers, and the Project Manager. In addition, by employing tighter-than-contracted variance thresholds, exceptions to planned performance surface earlier than DOE requirements, allowing the TAC more time to initiate remedial measures to preclude exceeding a DOE threshold and demonstrates prudent use of DOE funds.

3.5 FEDERAL BUDGET PREPARATION

Each year, the TAC is required to prepare individual detailed cost estimates for UMTRA Surface and UMTRA Ground Water Projects. Several revisions are usually required, including at least one edition of the project planning level (PPL), target level, and final budget case for Surface and Ground Water. While the primary focus of these budget submittals encompasses the 5-year planning

window, a TAC total estimated cost (TEC) projection is also required. The TAC TEC includes detailed cost estimates for the duration of the Surface and Ground Water Projects by WBS, by ADS, and by site.

The TAC has implemented several changes to the WBS, installed ABC, upgraded the PMCS software, and changed the estimating methodology. These changes resulted in the TAC's defining and installing a new system. The results of implementing the ABC concept in addition to the WBS changes and other enhancements will be used in future detail planning.

As part of the implementation of the ABC methodology, an automated basis of estimate (BOE) system was designed and implemented. All WBS 40 performers and CAMs use the new BOE system to spread resources over the task duration. The BOE system includes a comment section allowing the user to describe the basis for the resource requirements for accomplishing the process, deliverable, or activity as part of the ABC method.

The federal budget process also includes preparation and presentation of TAC cost estimates each fiscal year. The TAC is required to present Surface and Ground Water budgets to the DOE Project Team in an annual bottom-up review. The TAC also is required to support other DOE Project Team-sponsored reviews, including DOE-HQ ICE reviews, budget validation reviews, baseline validation audits, and MPCE reviews.

3.6 CHANGE CONTROL

As an integrated part of the PMCS, the TAC administers the Project cost, schedule, and technical baseline by site, by WBS, and by project (Surface and Ground Water). The DOE Project Team has established cost and schedule milestones thresholds, as outlined in the IPMS description. All proposed changes to cost or schedule are reviewed and analyzed internally. Changes exceeding the DOE thresholds are processed through the CCB (Figure 3.3). The CCB is chaired by senior representatives of the DOE Project Team and attended by key DOE staff members.

A CCB meeting is held by the DOE Project Team monthly to review change requests submitted by the TAC, as well as other Project participants. Change requests submitted by the TAC must be approved by the appropriate DOE site manager, CCB chairman, and the DOE Project Manager.

3.7 TAC ACTION MEMOS

A TAC action memo (TAM) is a written request for action from the DOE Project Team with a due date received in the form of a letter, a memo, a completed and signed TAM form, or an oral request. TAC staff members shall document an oral request by completing the TAM form and obtaining the DOE requestor's signature. The TAC Project Manager will determine which written requests will

FIGURE 3.3
CCB PROCESS FLOW CHART

be tracked as TAMs. Written requests not designated as TAMs will be handled as unplanned deliverables. TAMs are entered and tracked until complete in the TAILS described in Section 2.8.

4.0 PROJECT ADMINISTRATION

The primary components that form the project management systems employed by the TAC on the UMTRA Project assure on-time delivery of a quality product within cost objectives. The application of the TAC technical labor resources to the latest working schedules is accomplished through resource planning meetings (RPM) and the TAS, which use weekly and monthly meetings involving the site and technical managers as well as the responsible assistant Project managers. Individual members of the technical staff have weekly up-to-date assignment sheets describing current work assignments.

Communications are enhanced via electronic mail on the latest state-of-the-art electronic systems throughout the TAC and the DOE. TAILS provides a direct link and quick reference to the latest status of deliverables or DOE action items. TAILS identifies the persons responsible for accomplishing the action, the action coordinator, the author, and the backup for manager and DOE ready reference.

Since the majority of the deliverables on the UMTRA Project are documents, there is also a publications tracking system database available for ready reference. The publications tracking system, TAILS, and the quality improvement process are described in more detail in the following sections.

4.1 PERSONNEL MANAGEMENT

The UMTRA Project, with multidisciplinary aspects to both surface restoration and ground water remediation at 24 individual sites in 10 states, presents a formidable task of staffing and managing the appropriate personnel resources to accomplish the various objectives of the Project. The TAC meets this challenge by maintaining a staff dedicated solely to the UMTRA Project to accomplish anticipated, budgeted activities during the fiscal year. The staff is augmented as necessary during the year by drawing upon corporate resources from the teaming partners. This arrangement provides for an efficient staffing of "routine" work, but enables the Project to accomplish additional important work that arises or is otherwise identified during the course of the year. The logistical planning for technical staff work assignments is carried out during regularly scheduled RPMs, as described in Section 4.1.1.

Another critical aspect of resource management is staff development, which ensures that the dedicated staff receive ongoing professional training to ensure that they remain current in their respective areas of expertise, broaden their technical horizons (with respect to multidisciplinary projects), and bring state-of-the-art concepts to the UMTRA Project. Elements that support TAC staff development are discussed in Section 4.1.2.

4.1.1 TAC staff resource management process

Resource planning begins with the estimates to accomplish technical parameters within schedule and cost objectives. Thereafter, the estimate becomes the

basis for the budgeting process described in Section 3.0, Management Planning and Controls. A database system, the TAS, has been developed for the purpose of assuring that the technical, schedule, and cost objectives are met over time. Labor resources, the largest component of the cost drivers for the TAC, are managed through the TAS.

The features of TAS include a LAN-based system that links PMCS budget, schedule, and task data with a user-friendly spreadsheet interface. The system identifies employee overutilization within the technical departments. It is used for reporting current-year planning at the task level and summarizes up the organization and/or the WBS and by site providing needs by discipline or labor resource type.

Monthly RPMs review accomplishments and resolve any resource conflicts towards achieving technical and schedule objectives. Both technical and site managers attend these meetings. New or changed tasks and/or schedules are reviewed along with a review of task status. New working schedules may be employed along with employee reassignments. Assignment of employees to tasks are made and/or reviewed. The results of these meetings are input on the TAS. Updated department/site employee assignments by task are then distributed to the site and technical managers as well as to the technical staff.

4.1.2 Staff development

The TAC is committed to providing the DOE highly trained and knowledgeable personnel. This commitment requires that personnel receive the training required to remain current in their fields and aware of the changing DOE Orders, regulations, and procedures that affect their work on the Projects. The continued professional development of the UMTRA Project staff is maintained by encouraging attendance and presentations at professional seminars specific to the ever-changing field of environmental restoration associated with the UMTRA Project.

To facilitate the tracking of training requirements, the TAC has implemented the TRAIN system. This database, maintained on the UMTRA LAN, contains each individual's training requirements. The QA Department maintains the TRAIN database. Individual department managers are responsible for determining and entering the training requirements for their staffs. Requirements may include reading DOE Orders and SOPs, attending short courses, or formal classroom education. Each UMTRA Project TAC employee receives a new employee orientation manual upon hiring. Copies of the manual have been distributed to all task and department managers. The manual contains a checklist of the specific aspects of training pertinent to the individual employee. The manual contains reference materials to familiarize the employee with the UMTRA Project and the TAC way of doing business.

The PERC decides who should travel to present papers or attend conferences. Generally, the criteria considered are the technical adequacy of the paper or

abstract and whether the individual has given a paper, presentation, or workshop within the past year. A general rule of thumb is one conference or workshop per year per staff person. However, not every staff member can go in any given year. By requiring all such attendance be approved by the PERC, the TAC ensures that the available funds will be spent wisely and fairly. The members of the PERC are the Deputy Project Manager, the assistant Project manager for Technical Services or his designee, and the assistant Project manager for Site Management.

4.2 COMMUNICATIONS

The UMTRA Project is a mature DOE project that has evolved over the past decade and has developed a multitude of systems and stakeholders operating in an extremely complex infrastructure. The TAC role in this structure requires that it maintain a constant awareness of all Project activities and keep the DOE Project Team apprised of all issues. Therefore, a key feature of the TAC's management approach is an extensive set of communication systems implemented for the UMTRA Project. These systems assist all functional disciplines in performing UMTRA Project tasks associated with management, technical support, administrative support, and financial and Project controls. They are described in the following sections.

4.2.1 Meetings

The TAC conducts meetings to accomplish a variety of communications objectives, including dissemination of information, planning, problem solving, and coordinating activities. A continuing effort is made to evaluate these meetings to ensure that they are necessary and are appropriately attended. It is the policy of the TAC that all meetings are adequately planned and executed to include advance planning and notification, an agenda, preparation of attendees, adherence to time allowed, and the preparation and distribution of notes after the meeting.

Table 4.1 lists the "standing" meetings that form an important part of the TAC's management approach. Numerous other meetings are conducted, as needed, but those listed below are key to the TAC's Project communications.

4.2.2 DOE communication guidelines

Communication between the TAC and DOE requires a degree of formality. This is a function of the contractual relationship between the two organizations. This guideline is not intended to discourage casual, informal, or social communication with managers and staff of the DOE Project Team. This type of contact is actually encouraged because it builds rapport and confidence, which lays a strong foundation for professional communication. However, it is particularly important that the following kinds of communication be conducted through formal channels:

Table 4.1 TAC standing meetings

Meeting	Frequency	Attendees	Purpose
TAILS meeting	Weekly	All TAC managers	Review current status of TAILS items, deliverables, and current issues. Disseminate information from the Project Manager to TAC managers.
Standup meeting	Semiweekly (Wed & Fri)	All TAC managers	Provide a short (15 minutes) update on current issues and coordinate priorities and activities.
Assistant Project manager meeting	Weekly	Senior managers	Address significant management issues and plan and coordinate TAC activities among the assistant Project managers.
Department staff meetings	Weekly	Department manager and staff	Disseminate information and discuss issues pertinent to the department.
Site team meetings	Variable	Site manager, task manager, site team members	Coordinate multidisciplinary site activities, disseminate information, and resolve issues.
Kick-off meetings	As needed	Site manager/technical manager (sponsor), task manager or document coordinator, task/document team, Project Team representative(s)	Review scope, content, responsibilities, budget, and schedule for applicable task or document. Project Team representation intended to ensure effective DOE involvement throughout the task.
Resource planning meeting	Monthly	Site managers, technical managers, assistant Project manager-technical services, assistant Project manager-site management	Review and adjust technical staff assignments to meet current schedules, work loads, and priorities.
DOE/TAC management meeting	Monthly	DOE Project Manager and group leaders; TAC Project Manager, Deputy Project Manager, assistant Project managers, QA manager, and Public Affairs manager	Discuss Project issues of interest to the DOE Project Manager and group leaders. Obtain feedback on TAC performance. Identify Project Team actions needed to enable TAC performance.

Table 4.1 TAC standing meetings (Concluded)

Meeting	Frequency	Attendees	Purpose
Project critical issues meeting (PCIM)	Monthly	DOE group leaders, site managers, technical managers; TAC Deputy Project Manager, assistant Project managers, site managers, technical managers	Discuss predefined issues that are considered critical to Project success. A core group meets prior to the PCIM to set the agenda.
Audit schedule meeting	Monthly	Project Team reps; TAC REG Department manager, QA manager	Review and adjust site audit schedules; usually for the remainder of the construction season.
Teaming partner meeting	As needed	TAC Project Manager staff, senior teaming partner representatives, and corporate representatives	Present Project status and projections to senior corporate representatives. Discuss corporate concerns.

- Commitments to produce a deliverable or establish requirements.
- Changes to the requirements or schedule for a deliverable.
- Delivery of products/documents.
- Presentation of technical information or opinion.

Site-related communications concerning the above items are handled through the TAC site managers. Communications on nonsite-related topics are handled through the technical or support staff or senior TAC managers, typically with their counterparts in the DOE organization. Commitments for unplanned deliverables requiring more than about 8 hours of effort are documented on a TAM and processed as described briefly in Section 5.1 (SOP 1.4 describes the TAM process).

Part of the professional service that TAC provides to the DOE is the airing of differing viewpoints on technical issues. The way in which these differing viewpoints are presented can have profound consequences on the effectiveness of the communication, as well as the DOE's perception of the TAC's professionalism. Two approaches are preferred:

- Resolve conflicting viewpoints internally and present an agreed-upon solution or approach to the DOE with supporting arguments.
- Present the conflicting viewpoints to the DOE with the best representation of each case so that the DOE can make a fully informed decision.

Formal communication with the DOE occurs via memo through the appropriate assistant Project manager or via letter through the Project Manager as specified in applicable Project procedures. All communications directed outside the TAC must go through a site manager, assistant Project manager, or the Project Manager/Deputy Project Manager as specified in the procedures.

Communications concerning the UMTRA Project directed to the public or state, tribal, or other federal agencies should always be coordinated through the DOE Project Team. Formal correspondence of this type will normally be sent under DOE letterhead.

4.2.3 On-line electronic information systems

The UMTRA TAC Project team members have access to state-of-the-art LAN systems. The LAN is used by both the DOE Project Team members and the TAC staff. All members of the DOE Project Team and the TAC have PCs at their workstations for access to the information described below.

These systems or methods have been developed to increase availability to common UMTRA Project information, make it generally easier to access the information, and provide an effective method for communicating throughout the UMTRA Project. Most of the methods are outlined in the following paragraphs.

Electronic mail bulletin boards provide a method of posting information quickly and broadly, reducing the amount of reproduction and internal distribution. Some uses of the bulletin boards include DOE security issues, training announcements and schedules, calendars of Project events, information systems tips, and public affairs news flashes.

The Public Affairs Department maintains fact sheets on all UMTRA Project sites available for viewing on the UMTRA Project LAN. These fact sheets are stored on a public bulletin board on the UMTRA Project electronic mail system.

Most UMTRA Project standard forms are available on the LAN. Having these forms on-line reduces printing costs, storage space, distribution efforts, and handwritten form completion and makes revisions to the forms very easy.

The SOPs are also available on the LAN. This on-line access reduces the amount of paper use on the Project while offering an option to print if required. It also eliminates many problems associated with maintaining and distributing revisions.

These systems and methods are continuously updated to support our goal of providing on-line electronic information on all computing platforms to all UMTRA Project TAC and DOE users.

4.2.4 UMTRA Update (Newsletter)

Maintaining a regular flow of timely, accurate information to Project employees is essential for high morale and productivity. To address this important need, the TAC has established a monthly Project newsletter, the *UMTRA Update*. The eight-page publication is distributed to all Project Team, TAC, and RAC employees, as well as key subcontractor personnel and selected external stakeholders. It provides current information about the Project's mission, goals, accomplishments, and people; recognizes outstanding performers; highlights important contributions made by the wide variety of professions on the Project; and promotes pride in both the Project and the mission.

4.3 ADMINISTRATIVE SYSTEMS

In supporting the DOE, the TAC must receive direction from numerous individuals and through various channels. These channels range from formal task plan activities to oral requests made in passing. Requests may come from DOE site managers, technical personnel, or group leaders. To coordinate the status of the various resulting activities, the TAC has developed and implemented the following tracking systems.

4.3.1 TAC Action Item Logging System

In a service organization such as TAC, tracking action items is critical. Management must be made aware of events that may affect the schedule for

completing action items. To accomplish this requirement, the TAILS database was developed to provide a tool and communication medium allowing team members, as well as the DOE managers, to track task status and employee commitment more effectively in an environment with multiple critical deliverables. The software allows multiple users to access a common database of Project-related tasks. Task items are assigned action coordinators, commitment dates, a detailed task description, estimated LOE, and other related information. Each action item is also identified as an UMTRA task plan, a new unplanned requirement, or a special DOE request (See SOP 1.3, TAC Action Memos, JEG, n.d.).

TAILS items can be tracked with comments and new schedule dates can be added as needed. Task detail, listings, summary, and management-level summary reports can be generated from the system with advanced levels of selection filters/criteria. The wide variety of reports allows the system to be used for many purposes by any PC user on the UMTRA Project LAN, including the DOE.

4.3.2 Pubtracker

In June 1993, the ISPS Department developed a tracking and status reporting system, known as "Pubtracker," for the PUBS Department. The system was developed to assist in planning the publications work load, communicating information regarding the status of documents, and capturing a history of the publications process.

Pubtracker is updated weekly by the publications manager and technical editors. Information is gathered by way of meetings, TAILS, the budget and planning documentation, and verbal or written notification by authors, document sponsors, or document coordinators.

Information may be sorted and reported by site, document type, date due to the DOE, document coordinator, and technical editor. Pubtracker's reports are used during technical managers' and site managers' meetings to review the progress of deliverables. It is also available to anyone who has access to the LAN for checking the progress and status of any document in the system.

The implementation and use of Pubtracker has significantly increased the visibility of the publications work load and has allowed the TAC to be more effective in planning and scheduling resources and establishing work priorities.

4.3.3 Travel system

All travel by TAC personnel is governed by FAR 31.205-46, which sets forth travel and general allowance costs. Federal travel regulations (FTR) also prescribe meals and incidental expenses when on travel under the UMTRA Project contract (Nienow, 1994). UMTRA Project contract travelers must also

follow guidelines for long distance calls and maximum per diem rates (Nelson, 1994; Nienow, 1993).

Travel authorizations are filled out with all required information and processed for approval through the TAC management and DOE Project Team. They are then entered into the Automated Travel Logging and Awareness System (ATLAS). A report is generated from ATLAS weekly to apprise TAC management and the DOE Project Team of TAC staff traveling on UMTRA-related business, such as site-related conferences and training.

The responsibility for adherence to the FTRs, FARs, and other guidelines resides primarily with the CAMs, site managers, and department or technical managers on the UMTRA Project.

4.4 DOCUMENT PRODUCTION PROCESS

The TAC process of review and production of documents was designed to ensure timeliness and quality of deliverables. The process is shown in Figure 4.1 and described below. For recurring documents, deliverable item descriptions (DID) and detailed activity descriptions (DAD) (Figure 4.2) are typically available for the document team to begin the planning process. DIDs briefly describe the document and answer crucial questions: What is the purpose of the document? Who is the intended audience? DADs provide additional information for the major activities required to prepare the document, including the scope of each activity, the schedule duration and logic constraints, the estimated staff resources needed, special considerations, and references required to complete the activity.

The production process follows the steps discussed below.

- Step one of the document production process, document planning, emphasizes front-end planning. During this step, the document sponsor, document coordinator, DOE representative, PUBS manager, and QA representative meet to discuss the purpose of the document, its audience, preparation requirements, and references. This information and a draft annotated outline are documented through the preparation of a DID (Figure 4.3).
- During step two, the document kickoff meeting, the document sponsor, document coordinator, DOE representative, technical editor, QA representative, senior technical reviewer, peer reviewers, and authors meet to review the DID and DAD, potential issues, problem areas, technical challenges, data requirements, schedule, and milestones.
- From agreements reached in this meeting, the final DID, task plan/work authorization, and detailed document preparation schedule are documented and sent to all participants.

LEGEND

A Author
APM Assistant Project Manager
CR Client Representative
DC Document Coordinator
DPM Deputy Project Manager
DS Document Sponsor
GA Graphic Artist
PC Production Clerk

PM Project Manager
PR Peer Reviewer
PDM Publications Department Manager
QA Quality Assurance Representative
SR Senior Technical Reviewer
TE Technical Editor
WP Word Processor
 - - - Optional step (see Activity Matrix in Section 3.3)

FIGURE 4.1
DOCUMENT PRODUCTION/REVIEW PROCESS

DETAILED ACTIVITY DESCRIPTION		IDENTIFICATION	
TITLE:		PROJECT	UMTRA
		TASK	
		WBS	
		DATE	
SCOPE OF WORK:			
DURATION AND LOGIC:			
RESOURCES:			
DISCIPLINE	QTY	SCOPE/BASIS	
RESOURCES: COMMENTS/REMARKS:			
SPECIAL CONSIDERATIONS:			
REFERENCES:			

**FIGURE 4.2
DETAILED ACTIVITY DESCRIPTION FORM**

DELIVERABLE ITEM DESCRIPTION	IDENTIFICATION	
	PROJECT	UMTRA
	TITLE:	DELIV. REF.
	DATE	
DESCRIPTION/PURPOSE:		
APPLICATION/INTENDED AUDIENCE:		
CONTENT:		
PREPARATION REQUIREMENTS:		
REFERENCES:		

FIGURE 4.3
DELIVERABLE ITEM DESCRIPTION FORM

- Major, in-depth reviews of the document occur early in this process. Steps three through eight include document preparation and a series of reviews and comment resolution meetings. The number of reviewers and types of reviews are limited; each reviewer is given very detailed review directions.

The interim technical review and comment resolution meetings provide an opportunity to reinforce the team's understanding of the document purpose and goals. The meetings are also useful for identifying and resolving technical issues that arise during the course of document preparation.

These frequent checks are important in the TAC environment because of the many technical disciplines required to prepare a document, the many stakeholders whose interests must be protected, and the many reviewers who will comment on a document from different perspectives.

- Steps nine and ten of the document production process are completed by the PUBS Department staff in the preparation of the document for delivery. Word processing and graphics support are available earlier if needed by authors for preparing review versions of text and figures. However, at this point, the technical editors, word processors, and graphic artists assume responsibility for the document's final preparation. A substantive edit is performed, graphics are finalized, and final formatting, production, and assembly occur. The technical editor works very closely with the document coordinator and authors to ensure errors are not introduced.
- Step eleven is the final check of the document process before delivery. A QA representative is active throughout document production, ensuring that the correct process is followed and documented. At this step, the QA representative reviews the final document and the contents of the sign-off folder before passing it along for sign-off and delivery (steps twelve and thirteen).

Although the document production process appears to be long and complex, it actually reduces the time required to produce documents (by eliminating or greatly reducing rework time) and improves the quality of documents. Because the DOE is involved from preliminary planning through review and comment resolution steps, the document has a better chance of fulfilling the DOE's needs.

A graded approach to the process may be used. Obviously, not all documents require extensive review. Short documents, documents that are part of a well-defined series, documents written by a single individual, or documents that do not have a major impact on activities may go through an abbreviated process, with the approval of the appropriate assistant Project manager.

4.5 RECORDS MANAGEMENT

The UPDCC is part of the DOE Project Team that is managed by the TAC. The UPDCC is charged with preserving copies of all correspondence and other records pertaining to the UMTRA Project since its inception. Approximately 80 percent of these records have been designated by the National Archives and Records Administration (NARA) as information that could be vital to the interests of the U.S. government for at least 100 years after Project completion. Therefore, the TAC must collect, safeguard, and eventually send these records to NARA in Washington, D.C. It is the responsibility of all Project staff members to ensure that correspondence they receive or generate is sent to the UPDCC and that all records borrowed from the UPDCC are handled carefully and returned to the center.

The UPDCC maintains the following records collections for the Project:

- Correspondence files—all correspondence and documents from the beginning of the Project (1983) to the present (including field and laboratory data).
- Reference collection—technical books and documents on a variety of subjects to support research by Project staff. A limited number of technical journals are also subscribed to and housed in the UPDCC.
- Federal regulations—current 6 months of the *Federal Register* are kept on the site; older editions are housed in remote storage. The UPDCC also has copies of titles of the Code of Federal Regulations pertaining to Project needs.
- Engineering design drawings (produced by the RAC), U.S. Geological Survey topographical maps, site photographs (glossies, slides, and overhead transparencies), and RAC contract documents are also housed in the UPDCC.

Administrative records, personnel records (except dosimetry records), and contract records are maintained by the DOE Project Team and in the various teaming partner corporate offices.

See Section 2.5.4, Publications Services Department, for additional information on the UPDCC.

5.0 TECHNICAL MANAGEMENT

Technical work accomplished on the UMTRA Project is initiated through a series of interrelated contracting vehicles and guidance documents. The definition of technical work to be performed by the TAC is contained in the UMTRA Project TAC contract. UMTRA Project Team staff examine the UMTRA Project master schedule annually and enumerate activities or deliverables to be performed or delivered by the TAC under the scope of the contract during the upcoming fiscal year. This is the fiscal year task assignment. The TAC staff evaluate this assignment and in turn prepare a fiscal year task plan, which provides the supporting details concerning how the task assignment will be accomplished.

The resources necessary to perform the required tasks are planned using the required schedules in the TAS described in Section 4.1.1. The technical performance of the work is governed by various DOE Orders; state, federal, and local regulations; and regulatory guidance documents such as NRC's *Standard Format and Content Guide for Remedial Action Plans*, and EPA's *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods*, SW-846. Additionally, the following UMTRA Project guidance documents provide for a consistent, defensible approach to the work being performed:

- *Technical Approach Document*, UMTRA-DOE/AL-050425.002—This document describes the general technical approaches and design criteria adopted by the DOE to implement RAPs and final designs that comply with EPA standards related to the stabilization of uranium mill tailings. It does not address the technical approaches necessary for ground water restoration.
- *Technical Approach to Groundwater Restoration (TAGR)*, DOE/AL/62350-20F—This document provides general technical guidance to implement the ground water restoration phase of the UMTRA Project. It provides a technical overview of how the ground water program will be conducted, including the regulatory basis and requirements for compliance, and a framework for program activities needed to meet those requirements.
- *Risk Assessment Guidance Document for the UMTRA Project Groundwater Remediation Phase*, UMTRA-DOE/AL-400680.0000—This document describes the general technical approach to prepare risk assessments to assist in guiding the ground water regulatory compliance program and support the NEPA process. The methodology contained in this manual is consistent with the EPA Comprehensive Environmental Response, Compensation, and Liability Act of 1980.
- *Guidance for Implementing the UMTRA Project Long-term Surveillance Program*, UMTRA-DOE/AL-350125.000—This document provides instructions for preparing the disposal site LTSPs and for carrying out the UMTRA Project long-term surveillance program, including any monitoring that may be required by 40 CFR Part 192, Health and Environmental Protection Standards for Uranium and Thorium Mill Tailings.

- *Quality Assurance Implementation Plan*, DOE/AL/62350-72D—This document outlines the methods for integrating quality functions for TAC technical activities applied to the surface and ground water phases of the UMTRA Project. The QAIP is subordinate to the latest issue of the UMTRA Project TAC QAPP.

5.1 TECHNICAL WORK DEFINITION

Before initiating tasks identified in the task plan or SOW, a clear definition of the work to be accomplished or problem to be solved is agreed upon by the site manager, technical manager, and technical staff, thus reaffirming or further expanding on the technical baseline (Figure 5.1). An example of the elements that would be considered before initiating a large programmatic effort such as ground water restoration is illustrated in Figure 5.1. Smaller supporting tasks may not be as involved but are still tied to the programmatic structure of the Project.

The technical component of the technical baseline evolves from EPA standards (40 CFR 192), NEPA requirements, and relevant federal and state laws. The technical component is contained in a hierarchy of Project documents: the Project Charter (DOE, 1986), which defines the Project's mission; the UMTRA Surface Project Plan (DOE, 1993b) and the UMTRA Ground Water Project Plan (DOE 1993c), which include summary level descriptions of Project work and objectives; the UMTRA Surface Project Management Plan (DOE, 1994); and site-level documents, the contents of which depend on the design development stage of each site. The design development stages are functional requirements, site characterization, preliminary design, final design, and completion. The completion stage includes remedial action, site certification, and licensing. In addition to the TAGR and the programmatic environmental impact statement, other documents that contain the technical component of the baseline at each of these stages are the site fact sheets; the comparative analysis of disposal site alternatives report for the Surface Project; the RAP; the completion report; and the SOWP for the Ground Water Project.

The definition of the task is usually accomplished following the Project's document production/review process, since so many of the planned tasks the TAC undertakes result in the preparation of a formal document. This process is outlined in Section 4.4 in detail. In addition to planned tasks, numerous unplanned or ad hoc Project-related activities are undertaken by the technical staff. These tasks may be initiated by informal communication with TAC or DOE staff or managers. Depending on the nature of the request, it may be executed by preparing a DID/DAD (described briefly in Section 4.4) as required and charging a site-specific account or documented and tracked by preparing a TAM (Figure 5.2), which authorizes the activity (SOP 1.4 describes the TAM process). Resources are allocated to tasks based on complexity, duration, and risk. Where necessary, plans are changed in accordance with changing requirements to control cost drivers, schedule, or rising complexities.

FIGURE 5.1
GROUND WATER SCOPE BASELINING

JACOBS ENGINEERING GROUP INC.

ALBUQUERQUE OPERATIONS

TAC ACTION MEMO

ACTION REQUEST

1. DATE OF REQUEST: _____ 2. TAM CONTROL #: _____

3. NAME, TITLE, AND SIGNATURE OF DOE REQUESTOR: _____

4. DESIRED REPLY DATE: _____ NO LATER THAN DATE: _____

5. DOE ACTION REQUESTED: _____

6. TYPE OF REPLY
REQUESTED:

☐ Report

☐ Letter

☐ Informal/Verbal

☐ Other _____

TAC ACTION ASSIGNMENT

1. DATE ASSIGNED: _____ 2. ESTIMATED LABOR HOURS: _____

3. DATE REQUIRED: _____

4. TAM ADMINISTRATOR: _____

5. RECOMMENDED ACTION COORDINATOR: _____

Name

Organization

6. ACTION ASSIGNED TO: _____

Name

Organization

7. ACTION REVIEWED BY: _____

Name

Organization

8. REMARKS: _____

9. APPROVAL OF REQUEST BY PROJECT MANAGER: _____

Date

10. CHARGE ACCOUNT #: _____ 11. TAILS ID #: _____

TAC DELIVERY

1. DATE OF COMPLETION: _____

2. TAC ACTION COORDINATOR SIGNATURE: _____

3. ACTUAL LABOR HOURS EXPENDED: _____

4. RETURN FORM TO TAM ADMINISTRATOR: _____

Date

JEG-AL-AD-11 (7/93)

PATH I:\FL3.01\FORM_JEG
JEALAD11.DRW

**FIGURE 5.2
TAC ACTION MEMO**

5.2 TASK IDENTIFICATION

As discussed above, planning meetings are generally held to define clearly the required work and tasks necessary to accomplish the identified objective. In some instances, the task identification will be self-explanatory, such as conducting a design review of a disposal cell currently undergoing construction.

In this instance, the pertinent documents are evaluated against the specifications outlined in the RAP (which conforms to the requirements of the TAD) and documented according to procedures outlined in SOPs 17.1.2, Compilation of Design Calculations, and 17.2.1, Conceptual Design. In other instances, especially when a completely new document or report is planned, the particulars of the task identification may be found in the DID and the associated task plan/work authorization form. Likewise, if a TAM is being executed, the desired product is defined therein.

5.3 TASK IMPLEMENTATION

Work on the identified task is implemented in accordance with the TAM, the DID, task plan/work authorization guidance, and/or the DAD, with consideration given to the relevant guidance documents, DOE Orders, and SOPs discussed in Sections 2.5 and 5.0. The SOW, duration and logic, resources, special considerations, and necessary reference materials have now been identified and listed. In instances where field data are collected, data collection objectives (DCO) are documented outlining the purpose of the data collection effort, how the data will be used, and the range of expected results, which relate back to their anticipated use. Data quality objectives (DQO) are prepared to ensure that the collected data are of known and appropriate quality to satisfy the intended purpose, the DCOs. The development of DQOs is part of the planning process and is specified for every environmental sampling data collection activity of the UMTRA Project. DQOs are presented in the UMTRA Project TAC chemical analysis SOP, site WSAPs, SOWPs, SOWs, sampling work orders, SOPs, and other task-specific documents. Additional details regarding TAC's programmatic management of data collection activities can be found in the QAIP.

5.4 TECHNICAL CHANGE CONTROL

During the course of completing a given task assignment, changes in scope or direction may be necessary for a variety of reasons. This is common in environmental cleanup programs such as the UMTRA Project. For example, the identification of necessary changes could occur during the 50-percent technical review meeting (step four), which is conducted during the document preparation process (see Figure 4.1). This is the ideal time for task team participants (document coordinator, document sponsor, technical editor, senior technical reviewer, DOE representative, QA representative, author, and peer reviewer) to identify or recommend changes. If the changes require a budget or schedule adjustment, they are documented and managed with baseline change requests or CCB requests discussed in Section 3.0. Due to the wide variety of concurrent tasks being performed, special efforts are taken to ensure that

management, DOE representatives, and other stakeholders are kept informed of changes as they are identified, so that coordinated, agreed-to adjustments can be implemented. Changes also are occasionally initiated through TAMs written by the DOE or through recommendations from independent review teams. Status updates in TAILS are used extensively to document the chronology of changes associated with these activities. All changes to the baseline are tracked and controlled based on the guidance contained in the UMTRA Project TAC system description, which is described briefly in Section 3.0.

6.0 QUALITY IMPROVEMENT

The UMTRA Project TAC quality policy is to provide a continuous process of quality improvement in all areas of performance. Quality improvements are provided through continuous improvement of procedures and processes as well as to heighten the general cost consciousness of Project participants.

The opportunities for reducing costs and improving productivity are endless. The TAC's objectives in these area are:

- Improve productivity and quality.
- Heighten the general cost consciousness of Project participants at all levels of their organizations.
- Identify and implement specific innovative employee ideas extending beyond what is required through existing processes and procedures.
- Emphasize efforts creating additional value for the money spent by maintaining TPC at the lowest possible level.

To reach these objectives, the TAC maintains two integrated suggestion programs: the CR/PIP and the QIS program. The CR/PIP is a DOE program that the TAC participates in and manages for the Project Team. The program guidelines and requirements are outlined in *UMTRA Cost Reduction and Productivity Improvement Program Project Plan*, dated October 1992. The QIS program is an internal TAC program. The QIS program and the CR/PIP are linked via a single form used for the cost reduction aspects of any QIS and are tracked in the CR/PIP system. Suggestions submitted as QISs may be for quality improvement, cost reduction/productivity improvement, or ES&H.

The QISs are reviewed by the assistant Project managers and the Deputy Project Manager to ensure that the underlying issue in any suggestion is addressed, whether by assignment to a QIT, an appropriate manager, a department, or some other route. The suggestions are tracked through the use of the TAILS database. Additionally, the DOE tracks the progress of cost reduction and productivity improvement suggestions for the DOE's CR/PIP.

Results of the implementation of the TAC's CR/PIP are shown below:

TAC CR/PIP goals status 9/30/94			TAC CR/PIP goals for FY95		
	Goal	Actual		Goal	Actual ^a
Quantity	95	97	Quantity	95	63
Employee			Employee		
participation	75%	90%	participation	100%	66.3%
Dollars	2200 K	3288 K	Dollars	2200 K	2812 K

^aAs of 7/30/95.

6.1 INDEPENDENT TECHNICAL REVIEWS

Independent technical reviews (ITR) are conducted to enhance the quality of technical documents, processes, or systems by providing additional independent high-caliber expertise. Peer reviews have been used successfully for years by the design and construction industry to ensure quality in work products. Not all documents or procedures will be subjected to peer reviews. Potential candidate subjects for reviews will be carefully considered for review by the TAC and the DOE. During an ITR, reviewers examine the consistency and defensibility of technical concepts, methods, studies, and/or conclusions presented in UMTRA Project documents and procedures.

6.1.1 Independent technical review distinguishing characteristics

ITRs are extra efforts, not routine procedures performed daily on typical projects, activities, or design processes. Because an ITR is defined apart from "normal" quality management activities, it should be seen by all participants as an endeavor demanding special attention, time, and procedures because special benefits are expected.

An ITR is not the application of normal checks and balances within the UMTRA Project, which is a part of standard Project procedures and everyday routines associated with quality management or design. An ITR is not simply a review of a document by anyone other than its author, even if the reviewer is at or above the author's "peer" level. Additionally, an ITR is not a value engineering study. A basic difference is that value engineering of a design focuses on potential cost savings, while an ITR of a design examines the validity of the design, including, in many cases, the procedures used and the management of the process.

An ITR is always conducted by persons independent of the subject under review. Reviewers should be administratively (and sometimes geographically) remote so that there is no question of their complete independence and impartiality.

A peer review has a specified purpose, scope, format, and duration, distinguishing it from other reviews that may be performed on a less systematic basis, such as the existing internal Project peer review process. It has a commissioning, a beginning, a report, and a decommissioning.

6.1.2 Levels of independent technical review

Two levels of peer review, with increasingly stringent procedures, will be employed on the UMTRA Project. An additional type of internal, informal review is the subject of an UMTRA Project SOP (8.1.3, Peer Review) and is not included in this management plan.

Level I

A Level I review can be flexible in format based on guidance from the appropriate managers. The structure of this level of review is less rigid than a Level II review. A Level I review will be conducted by TAC corporate specialists and will require DOE notification and approval. Examples of this type of review include peer reviews of data validation procedures and the TAC UMTRA water sampling program.

Level II

A Level II review requires a predetermined method of meetings and formal review presentations. This type of review will normally be conducted by organizations outside the TAC. For example, ground water remediation designs would be subject to a formal, Level II review process to document formally the results of the peer review to the DOE and others. Level II reviews have a very formal structure in order to assure an independent check or review of an issue. This level of peer review also requires DOE notification and approval.

7.0 CONCLUSION

The TAC is proud of the role it has played in support of the DOE UMTRA Project Team during the past decade as the UMTRA Project has evolved. This plan has been developed to document the TAC's current organization and approaches used for managing the demanding technical challenges presented by the UMTRA Surface and Ground Water Projects. It is a key management document in that it contains the TAC's vision and mission statements and its highest level goals. It also describes the roles and responsibilities for each of the departments forming the TAC. It will be an often-cited reference by TAC managers and staff and used in training new employees within the TAC across the four teaming partners.

The TAC is committed to a smooth and efficient transition of the UMTRA Ground Water Project effort to the DOE GJPO. Although the DOE has not requested any transition planning activities, the TAC has undertaken some initiatives that will greatly facilitate the transition. For example, the TAC has developed generic planning model notebooks for the four compliance strategies used on the Ground Water Project. These notebooks list background, planning assumptions, schedule, and cost information to aid the GJPO. Additionally, the TAC has developed site-specific planning notebooks containing the same information as the generic notebooks with more site-specific issues reported. The notebooks will be reviewed periodically and updated until the Ground Water Project transition is complete.

As the UMTRA Surface Project efforts are completed and the UMTRA Ground Water Project transitions to the GJPO, TAC personnel organizational changes will be necessary. As the work terminates, it is intended that a smooth and efficient transition will be achieved through attrition rather than a RIF. As changes occur, updated organizational requirements will be provided to the DOE UMTRA Project Team.

This management plan is considered to be a "living" document by the TAC and will be revised periodically to ensure that it accurately describes the continually evolving organizational and technical approaches used to deal with Project tasks and issues.

8.0 LIST OF CONTRIBUTORS

The following individuals contributed to the preparation of this plan.

Name	Contribution
J. W. Cool	Document coordinator, author
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D. Thalley	Document production coordination

9.0 REFERENCES

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- DOE (U.S. Department of Energy), 1993a. *Integrated Project Management System Description*, March 1993, prepared by the U.S. Department of Energy, UMTRA Project Office, Albuquerque Operations Office, Albuquerque, New Mexico.
- DOE (U.S. Department of Energy), 1993b. *Uranium Mill Tailings Remedial Action (UMTRA) Surface Project, Project Plan*, August 1993, prepared by the U.S. Department of Energy, UMTRA Project Office, Albuquerque Operations Office, Albuquerque, New Mexico.
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APPENDIX A
DOCUMENT MATRIX

TECHNICAL ASSISTANCE CONTRACTOR
MANAGEMENT PLAN

Type	Surface/ Ground Water	Programmatic/ Site-Specific	Purpose	Frequency
Annual Environmental Report (AER)	S, GW	Programmatic	Provide information to the public and stakeholders on environmental monitoring and compliance status at each UMTRA site	Annual
Annual Report on the U.S. Department of Energy's Cultural Resource Activities at Colorado UMTRA Project Sites (sent to Advisory Council on Historic Places and Colorado State Historical Preservation Officer)	S	Programmatic	Summarizes DOE's cultural resource studies undertaken in support of UMTRA Project in state of Colorado for a fiscal year.	Annual
Annual Report to Stakeholders	S, GW	Programmatic	Describes the major accomplishments and activities of the UMTRA surface and ground water projects during the previous fiscal year. Covers progress on UMTRA Project-wide issues as well as activities specific to each processing site.	Annual
Annual UMTRA Project Video	S, GW	Programmatic	Shows accomplishments by the Project during the previous year	Annual
Baseline Risk Assessment (BLRA)	GW	Site	Evaluates potential public health or environmental impacts resulting from ground water contamination	One-time only
Chemical Hygiene Plan	S	Programmatic	Ensures that TAC employees are informed of the presence and use of potentially hazardous chemicals in their work area.	As needed
Colorado Economic Impact Study	S	Programmatic	Summarizes employment and economic benefits to the state from activities associated with the UMTRA Project during a Colorado fiscal year.	Annual
Cost Reduction/Productivity Improvement Project Plan (UMTRA)	S, GW	Programmatic	Formalizes and improves upon existing efforts to control costs which have been under way since Project inception.	As needed
Environmental Assessment (EA)	S	Site	Evaluates compliance with EPA standards for remedial actions under the UMTRCA (40 CFR Part 192).	One-time only

Frequency	Related Documents	Review Audience	Approval Level	Preparation Trigger	Ownership
Annual	BLRAs, SOWPs, PEIS, TAGR, ERWM 5-Year Plan, WMPP Plan, UMTRA Project QAPP	NRC, State/Tribal agencies, DOE/AL, DOE/HQS	DOE/AL	DOE Order 5400.1	TAC Regulatory Compliance Technical Manager
Annual	None	TAC; DOE UMTRA	TAC Project Manager	Programmatic memorandum of agreement executed between DOE, the Advisory Council on Historic Preservation, and the Colorado State Historic Preservation Officer in Dec 1984.	TAC Regulatory Compliance
Annual	Annual UMTRA Project Video	DOE UMTRA; DOE HQS (EM 451)	DOE HQS	End of fiscal year	Public Affairs
Annual	Annual Report to Stakeholders	DOE UMTRA; DOE/AL (Office of Public Affairs)	DOE Office of Public Affairs	End of fiscal year	Public Affairs
One-time only	Human Health Risk Assessment Methodology	DOE UMTRA, NRC, States/Tribes, Other affected stakeholders	DOE UMTRA	TAC instigated	Site Manager
As needed	Albuquerque Operations Manual	TAC	TAC	To be in compliance with OSHA	Data Management and Assessment
Annual	None	TAC, DOE UMTRA, State	TAC Project Manager	Memorandum of Agreement with the State of Colorado	Regulatory Compliance
As needed	None	DOE UMTRA	DOE UMTRA	change in procedures	DOE UMTRA
One-time only	PEIS for ground water EAs	TAC, DOE UMTRA, DOE/AL, State/Tribe	DOE/AL	NEPA; built into site schedules	Site manager

TECHNICAL ASSISTANCE CONTRACTOR
MANAGEMENT PLAN

Type	Surface/ Ground Water	Programmatic/ Site-Specific	Purpose	Frequency
Environmental Audit Report	S	Site	To report on environmental audits conducted to assess the effectiveness of the RAC's (and subcontractors') environmental compliance programs pertaining to over site and surface remedial activities.	During construction - annual
Environment, Safety, and Health Plan	GW	Programmatic	To establish the policy, implementing requirements, and guidance for the UMTRA Project.	As needed
Environment, Safety, and Health Regulatory Implementation Plan	S	Programmatic	To establish the process for implementing and maintaining the UMTRA Project's regulatory operating envelope, which involves identifying all applicable regulatory and institutional requirements and determining compliance status. Describes how the Project will identify ES&H regulatory requirements, analyze applicability to the UMTRA Project, and evaluate UMTRA Project compliance status.	One-time only
Federal Employee Occupational Health and Safety Plan	S	Programmatic	Establishes the Federal Employee Occupational Safety and Health (FEOSH) Program for the UMTRA Project Office ensuring compliance with the applicable requirements of DOE Order 3790.1B and DOE/AL Order 3790.1A.	As needed
Final Audit Report	S	Site	Summarizes radiological audits and quality assurance in-process surveillances, audits, and final close-out inspection performed by the DOE and TAC. Also summarizes NRC surveillances.	Once
Ground Water Project Plan (UMTRA)	GW	Programmatic	Outlines the Project mission and objectives and describes the Project scope and technical approach.	As needed

Frequency	Related Documents	Review Audience	Approval Level	Preparation Trigger	Ownership
During construction - annual	SOP 11.3	TAC, DOE UMTRA	DOE UMTRA	Audit conducted	Site manager
As needed	None	TAC, DOE UMTRA	DOE UMTRA	Mandated by DOE and other federal regulatory agencies; OSHA 1910.120	Regulatory Compliance
One-time only	None	TAC	TAC Project Manager	To present formalized plan to DOE	Regulatory Compliance
As needed	None	DOE UMTRA, DOE/AL	DOE/AL	DOE Order	DOE UMTRA (Environmental, Health and Safety Manager)
Once	Red Audits, QA audits	TAC, DOE UMTRA	TAC, DOE UMTRA	Completion of construction	Site manager
As needed	None	TAC; DOE UMTRA; DOE/AL; DOE/HQS	DOE UMTRA; DOE/AL; DOE/HQS	Significant change to Project schedule or total estimated cost	DOE UMTRA

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Type	Surface/ Ground Water	Programmatic/ Site-Specific	Purpose	Frequency
Ground Water Protection Management Program Plan	S	Programmatic	Highlights the methods designed to preserve, protect, and monitor ground water resources at UMTRA Project Processing and disposal sites. Provides an overview of the remedial action status at the 24 sites and identifies technical guidance documents and site-specific documents. Addresses general information required to develop a water resources protection strategy at the disposal sites. Describes ongoing activities at Project sites.	Reviewed annually; updated every 3 years
Ground Water Sampling Techniques (UMTRA)	GW	Programmatic	To evaluate the need for an UMTRA Project-specific comparison study for traditional ground water sampling and low-flow sampling; to conduct a literature review and analysis	One-time only
Ground Water WBS Dictionary	GW	Programmatic	Details the work breakdown structure used by the TAC for the Ground Water Project.	Annual
Guidance Document for Preparing Water Sampling and Analysis Plans	GW	Programmatic	To provide a consistent technical approach for sampling and monitoring activities performed under the WSAPs and to provide a consistent format for the WSAP documents.	EPA guidelines required update
Health and Safety Audit Reports	S, GW	Site	Reports on health and safety audits conducted to examine health and safety management, industrial hygiene programs, hazard communication programs, operation of heavy equipment, and previous audit findings.	Developed for each audit (frequency of audit is based on site-specific activities)
Historical Data Validation Report	S, GW	Site	Formally documents results of historical data validation effort	One time only
Human Health Risk Assessment Methodology for the UMTRA Ground Water Project	GW	Programmatic	Presents the method used to evaluate human health risks associated with ground water contamination at inactive uranium processing sites.	One-time only

Frequency	Related Documents	Review Audience	Approval Level	Preparation Trigger	Ownership
Reviewed annually; updated every 3 years	Environmental Protection and Implementation Plan (EPIP)	TAC, DOE UMTRA, DOE/AL, DOE/HQS	DOE/HQS	DOE Order 5400.1	Regulatory Compliance
One-time only	None	TAC; DOE UMTRA	DOE UMTRA	Converting UMTRA wells to low-flow sampling	TAC Ground Water Sampling Program Manager
Annual	None	TAC	TAC Deputy Project Manager	In conjunction with fiscal year planning	TAC Deputy Project Manager
EPA guidelines required update	WSAP	TAC; UMTRA DOE	UMTRA DOE	EPA guidelines	Assistant Project Manager for Technical Services; Technical Manager for Design and Assessment
Developed for each audit (frequency of audit is based on site-specific activities)	None	TAC, RAC, DOE UMTRA	DOE UMTRA	Audit conducted	Site manager
One time only	None	TAC	TAC	Recognized historical data deficiencies	Site manager
One-time only	BLRA	TAC	TAC	Decision to do BLRAs created need	Technical Manager for Data Management and Assessment

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Type	Surface/ Ground Water	Programmatic/ Site-Specific	Purpose	Frequency
Integrated Project Management Systems (IPMS) Description	S, GW	Programmatic	Describes the work processes of the UMTRA Project and IPMS Group; explains the relationships between the Project Office, contractors, and other participants.	As needed
Licensing Plan for UMTRA Project Disposal Sites	S	Programmatic	Defines UMTRA Project licensing program objectives and establishes a process enabling the DOE to document completion of remedial actions in compliance with 40 CFR 192 and the requirements of the NRC general license.	As needed
Long-Term Surveillance Plan (LTSP)	S	Site	Describes the surveillance activities for the disposal cell. Prepared as a requirement for acceptance under the NRC general license for custody and long-term care of residual radioactive materials. Documents whether the land and interests are owned by the U.S. or an Indian tribe and details how the long-term care of the site will be carried out.	Upon receipt of comments from federal/state/tribal agencies
Long-Term Surveillance Plan (LTSP) Guidance Document	S	Programmatic	Provides instructions for preparing the disposal site LTSPs and instructions for carrying out the UMTRA Project long-term surveillance program, including any monitoring that may be required.	Annual
Planning Guide for SOWP	GW	Programmatic	To provide detailed planning guide for site managers including tasks required and the number of hours needed in relation to the SOWP.	Annual

	Frequency	Related Documents	Review Audience	Approval Level	Preparation Trigger	Ownership
esses and	As needed	None	Contractor participants on the Project; DOE UMTRA	DOE UMTRA	Significant changes in reporting thresholds or to Project control procedures	Integrated Project Management Systems Manager
es ment tions R 192 he	As needed	Guidance for implementing the UMTRA Project LTSP Program, Implementation Plan for the Integration of the Prelicensing Custodial Care Programmatic Activities Between the UMTRA Project Office and GJPO, Technical Approach Document	TAC, RAC, DOE UMTRA, NRC	TAC Project Manager	Changes in licensing process logic, regulatory agency (state or NRC) requirements, in other supporting documents (Final Audit Reports, LTSPs, etc.); per the UMTRA Project Task Plan recommendation	Assistant Project Manager for Site Management
a cell. t for C y and and by the d n care out.	Upon receipt of comments from federal/state/tribal agencies	LTSP guidance document; WSAP guidance document; Remedial Action Plan; Environmental Assessment; Completion Report; Prelicensing Inspection Report	DOE UMTRA; DOE GJPO; DOE HQS; States; Tribes; RAC; NRC	NRC	Completion of construction.	Site manager
e or Project ogram, that	Annual	LTSP	DOE UMTRA; DOE GJPO; NRC	NRC		Technical Manager for Regulatory Compliance
ing and the in	Annual	SOWPs	TAC	TAC APM for Site Management	Annual detailed planning effort	Assistant Project Manager for Site Management

TECHNICAL ASSISTANCE CONTRACTOR
MANAGEMENT PLAN

Type	Surface/ Ground Water	Programmatic/ Site-Specific	Purpose	Frequency	Related D
Programmatic Environmental Impact Statement (PEIS)	GW	Programmatic	Analyzes potential impacts of four programmatic alternatives, including proposed action. Provides a framework for conducting the Ground Water Project; assesses the potential programmatic impacts of conducting the Ground Water Project; provides a method for determining the site-specific ground water compliance strategies; and provides data and information that can be used to prepare site-specific environmental impacts analyses more efficiently.	One time only	PEIS Implement Plan
PEIS Implementation Plan	GW	Programmatic	Describes and records the results of the PEIS scoping process; summarizes comments received and their disposition; describes the purpose of and need for agency action, the proposed action, and alternatives; lists alternatives considered and eliminated from review; identifies cooperating agencies, their roles, and responsibilities; provides a draft PEIS outline; and provides a schedule for the PEIS process.	One time only	PEIS
Progress Tracking System	S, GW	Programmatic	Monthly report by Activity Data Sheets (ADS) for performance funding, schedule, milestones; used by DOE HQS (EM) and U.S. Congress	Monthly	Project Man Progress Re
Project Document Control Manual	S	Programmatic	Defines the Project Document Control System operated by the DOE UMTRA Project.	As significant changes warrant	None
Project Environmental Protection Implementation Plan (EPIP) (UMTRA)	S	Programmatic	Provides management direction to ensure that the UMTRA Project is operated and managed in a manner that will protect, maintain, and where necessary, restore environmental quality, minimize potential threats to public health and the environment, and comply with environmental regulations and DOE policies.	Annual	Environmen Monitoring Minimization Pollution Pr Plan, Groun Protection M Plan

	Frequency	Related Documents	Review Audience	Approval Level	Preparation Trigger	Ownership
cts of natives, on. or Water potential of Water mod for specific e data n be specific analyses	One time only	PEIS Implementation Plan	TAC, DOE UMTRA, DOE/AL, DOE/HQS, States/Tribes, NRC	DOE/HQS	Administrative Decision Memoranda (ADM) to fulfill NEPA and other regulatory requirements	Technical Manager for Regulatory Compliance
he ing omments ition; f and the atives ed from rating d s a draft es a rocess.	One time only	PEIS	TAC, DOE UMTRA, DOE/HQS, NRC	DOE/HQS	ADM to fulfill NEPA requirements	Technical Manager for Regulatory Compliance
ity Data mance stones; and	Monthly	Project Manager's Progress Report	DOE UMTRA	DOE UMTRA	Automatic	DOE UMTRA
ument d by the	As significant changes warrant	None	TAC; DOE UMTRA	DOE UMTRA	When a significant change occurs	TAC Document Control Center Manager
irection RA hat will where minimize lic nent, nmental licies.	Annual	Environmental Monitoring Plan, Waste Minimization and Pollution Prevention Plan, Ground Water Protection Management Plan	TAC, DOE UMTRA, DOE/AL, DOE/HQS	DOE/HQS	DOE Order 5400.1	Technical Manager for Regulatory Compliance

TECHNICAL ASSISTANCE CONTRACTOR
MANAGEMENT PLAN

Type	Surface/ Ground Water	Programmatic/ Site-Specific	Purpose	Frequency	
Project-Groundwater Restoration Draft Plan for the Technology Assessment Program (UMTRA)	GW	Programmatic	Designed to ensure the use of efficient and effective technologies in the ground water restoration phase of the Project. Facilitates coordination between the UMTRA Project and other DOE operations and activities relating to ground water and to the DOE's technology acquisition, development, and transfer programs.	One-time only	N
Project List of Reportable Occurrences (UMTRA)	S	Programmatic	Facilitates efficient categorization of reportable occurrences. Established in compliance with DOE minimum reporting requirements under DOE Order 5000.3B.	As needed	U En an
Project Management Control System (PMCS) Description	S, GW	Programmatic	Describes the PMCS used by the TAC. Provides an overview of the TAC's PMCS in the areas of organization, planning, scheduling, budgeting, accounting, performance measurement, analysis, change control, and system maintenance.	Annual	S De
Project Manager's Progress Report	S, GW	Programmatic	Highlights progress made by the Surface and Ground Water Projects since the previous quarterly report. Includes narrative and summary funding/cost status figures. Outlines significant problems and variance analysis. Includes milestone log and the various changes made through the change control process.	Quarterly	Pr Sy
Project Office Quality Assurance Program Plan (UMTRA)	S, GW	Programmatic	Brings into one document the essential applicable criteria for a quality assurance program to be applied on a selective basis, depending upon the nature of the activity being conducted, and describes how those criteria shall be applied to the UMTRA Project.	Annual	En an Fe Oc an QA Pla Sp

Frequency	Related Documents	Review Audience	Approval Level	Preparation Trigger	Ownership
One-time only	None	TAC; DOE UMTRA	TAC	Funding deleted for Technology Assessment Program	TAC Manager for Technology Assessment
As needed	UMTRA Project Environment, Safety and Health Plan	TAC, DOE UMTRA, DOE/HQS	DOE/HQS	DOE Order 5000.3B, as program needs change, new DOE Order	DOE UMTRA
Annual	SOPs; IPMS System Description	TAC	TAC Project Manager	Automatic	TAC Project Controls Manager
Quarterly	Progress Tracking System	DOE UMTRA	DOE UMTRA	Automatic	DOE UMTRA
Annual	Environmental, Safety, and Health Plan, Federal Employee Occupational Health and Safety Plan, TAC QAPP, UMTRA Project Plans and Specifications	DOE UMTRA; DOE/AL; DOE HQS; NRC	DOE/AL	Automatic	DOE UMTRA

TECHNICAL ASSISTANCE CONTRACTOR
MANAGEMENT PLAN

Type	Surface/ Ground Water	Programmatic/ Site-Specific	Purpose	Frequency	Rela
Project Office Records Management Plan (UMTRA)	S	Programmatic	Provides the framework for identifying the elements and activities that relate to the management and operational aspects involved in handling the UMTRA Project Administrative Files Collection.	When significant changes occur	None
Public Affairs Plan	S, GW	Programmatic	To establish goals for the fiscal year public affairs program and identify specific activities to be conducted during the year. Describes the roles of various agencies involved in the conduct of the public affairs program and defines the function of the TAC Public Affairs Department. Integrates and replaces the Public Participation Plan and the Public Information Plan.	Annual, as required	None
Quality Assurance Surveillance Report	S	Site	Reports findings, observations, recommendations of surveillance to determine the degree of compliance with Project specifications and requirements.	Following audit performed after each phase of construction	Previous surveill
Radiological Audit Report	S	Site	Documents the audit of health physics activities, records, procedures, and performance of the contractors and subcontractors responsible for health physics remedial action work.	Following audit performed at the determination of DOE UMTRA	None
Real Estate Management Plan	S	Programmatic	Summarizes the real estate requirements of the Project, identifies the roles and responsibilities of Project participants involved in real estate activities, and describes the approaches used for completing these requirements.	Annual (as needed)	None
Real Estate Status Report	S, GW	Programmatic	Includes the most recent progress made on site real estate activities.	Monthly	Licensi

Frequency	Related Documents	Review Audience	Approval Level	Preparation Trigger	Ownership
When significant changes occur	None	DOE UMTRA	DOE UMTRA	A significant change	DOE UMTRA
Annual, as required	None	DOE UMTRA, DOE/AL (Office of Public Affairs)	DOE/AL Office of Public Affairs	Due by end of fiscal year	TAC Public Affairs Manager
Following audit performed after each phase of construction	Previous QA surveillance reports	TAC QA Department, DOE UMTRA	TAC QA Manager	Surveillance conducted	Site manager
Following audit performed at the determination of DOE UMTRA	None	TAC	DOE UMTRA	Audit conducted	Site manager
Annual (as needed)	None	DOE/AL	DOE/AL	As needed	TAC Real Estate Coordinator
Monthly	Licensing Status Report	DOE UMTRA	APM for Site Management	Automatic	APM for site management; Real Estate Coordinator

TECHNICAL ASSISTANCE CONTRACTOR
MANAGEMENT PLAN

Type	Surface/ Ground Water	Programmatic/ Site-Specific	Purpose	Frequency	R
Remedial Action Plan (RAP)	S	Site	Describes the activities proposed by the DOE to accomplish long-term stabilization and control of residual radioactive materials at the processing site. Becomes Appendix B of the cooperative agreement between the DOE and the state. Reflects the incorporation of 40 CFR Part 192.	One-time only	No
Sampling and Analysis Plan	GW, S	Site	Provides specific plan for sampling and analysis actions related to a single round of water sampling	each sampling event	W
Site Licensing Status Report (UMTRA)	S	Programmatic	Describes the most recent status of licensing activities and the progress made on licensing the UMTRA sites on which surface remedial action has been completed.	monthly	TA M R
Site Observational Work Plan (SOWP)	GW	Site	To implement observational approach for site-specific data collection and evaluation activities leading to selection of a preferred ground water compliance strategy to be developed in the EA and RAP	Depends on the site and the results of field work	R
Surface Project Management Plan	S	Programmatic	Describes the management organization, system, and methods used to manage the design, construction, and other activities required to clean up the designated sites and associated vicinity properties, in accordance with the UMTRCA.	As needed	P U P
Surface Project Plan (UMTRA)	S	Programmatic	Outlines the Project mission and objectives and describes the Project scope and technical approach.	As needed	S M
Task Plans	GW, S	Programmatic	Provides supporting details for the scope of the TAC's effort to be performed during a fiscal year.	Annual	F F
Technical Approach Document (TAD)	S	Programmatic	Describes the general technical approaches and design criteria adopted by the DOE in order to implement remedial action plans and final designs that comply with EPA standards.	As needed	T

Frequency	Related Documents	Review Audience	Approval Level	Preparation Trigger	Ownership
One-time only	None	TAC, RAC, DOE UMTRA, States/Tribes, NRC	DOE UMTRA, States/Tribes, NRC	Agreement on disposal site selection and site design	Site manager
each sampling event	WSAP	TAC, DOE, States/Tribes	DOE UMTRA	Sampling event; LTSP; other ground water documents such as the SOWP, BLRA	Technical Manager for Design and Assessment
monthly	TAC Site Management Status Report	TAC, RAC, DOE UMTRA	TAC APM for Site Management	Automatic	APM for Site Management
Depends on the site and the results of field work	RAP, EA	NRC, states/tribes	DOE UMTRA	Depends on field work and observational results	Site manager; Technical Manager for Design and Assessment
As needed	Project Charter, UMTRA Surface Project Plan	TAC; DOE UMTRA; DOE/AL; DOE HQS (EM)	DOE UMTRA; DOE/AL; DOE HQS	To maintain currency with Project	DOE UMTRA
As needed	Surface Project Management Plan	TAC; DOE UMTRA; DOE/AL; DOE/HQS	DOE UMTRA; DOE/AL; DOE/HQS	Significant change to Project schedule or total estimated cost	DOE UMTRA
Annual	FY Budget - Annual Replan	TAC	TAC Contracts Department Manager	Receipt of task assignment from DOE	Contracts Manager; Project Management Control System Director
As needed	TAGR	DOE UMTRA; DOE HQS; NRC	NRC	"Modified and updated as new technology and information become available."	Assistant Project Manager for Technical Services

TECHNICAL ASSISTANCE CONTRACTOR
MANAGEMENT PLAN

Type	Surface/ Ground Water	Programmatic/ Site-Specific	Purpose	Frequency
Technical Approach to Ground Water Restoration (TAGR)	GW, S	Programmatic	Provides general technical guidance to implement the ground water restoration phase of the UMTRA Project. Covers the regulatory basis and requirements for compliance and provides a framework for the program activities needed to meet those requirements.	As needed
TAC Management Plan	S, GW	Programmatic	Sets forth plans, organization, and systems that shall be used by those responsible for managing the Project	Annual
TAC Project Status Report	S, GW	Programmatic	Provides status on IPMS, Surface Project, Ground Water Project, and Monticello Contract Report including out-of-tolerance variances, performance and analysis at the total Project level.	Monthly
TAC Quality Assurance Implementation Plan	GW, S	Programmatic	Outlines primary requirements for integrating quality functions for TAC technical activities applied to the surface and ground water phases of the UMTRA Project. Describes in detail TAC policies governing data collection, validation, and quality.	Reviewed each calendar year.
TAC Quality Assurance Program Plan	GW, S	Programmatic	Provides the primary requirements for the integration of quality functions in all TAC Project organization activities.	Annual
Validated Data Package for Sampling Rounds	S, GW	site	Includes TAC site hydrologist/geochemist/toxicologist summary, data package assessment, data management's narrative, suspected anomalies report, anomalous data review check sheet, database printout, static ground water level measurement worksheet, sampling and analysis plan.	One time

Frequency	Related Documents	Review Audience	Approval Level	Preparation Trigger	Ownership
As needed	TAD	DOE UMTRA; DOE HQS; NRC	NRC	Significant change in regulations	Assistant Project Manager for Technical Services
Annual	None	TAC	TAC Project Manager	Automatic	TAC Project Manager
Monthly	None	TAC	TAC Project Manager	Calendar cycle	PMCS Director
Reviewed once each calendar year.	TAC QAPP, SOPs	TAC; DOE UMTRA	TAC Project Manager and QA Manager	Automatic	TAC QA Department Manager
Annual	QAIP	TAC; DOE UMTRA	TAC Project Manager	Automatic	TAC QA Manager
One time only	UMTRA Project QAPP; QAIP; SOW; SOP 16.3.2; SOP 16.3.3; SAPs, etc.	TAC; DOE UMTRA (site manager)	TAC	Completion of sampling round.	Site manager

TECHNICAL ASSISTANCE CONTRACTOR
MANAGEMENT PLAN

Type	Surface/ Ground Water	Programmatic/ Site-Specific	Purpose	Frequency
Vicinity Property Management Systems Description (VPMIM)	S	Programmatic	To describe UMTRA Project policies and guidelines for remedial action activities on vicinity properties. To establish standard procedures for all vicinity property activities, and to present a uniform system of planning and scheduling that will promote effective management by the DOE and communication between the DOE, states, tribes, participating contractors, and the public.	One time only
Waste Minimization and Pollution Prevention Awareness Plan	S	Programmatic	To establish a waste minimization and pollution prevention awareness program for the UMTRA Project. Satisfies DOE Order 5400.1 by establishing planning objectives and strategies for conserving resources and reducing the quantity and toxicity of wastes and other environmental releases.	Every 3 years
Water Sampling and Analysis Plan (WSAP)	GW, S	Site	To provide rationale for routine ground water sampling at disposal and former processing sites	Updated as needed
Work Plan	S, GW	Site	To describe all aspects of a proposed data collection program either directly or indirectly through reference to appropriate SOPs, plans, or other applicable documents	One time only

Frequency	Related Documents	Review Audience	Approval Level	Preparation Trigger	Ownership
One time only	Vicinity Property Implementation Plan (MK-F)	TAC; DOE UMTRA; RAC; States/Tribes; NRC	NRC	None	TAC Vicinity Property Manager
Every 3 years	EPIP	TAC, DOE UMTRA, DOE/AL, DOE/HQS	DOE/HQS	DOE Order 5400.1	Technical Manager for Regulatory Compliance
Updated as needed	Guidance document for preparing WSAPs, Sampling and Analysis Plans	DOE UMTRA, NRC, States/Tribes, Other regulatory agencies	DOE UMTRA	Changes in the interpretation of the site conceptual model, regulatory requirements, or other criteria that affect the approach to water sampling and monitoring activities	Site manager
One time only	Varies	TAC; DOE UMTRA	TAC; DOE UMTRA	A recognized need	Site manager