Environment, Safety and Health Progress Assessment

of the Rocky Flats Plant

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MASTER

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Executive Summary

EXECUTIVE SUMMARY

This report documents the result of the U.S. Department of Energy's (DOE) Environment, Safety and Health (ES&H) Progress Assessment of the DOE Rocky Flats Plant (RFP) in Golden, Colorado. The assessment, which was conducted during the period of May 17 through May 28, 1993, included a selective review of the ES&H management systems and programs of the responsible DOE Headquarters Program Offices (Defense Programs (DP) and Environmental Restoration and Waste Management (EM)), the DOE Rocky Flats Office (RFO), and the site contractor, EG&G Rocky Flats, Inc (EG&G).

The ES&H Progress Assessments are part of the DOE's continuing effort to institutionalize line management accountability and the self-assessment process throughout DOE and its contractor organizations. The purpose of the RFP ES&H Progress Assessment is to provide the Secretary of Energy and Senior DOE management with an independent assessment of the adequacy and effectiveness of the DOE and contractor management structures, resources, and systems to address ES&H problems and requirements. They are not intended to be comprehensive compliance assessments of ES&H activities. The RFP Progress Assessment was conducted by a Team of 15 professionals from various DOE offices and their support contractors, with expertise in the areas of environment, safety, health, and management.

RFP has been operated since 1952 by the DOE and its predecessor agencies. Located approximately 17 miles northwest of Denver, Colorado, the primary mission of RFP has been manufacturing nuclear and non-nuclear components for nuclear weapons. A Secretarial curtailment of "plutonium operations" remains in effect except for Building 559, and is addressed in law. A proposed change in mission stems from recent changes in global politics and the defense needs of the United States; the change is also related to a focused effort, initiated by the Secretary of Energy, to reshape nuclear weapons production into a more cost effective program. The proposed new mission involves cleanup, waste management, and economic development activities. These activities have recently been guided by the need to respond to critical noncompliance issues; negotiating regulatory compliance agreements; creating systems to identify, report, and correct ES&H deficiencies; and providing long term plans for waste treatment, disposal and waste minimization. In addition, several facilities are planned to be retained for non-nuclear production.

Progress in ES&H Performance

Despite the near constant state of flux under which RFP has been required to operate, the Progress Assessment Team has concluded that significant progress has been made in correcting the deficiencies identified in the 1989 Assessment and in responding responsibly to regulations, and DOE directives and guidance that have been issued since that time. The Team concluded that the improvements have been concentrated in the activities associated with plutonium facilities and in regulatory driven programs. Much remains to be done with respect to implementing on a sitewide basis those management systems that anchor an organization's pursuit of continuous ES&H improvement. Furthermore the Team concluded that the pace of improvement has been constrained by a combination of factors that have limited the site's ability to manage change in the pursuit of sitewide ES&H excellence.

No conditions were identified as immediate concerns which justified the general curtailment of operations. Inspections of individual facilities did identify a number of specific worker safety problems that required prompt attention. These included ineffective machine guarding, breaches in the integrity of electrical extension cords, defective portable tool electrical cords, damaged hand tools, and the absence of equipment anchoring. In the Team's judgement, such deficiencies represent serious safety and health exposure hazards.

In addition, a life safety issue with regard to Building 881 egress was identified. Reassessment by Progress Assessment Team members confirmed that corrective action by RFP was underway.

The Progress Assessment Team identified progress in the development and implementation of management systems since the 1989 Assessment. Elements of all of these programs are in place and additional elements are being defined and developed. Numerous procedures have been developed to provide guidance, direction, and formality. ES&H staffing and oversight have increased significantly in both RFO and EG&G. A self-assessment program is being developed and implemented and corrective action systems are being consolidated and formalized. A foundation for sitewide strategic planning has been established by the strategic planning efforts within EM, DP, and RFO. The effectiveness of the RFO Facility Representative Program, assessment and review activities by both RFO and EG&G, formality of operations, training of personnel, and the identification and correction of deficiencies were all demonstrated through a focused effort on resumption Buildings 559 and 707. However, this focused approach has not yet been applied sitewide, and nonresumption areas have not received proper attention for ES&H matters. Resources, program development and improvements, as well as corrective actions in many areas were directed primarily at the resumption effort.

The Progress Assessment Team concluded that RFP has made notable progress in the environmental disciplines reviewed. Strengths noted in the assessment include the formation of a Quality Action Team to address environmental restoration issues; EG&G's operational control of the Sewage Treatment Plant; the solid radioactive waste generator training and qualification program; and EG&G's management and oversight of offsite laboratories that perform environmental analyses. Weaknesses were identified in specific aspects of environmental programs, including RFO and EG&G systems for managing the Interagency Agreement (IAG); EG&G implementation of the waste characterization program; RFO oversight of programs for waste characterization, surface water, and environmental sampling and analysis; and EG&G oversight of the environmental sampling analysis program.

At the outset, the Progress Assessment Team envisioned focusing its attention primarily outside of Buildings 559 and 707 (the resumption buildings) since these buildings had been the subject of numerous reviews by Operational Readiness Review teams, by EH and the Office of Nuclear Safety, and by the Defense Nuclear Facilities Safety Board. However, from the in-briefings and the initial site review it became apparent that to do so would do the site an injustice since an overwhelming focus of the ES&H improvement program had been developed around and concentrated on these facilities. RFP's overall intent was to develop and qualify improvement programs in those two facilities and then to clone them elsewhere on the site. (This approach was responsive to the guidance provided by DP but not necessarily throughout DOE and led to

periodic questions regarding priorities, and disputes on resource allocation.) The site has characterized this approach as "developing the infrastructure" for a sitewide improvement in ES&H performance. Consequently, the Team modified its assessment planning both to examine, where possible, the quality of the infrastructure programs in Buildings 559 and 707 and also to examine the sitewide implications of the concentration of resources in those buildings.

There is ample evidence to support a conclusion that RFP management in both RFO and EG&G considered ES&H improvement associated with Buildings 559 and 707 as fundamental to resumption of operations in those facilities. It is apparent in the management attention given those facilities; specifically in the areas of human resource allocation, training and oversight. This was accurately characterized in the in-briefing as a "laser focus" on the resumption facilities. The attendant needs of other ES&H demands onsite were met in a reactive mode, reflecting regulatory liability risk, external influences, or as driven by the individual insistence of a specific facility operations manager. This explains why there are examples of excellence outside of the resumption facilities (for example, the overall appearance and conduct of the sewage treatment facility) but without integration into an overall ES&H improvement plan.

Consistent statements of roles, responsibilities, and authorities properly reflected in procedures and implementing instructions that one would expect at RFP are not entirely complete or accurate. The Team attributes this to the frequency with which organizational realignments have occurred at RFP over the past several years. While in most cases there is an informal understanding of roles and responsibilities that appears consistently implemented, in some instances this is not the case.

An understanding of the ES&H program status at RFP requires an evaluation of current programs and an understanding of the conduct of the site during the period between the 1989 Assessment and today. Our understanding of this period is largely anecdotal, derived from a multiplicity of interviews with RFO and EG&G personnel, but it is supported by review of site records as well. During much of that period, RFP has been actively pursuing a transition from operating as a confederation of independent and loosely connected facilities, organizations, and programs to that of an integrated site. In the Team's judgement, there are multiple contributing barriers to this transition including the historical production campaign approach to facility operations, mission drivers (resumption verses non-resumption facilities), contractual barriers (bargaining unit agreements preclude efficient reallocation of personnel between facilities), and programmatic issues (DP and EM programs have been conducted largely as isolated independent activities through separate management chains.) While recent events, notably the 1992 Resource Conservation and Recovery Act (RCRA) Notice of Violation and the change in production mission, have been identified by the site as contributors to a more "corporate" sitewide approach to RFP, the effect of the previous constraints is an ES&H program that is often incoherent and inconsistent. Areas of strength tend to be isolated to resumption facilities or those subject to external influences (regulation or mission constraining influences such as Nevada's waste shipment prohibition) although there is recent evidence of broader application across the site with the interruption of resumption activities.

Priorities were driven by facility-, regulatory-, or mission-specific considerations rather than a comprehensive corrective action program, one that integrates sitewide assessment of ES&H risk verses programmatic need. Only recently has the site addressed the need for a sitewide corrective action system and a priority system that will permit a sound comparison of sitewide needs. Much of the recent prioritization has been driven by response to external forces rather than an assessment process fully within site control.

The Progress Assessment Team views the recent changes toward sitewide integration as positive indicators of progress toward a coherent ES&H program. Nevertheless, managing the site as a whole instead of as separable entities remains as a major barrier to be overcome. The transition of the site to an EM mission would, on the surface, seem to simplify this task. But EM's interaction with the site has been fragmented along program lines without integration and resolution of conflicting guidance. In addition, the differences that continue to exist between DP and EM missions, funding and management philosophies create an apparent strain at RFP that is adversely affecting performance and morale.

A dominant influence on the inconsistency of the ES&H program has been the nearly constant change at RFP. Multiple changes in leadership, organization, mission, and contractors have impeded the ability to put in place clearly defined sitewide policies, roles and responsibilities, and consistent plans and procedures. Although some of this change was within the control of RFP; much was not. Nevertheless, a period of stability is badly needed to facilitate achieving programmatic improvement in overall RFP ES&H performance, particularly those aspects dealing with program management. Current and planned DOE actions that will influence the site's stability include the selection of a permanent manager, the impact of the Secretary's reorganization on the interface between RFO/DOE-HQ, and the actions taken to make the turnover of RFP programs from DP to EM at DOE-HQ as transparent as possible from a field perspective. Each of these areas is presently contributing to a continuing sense of uncertainty at RFO with attendant morale and leadership implications.

A summary of issues and progress in the areas of environment, safety and health, and management follows. The reader is referred to Section 2.0 and Appendix B for a full description.

Key Concerns, Root Causes, and Strengths

The RFP Progress Assessment Team evaluated the concerns, weaknesses, and findings and identified three key concerns that are considered to be representative of the RFP ES&H deficiencies.

The key concerns are:

RFO and EG&G have only recently initiated a comprehensive planning process to integrate RFP mission objectives with specific ES&H and programmatic goals and objectives for the RFO Offices, and EG&G. As a result, effective planning and program management based on sitewide ES&H risks and vulnerabilities has not been implemented throughout RFO and its RFP contractor organizations. The failure of RFO and EG&G to develop a planning system for RFP that considers the site mission, communicates a vision of an architecture for managing the

site (as opposed to singular facilities), and develops and implements a comprehensive plan for executing its mission, are manifested in several ways. Neither a sitewide RFP strategic or mission plan, nor subordinate implementation plans exist that would translate a RFP vision into practice. Essential management decision-making tools such as comprehensive, sitewide corrective action and self-assessment programs are not fully in place. Collectively, these planning tools are essential to RFP's ability to balance mission demands, manage change, and achieve a higher level of ES&H performance. RFO and EG&G have initiated the development of a comprehensive, sitewide, integrated planning, budgeting, and resources allocation system that, if fully implemented, will be essential elements in RFP's pursuit of ES&H excellence.

The frequency of organizational changes within both RFO and EG&G have impacted execution of the site's mission by undermining a common understanding of ES&H roles, responsibilities, and authorities throughout the site, particularly as they are expressed in mission and function statements, policies and procedures, and program plans. Both RFO and EG&G have undergone significant reorganizations and changes of key personnel, including changes in RFO senior management and numerous EG&G reorganizations of varying scope and magnitude involving the General Manager and/or his direct reports since January 1990. This has inhibited the ability of RFO and EG&G to clearly define, formally document, and effectively communicate individual and organizational roles, responsibilities, and authorities to all affected parties; and has altered the organizational relationships within and between RFP organizations, inhibiting effective communication when strengthening was needed. Realignment down through the EG&G organization have compounded the effects of mission changes and external pressures while depriving the site of leadership stability at every level. As a result, confusion surrounding ES&H roles, responsibilities, and authorities exists at RFP. RFP documents such as mission and function statements, policies and procedures, and implementation plans that would formally define and communicate ES&H roles, responsibilities, and authorities are often incomplete, in draft form, outdated, or nonexistent.

RFO and EG&G lack the management systems required to pursue continuous improvement of ES&H performance on a prioritized and sitewide basis. Continuous improvement of ES&H performance that is based on priorities determined by risks and vulnerabilities is founded on strong self-assessment and oversight programs coupled with a comprehensive sitewide corrective action and issues management program. When fully functioning, these management systems provide senior managers with the complete and reliable information regarding the status of facilities and activities with regard to ES&H. They can provide the technical basis for integrating the demands of RFP stakeholders into commonly-accepted priorities. Management must have this information to assess the risks and vulnerabilities at the site and make informed decisions regarding ES&H plans, priorities, and the allocation of resources. Although RFO and EG&G have made varying degrees of progress toward the development of these essential ES&H management programs, key elements are not fully developed and being applied towards assuring an effective ES&H program at RFP. Comprehensive sitewide self-assessment and corrective action programs at RFP are in the early stages of development and implementation. In addition, the RFO and EG&G oversight programs have not yet been clearly defined in several areas or are not being performed in a manner that provides management with all needed information. Management has not allocated and directed the considerable resources now available at RFO and EG&G to

aggressively and proactively forge these management systems into the tools needed to improve the ES&H program sitewide at RFP. Although management has established top level action plans for correcting the identified weaknesses in these management systems, and progress is being made, overall responsibility and accountability for the execution of these plans have not been clearly established. In addition, detailed implementation plans have not been developed to assure that all of the required actions are identified and executed in a rigorous, prioritized, and timely manner.

The Team identified one root cause, leading to the concerns and weaknesses identified during the assessment:

The absence of a comprehensive ES&H program that integrates and balances site and external stakeholder interests has inhibited the pursuit of ES&H excellence. While the difficulty presented by numerous and often disparate stakeholder demands is recognized, it is the responsibility of RFO and EG&G senior management to strike that balance in forging a program. Since the 1989 Assessment, numerous and often conflicting challenges posed by site stakeholders narrowed management's focus to a subset of objectives within the overall site mission. During this period, RFP experienced an FBI/EPA criminal investigation, a change in M&O contractor, creation of a new DOE field office, execution of several major environmental compliance agreements, intense oversight by internal and external organizations, and scrutiny from special interest groups and the general public. These influencing factors exerted additional pressure on RFP management at a time when their principal focus was on resumption activities of Buildings 559 and 707. RFP leadership was further challenged as resumption activities were canceled and transition from Defense Programs to Environmental Restoration and Waste Management was initiated.

RFP's focus on satisfying external and internal demands regarding specific RFP facilities and programs have delayed the timely execution of an ES&H program that extends to all site activities. Collectively, the frequency and magnitude of demands on RFP have challenged RFP's ability to respond in an integrated fashion to all ES&H challenges. The rigor that was successfully applied to ES&H issues arising out of resumption activities has not yet been demonstrated sitewide.

The Progress Assessment Team identified the following strengths:

The Cost/Productivity Improvement Program, as exemplified by the Engineering Corrective Action Team, has demonstrated the ability to make meaningful improvements in ES&H disciplines.

A Quality Action Team (QAT) has proven successful for resolving significant issues associated with the Interagency Agreement (IAG), and for identifying impediments that affect the efficient implementation of environmental restoration activities associated with the IAG.

EG&G has obtained a very high level of operational control at the Sewage Treatment Plant (STP) which reflects a strong conduct of operations and promotes excellence.

The solid radioactive waste generator training and qualification program has significantly improved radioactive waste characterization at the generator level.

EG&G Environmental Restoration Management (ERM) has a well implemented program to ensure the accuracy, reliability, traceability, and timeliness of environmental analyses performed by offsite laboratories.

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1.0

Introduction

1.0 INTRODUCTION

1.1 ENVIRONMENT, SAFETY, AND HEALTH (ES&H) PROGRESS ASSESSMENT PROGRAM

In June 1989, during the 1989 Assessment of Environmental Conditions at RFP, DOE announced a 10-point Initiative to strengthen ES&H programs and waste management operations at the U.S. Department of Energy (DOE). One of the initiatives involved conducting independent Tiger Team Assessments of DOE operating facilities. To date, 35 Tiger Team Assessments have been conducted, with the final one completed in June 1992. These large, comprehensive assessments established baselines for ES&H compliance levels, evaluated ES&H management programs, identified root causes of noncompliance, and provided for corrective action plans. As part of the continuing effort to institutionalize line management accountability and the self-assessment process, and to evaluate the actions taken in response to Tiger Team findings, DOE directed that small, focused, ES&H Progress Assessments be performed. The ES&H Progress Assessment at the RFP, conducted from May 17 through May 28, 1993, is the tenth overall assessment of this new program.

The point of reference for assessing programs at the RFP, was for the most part the Assessment of Environmental Conditions at the Rocky Flats Plant which was conducted from June 6 through July 21, 1989. The level of onsite effort for that assessment was approximately 60 people for 6 weeks versus 15 people for 3 weeks for the ES&H Progress Assessment.

The objectives of the RFP ES&H Progress Assessment were to develop an updated picture of how RFP has progressed since the 1989 Assessment; how effectively RFP has corrected specific deficiencies identified by that team and the root causes of those deficiencies; and whether the current structure, resources, and systems are in place and functioning to identify weaknesses in a timely manner and effectively manage ES&H issues.

Accomplishing these objectives involved performing evaluations of the following:

- Effectiveness of DOE and contractor management structures, resources, and systems to address ES&H problems and new ES&H initiatives, resulting from the 1989 Assessment.
- Adequacy and effectiveness of the ES&H self-assessment programs of the DOE line organization and the site management and operating contractor(s).
- Progress and effectiveness of the ES&H corrective actions resulting from the 1989 Assessment.

The Progress Assessment was conducted by a Team of specialists from various DOE offices and support contractors, with expertise in the areas of the environment, safety, health, and management. The Team Leader was a senior DOE manager from DOE Savannah River. Team members, with their areas of responsibility and work-related experience, are identified in Appendix C.

The assessment process consisted of a Team meeting, initial site visit, offsite review of documents, DOE Headquarters interviews, and onsite interviews, observations, inspections, and document review. The initial site

visit was conducted April 19 through April 23, 1993. This activity included presentations by RFO and EG&G; various site/facility tours; the collection of documents for review; and planning of the assessment. Team members reviewed documents and developed more formal assessment scopes (see Appendix D) and activity schedule list (see Appendix E) between April 26 and May 14, 1993. Several Team members conducted interviews with DOE Headquarters personnel during this period. The onsite assessment was conducted May 17 through May 28, 1993. During this period the Team conducted interviews with RFO and contractor personnel, inspected facilities, developed the results of the assessment, drafted the assessment report, and held a formal closeout with DOE and contractor management. Daily Team meetings were held to discuss issues and assessment progress. To facilitate the full understanding of the issues and encourage involvement in the assessment process, DOE and EG&G personnel were invited to attend and participate in these meetings.

The approach used by the Team to perform the evaluations and achieve the objectives detailed above, involved both horizontal and vertical reviews of ES&H activities. The horizontal reviews evaluated the existence and adequacy of management structures and systems for identifying and addressing ES&H problems and requirements. The management elements evaluated included oversight, organization, planning, directive systems, human resources, and design basis and configuration management. Horizontal and vertical reviews were also performed on the self-assessment and corrective action programs. Although these two programs are integral parts of ES&H management systems, they are addressed as separate disciplines in this report. The distinction was made because of the importance of these two programs, as indicators of progress since the 1989 Assessment, and more importantly because they are key elements of a sustainable ES&H program.

The vertical reviews are used to validate conclusions reached during the horizontal reviews. The ES&H technical areas selected for vertical reviews were consent agreement interpretation, restoration activities for IAG, surface water programs, waste characterization programs, sampling and analysis quality assurance, OS&H programs, fire protection, and industrial hygiene. The selection of the areas for vertical review was based on the results of the 1989 Assessment and its Action Plan, other assessments, occurrence reports, and information obtained during the initial site visit.

The Team conducted a review of all of the concerns, weaknesses, and strengths and identified key concerns and root causes. The key concerns represent the essence of the weaknesses and deficiencies identified by the Team, and the root causes the most fundamental reasons that the deficiencies occurred.

The correction of the 1989 Assessment findings and their root causes and self-assessment activities were subjects reviewed by all Team members in both the horizontal and vertical reviews. The observations of Team members related to the 1989 Assessment corrective actions, other corrective actions, and self-assessment were consolidated and evaluated from a sitewide perspective. Details of the specific subjects covered by these reviews are provided in Section 2.0 and Appendix B of this report. The results of the Team members' evaluations were categorized into four groups:

- **Immediate Concern.** Any situation or adverse condition, including any non-conformance with applicable law or agreement that significantly endangers the safety or health of the public or

workers, or would have substantial adverse effect on the environment.

- **Concern.** Any situation or adverse condition that does not meet the requirements of an applicable law, agreement, DOE rule or Order, DOE procedure, or constitutes a significantly deficient practice not covered by procedure, and is not classified as an immediate concern.
- **Weakness.** Any situation which indicates less than optimal performance and could be an indication of more serious problems and is not classified as an immediate concern or concern. The term is also used for any series of situations or adverse conditions related to findings that indicate a degradation in the performance of a program or management system.
- **Strength.** A strength is an example of exceptional performance or achievement of excellence. A strength may be a noteworthy practice, activity, or program that clearly exceeds the acceptable level of performance and that warrants documentation supported by findings of fact. Strengths may have general application to other DOE programs or operations. The purpose for documenting the strength is for communicating the strength within DOE. General application of a strength, either by its design or its execution, results in more effective and improved management or operation performance.

1.2 Rocky Flats Plant

RFP has been operated since 1952 by DOE and its predecessor agencies. Located approximately 17 miles northwest of Denver, Colorado, the RFP is a 384-acre complex containing 436 buildings and facilities, of which 150 are permanent buildings. The plant currently employs about 8,300 people and generates an additional 19,000 jobs in the region. Approximately 2 million people live within 50 miles of the plant.

The primary mission of RFP has been manufacturing nuclear and non-nuclear components for nuclear weapons. A proposed change in mission stems from recent changes in global politics and the defense needs of the United States; the change is also related to a focused effort, initiated by the Secretary of Energy, to reshape nuclear weapons production into a more cost effective program. The proposed new mission involves cleanup, waste management, and economic development activities. These activities have recently been guided by the need to respond to critical noncompliance issues; negotiating Federal Facilities Compliance Agreements; creating systems to identify, report, and correct ES&H deficiencies; and providing long term plans for waste treatment, disposal, and waste minimization.

1.3 Report Structure

The results of the assessment are addressed in two main sections of this report: Section 2.0, Key Concerns, Root Causes, Findings, and Assessment Overviews; and Appendix B, Concerns, Weaknesses, and Strengths. Section 2.0 presents the Team's overall evaluation of the results of the Progress Assessment. This includes an identification of key concerns, root causes of

the assessment results, a discussion of strengths, and overview sections for each area of responsibility. Each overview section provides a summary of the assessment conclusions for each area assessed. Appendix B includes the individual concerns, weaknesses, and strengths by discipline. A summary table of concerns, weaknesses, and strengths is presented in Appendix A.

Each evaluation item is given a unique number that identifies its category. The disciplines are identified by the following designations M = ES&H Management Systems, E = Environmental Programs, S = Safety and Health Programs. The categories are represented by: C = Concern, W = Weaknesses, and S = Strength. These letters are followed by a sequential number assigned to each evaluation item within a given category. As an example, the first Management concern would be written as M/C-1. These identifiers are used in both the body of the report and in Appendix B.

Where appropriate, discussions are supported by references to specific interviews and documents. These references are tied to the reference numbers on the interviews and documents listed in Appendices F and G respectively. In the report, the references are shown by placing the reference number in parentheses. The first letter in the reference number is either I or D, indicating whether the reference is an interview or document. The second letter is a Progress Assessment Team member identifier used for internal document control. The alphabetic designation is followed by a sequential number. As an example, the sixth interview reference by Progress Assessment Team member "A" would be I-A-6.

2.0

***Performance and Progress of
Rocky Flats ES&H Programs***

2.0 PERFORMANCE AND PROGRESS OF ROCKY FLATS PLANT ES&H PROGRAMS

The approach taken by the Progress Assessment Team included interviews with RFO and EG&G line and support staff, review of relevant documentation, and tours of the site. In addition, interviews with selected senior DOE officials occurred at Headquarters in Washington, D.C. The review looked across the organizations horizontally for the existence and adequacy of the management programs, as well as vertically to review the implementation of the selected environmental, safety and health disciplines throughout all levels of each organization.

Key standards used for the assessment primarily included the ES&H Progress Assessment Manual, Volume II, Appendix B, Performance Objectives and Criteria for Progress Assessments. Three primary performance objective and criteria documents are contained within the Progress Assessment Manual:

- ES&H Management Performance Objectives and Criteria for Progress Assessments (PA);
- Performance Objectives and Criteria for Conducting DOE Environmental Audits (ENV); and
- Performance Objectives and Criteria for Technical Safety Appraisals at DOE Facilities and Sites (TSA).

The Assessment of Environmental Conditions at the Rocky Flats Plant (August 1989) served as the Progress Assessment Teams' baseline for judging progress made in ES&H programs, where warranted. While this 1989 Assessment did not address safety and health disciplines, as well as management systems such as corrective action program; self-assessment programs; oversight; planning; and organizational roles, responsibilities, and authorities as discrete assessment elements, it brought forward inadequacies and inconsistencies of many of the environmental elements.

2.1 OVERVIEW

The Progress Assessment Team has reviewed the ES&H management systems and programs at RFP and concluded that RFO and EG&G have made significant progress in correcting the deficiencies identified in the 1989 Assessment and in responding responsibly to regulations, and DOE directives and guidance that have been issued since that time. However, the Team concluded that much remains to be done with respect to implementing those management systems that anchor an organization's pursuit of continuous ES&H performance improvement. Furthermore, the Team concluded that the pace of improvement has been constrained by a combination of factors that have strained the site leadership's ability to effectively manage change, whether in mission, or in pursuit of ES&H excellence.

RFO and EG&G have begun developing and implementing a sitewide planning, budgeting, and resource allocation process to define, guide, and control all activities at RFP, including ES&H. Both RFO and EG&G have active oversight programs that can be improved with enhanced formality. Corrective action and self-assessment programs are emerging sitewide but have not been fully defined, developed, implemented, or integrated. Policy, procedure, and directive systems are in place but have not been implemented on a sitewide

basis. The organizational alignments for RFO and EG&G oversight provides sufficient independence but frequent reorganizations inhibits the ability of both organizations to establish clear roles, responsibilities, and authorities. Training programs were found to be making sufficient progress.

Three key concerns were identified by the Progress Assessment Team that if addressed effectively should establish a firm foundation for continuous performance improvement and attainment of ES&H excellence. In general, these concerns relate to ES&H management systems and organizational issues with respect to RFO and EG&G. The Progress Assessment Team also identified five strengths related to specific aspects of ES&H activities at RFP. These strengths demonstrate a commitment on the part of RFP management to seek continual performance improvement towards ES&H excellence.

2.1.1 Key Concerns

The following key concerns were identified by the Progress Assessment Team:

RFO and EG&G have only recently initiated a comprehensive planning process to integrate RFP mission objectives with specific ES&H and programmatic goals and objectives for the RFO Offices, and EG&G. As a result, effective planning and program management based on sitewide ES&H risks and vulnerabilities has not been implemented throughout RFO and its RFP contractor organizations. The failure of RFO and EG&G to develop a planning system for RFP that considers the site mission, communicates a vision of an architecture for managing the site (as opposed to singular facilities), and develops and implements a comprehensive plan for executing its mission, are manifested in several ways.

Neither a sitewide RFP strategic or mission plan, nor subordinate implementation plans exist that would translate a RFP vision into practice. Essential management decision-making tools such as comprehensive, sitewide corrective action and self-assessment programs are not fully in place. Collectively, these planning tools are essential to RFP's ability to balance mission demands, manage change, and achieve a higher level of ES&H performance. RFO and EG&G have initiated the development of a comprehensive, sitewide, integrated planning, budgeting, and resources allocation system that, if fully implemented, will be essential elements in RFP's pursuit of ES&H excellence.

The frequency of organizational changes within both RFO and EG&G have impacted execution of the site's mission by undermining a common understanding of ES&H roles, responsibilities, and authorities throughout the site, particularly as they are expressed in mission and function statements, policies and procedures, and program plans. Both RFO and EG&G have undergone significant reorganizations and changes of key personnel, including changes in RFO senior management and numerous EG&G reorganizations of varying scope and magnitude involving the General Manager and/or his direct reports since January 1990. This has inhibited the ability of RFO and EG&G to clearly define, formally document, and effectively communicate individual and organizational roles, responsibilities, and authorities to all affected parties; and has altered the organizational relationships within and between RFP organizations, inhibiting effective communication when strengthening was needed. Realignment down through the EG&G organization have compounded the effects of mission changes and external pressures while depriving the site of leadership stability at every level. As a result, confusion surrounding ES&H roles, responsibilities,

and authorities exists at RFP. RFP documents such as mission and function statements, policies and procedures, and implementation plans that would formally define and communicate ES&H roles, responsibilities, and authorities are often incomplete, in draft form, outdated, or nonexistent.

RFO and EG&G lack the management systems required to pursue continuous improvement of ES&H performance on a prioritized and sitewide basis. Continuous improvement of ES&H performance that is based on priorities determined by risks and vulnerabilities is founded on strong self-assessment and oversight programs coupled with a comprehensive sitewide corrective action and issues management program. When fully functioning, these management systems provide senior managers with the complete and reliable information regarding the status of facilities and activities with regard to ES&H. They can provide the technical basis for integrating the demands of RFP stakeholders into commonly-accepted priorities. Management must have this information to assess the risks and vulnerabilities at the site and make informed decisions regarding ES&H plans, priorities, and the allocation of resources. Although RFO and EG&G have made varying degrees of progress toward the development of these essential ES&H management programs, key elements are not fully developed and being applied towards assuring an effective ES&H program at RFP. Comprehensive sitewide self-assessment and corrective action programs at RFP are in the early stages of development and implementation. In addition, the RFO and EG&G oversight programs have not yet been clearly defined in several areas or are not being performed in a manner that provides management with all needed information. Management has not allocated and directed the considerable resources now available at RFO and EG&G to aggressively and proactively forge these management systems into the tools needed to improve the ES&H program sitewide at RFP. Although management has established top level action plans for correcting the identified weaknesses in these management systems, and progress is being made, overall responsibility and accountability for the execution of these plans have not been clearly established. In addition, detailed implementation plans have not been developed to assure that all of the required actions are identified and executed in a rigorous, prioritized, and timely manner.

2.1.2 Root Causes

The Progress Assessment Team evaluated the key concerns and identified the following root cause:

The absence of a comprehensive ES&H program that integrates and balances site and external stakeholder interests has inhibited the pursuit of ES&H excellence. While the difficulty presented by numerous and often disparate stakeholder demands is recognized, it is the responsibility of RFO and EG&G senior management to strike that balance in forging a program. Since the 1989 Assessment, numerous and often conflicting challenges posed by site stakeholders narrowed management's focus to a subset of objectives within the overall site mission. During this period, RFP experienced an FBI/EPA criminal investigation, a change in M&O contractor, creation of a new DOE field office, execution of several major environmental compliance agreements, intense oversight by internal and external organizations, and scrutiny from special interest groups and the general public. These influencing factors exerted additional pressure on RFP management at a time when their principal focus was on resumption activities of Buildings 559 and 707. RFP leadership was further

challenged as resumption activities were canceled and transition from Defense Programs to Environmental Restoration and Waste Management was initiated.

RFP's focus on satisfying external and internal demands regarding specific RFP facilities and programs have delayed the timely execution of an ES&H program that extends to all site activities. Collectively, the frequency and magnitude of demands on RFP have challenged RFP's ability to respond in an integrated fashion to all ES&H challenges. The rigor that was successfully applied to ES&H issues arising out of resumption activities has not yet been demonstrated sitewide.

2.1.3 Strengths

The Progress Assessment Team identified the following strengths:

The Cost/Productivity Improvement Program, as exemplified by the Engineering Corrective Action Team, has demonstrated the ability to make meaningful improvements in ES&H disciplines. While process improvement concepts are relatively commonplace throughout DOE, this program has demonstrated the ability to affect meaningful change at RFP. The engineering Team devised programmatic changes which have substantially reduced non-conformances while improving responsiveness. Other Process Improvement Teams have addressed issues ranging from radiological control to the laundry operations. Currently there are approximately 40 Project Management Teams and 50 Process Improvement Teams and a trained staff of 1,500 employees that can apply this form of corrective action to the wide range of ES&H issues at RFP.

A Quality Action Team (QAT) has proven successful for resolving significant issues associated with the Interagency Agreement (IAG), and for identifying impediments that affect the efficient implementation of environmental restoration activities associated with the IAG. Evidence of the QAT's effectiveness is demonstrated in the streamlining of the contractor procurement process which, prior to QAT attention, had serious effects on the timeliness in which environmental restoration activities were getting done in the field. The QAT has also served to improve communications with the regulators; a serious problem up to nearly 9 months ago.

EG&G has obtained a very high level of operational control at the Sewage Treatment Plant (STP) which reflects a strong conduct of operations and promotes excellence. It is apparent that the STP is being operated at a very high level of proficiency, indicating a high level of operational of control. The demonstrated ability to implement emergency procedures is indicative of a mature conduct of operations program. EG&G management has taken measure to hire professionally certified operators and provide the necessary resources to ensure that preventive maintenance is preformed to ensure a level of facility performance that is excellent.

The solid radioactive waste generator training and qualification program has significantly improved radioactive waste characterization at the generator level. Based on demonstrated improvements in radioactive waste characterization and the implementation of management systems to ensure that the program continues to evolve in response to performance indicators, the Solid Radioactive Waste Generator Training and Qualification Program represents a model system for implementation of a successful training program. The program is formalized by a program plan and is subject to regular review.

EG&G Environmental Restoration Management (ERM) has a well implemented program to ensure the accuracy, reliability, traceability, and timeliness of environmental analyses performed by offsite laboratories. The Sample Management Office (SMO) was formed to serve as the single point of contact for ERM analysis and has developed a program protocol including qualification standards and audits for analytical laboratories. As a result of the efforts of the SMO, the turnaround time for analytical data for radiochemical analysis has been reduced from 240 days to 70 days. For nonradiological analysis the turnaround has dropped from 140 days to 60 days. The results have been so successful that it is being implemented sitewide.

2.2 OVERVIEW OF ES&H MANAGEMENT SYSTEMS ASSESSMENT

The Progress Assessment Team evaluated the overall effectiveness of the DOE and EG&G management systems as they relate to the ES&H programs at RFP. The assessment was conducted through interviews, review of documents, and where appropriate, field inspection of activities and processes. The management systems addressed in this assessment were corrective action programs; self-assessment programs; oversight; organization, roles, responsibilities, and authorities; planning, budgeting, and resource allocation; directives, policies, and procedures; human resource management; and design basis and configuration management.

The Progress Assessment Team determined that the development and implementation of management systems has evolved substantially since the 1989 Assessment. Elements of all of these programs are in place and additional elements are being defined and developed. Numerous procedures have been developed to provide guidance, direction, and formality. ES&H staffing and oversight have increased significantly in both RFO and EG&G. A self-assessment program is being developed and implemented and corrective action systems are being consolidated and formalized. A foundation for sitewide strategic planning has been established by the strategic planning efforts within EM, DP, and RFO. The effectiveness of the RFO Facility Representative Program, assessment and review activities by both RFO and EG&G, formality of operations, training of personnel, and the identification and correction of deficiencies were all demonstrated through a focused effort on resumption of production in Buildings 559 and 707. However, this focused application of resources, program development and improvements, and corrective actions has not yet been applied sitewide, and non-resumption areas have been not received equivalent attention for ES&H matters.

Key elements of most of the management systems evaluated are still not fully developed, fully implemented, or having the expected positive impact on the overall ES&H program at RFP. The site has been aware of DOE mandated initiatives vital to achieving ES&H excellence for several years and yet they are only now in the early stages of their response to these mandates. Examples of areas where the implementation has lagged on a sitewide basis include conduct of operations, self-assessment, and the corrective action program. RFO management has not allocated and directed the considerable resources it now commands to aggressively develop and implement these fundamental management systems into the management tools needed for an effective sitewide RFP ES&H program. Full and timely development and implementation of these programs also appears to be hindered by a failure to establish proper ES&H priorities, develop detailed implementation plans and schedules, and clearly assign responsibilities and authority.

Based on the review of the management systems listed above, the Progress Assessment Team reached the following conclusions with respect to each of these areas:

- ES&H corrective action management systems for DP, EM, RFO, and EG&G are in various stages of development. Although various elements of a corrective action program exist, none of these organizations presently possess a comprehensive, integrated corrective action program for managing organization-wide ES&H deficiencies. DP-9 assessments do not have a provision for formal corrective action plans or a corrective action closure process. RFO does not have a comprehensive corrective action program that captures all deficiencies, assures correction of root causes, identifies adverse trends, assures correction of problems on a generic (sitewide) basis, provides for tracking, verification of closure, incorporates lessons learned, or communicates results to management. EG&G has over 20 individual corrective action systems tied to individual facilities, organizations, and programs. Although EG&G is in the process of developing a sitewide program and identifying and consolidating the individual systems, it was not until December 1992 that EG&G began an aggressive and formalized effort to develop and implement a sitewide system.
- The Progress Assessment Team determined that DP, EM, RFO, and EG&G have made varying degrees of progress toward the development of effective self-assessment programs. The DP Office of Self-Assessment and Emergency Management (DP-9) has instituted new self-assessment initiatives such as the development and distribution of DP Self-assessment guidance. The EM Office of Self-Assessment (EM-20) has recently developed self-assessment guidance and a draft report which is subordinate to the management plan and describes requirements and characteristics for a planned EM corrective action system to address this issue.

RFO and EG&G have established independent assessment offices that have the responsibility for the overall self-assessment program within their respective organizations. In the case of both organizations, components of self-assessment programs such as ES&H assessments, appraisals, and audits are in place and working for most functional areas. EG&G has also developed a system of formal policies and top level procedures to define and control the conduct of self-assessment related activities.

Although progress has been made in the development of elements of an effective self-assessment program by DP, EM, RFO, and EG&G, these organizations have not fully implemented self-assessment programs which provide a comprehensive view of both functional and management areas; communicate lessons learned and trends across and among their organizations; reinforce ownership of ES&H by their line managers and line operator staff; and enable their managers to make informed decisions concerning organization-wide ES&H priorities.
- RFO and EG&G have made significant progress in establishing, improving, and implementing ES&H oversight program elements since

the 1989 Assessment. RFO ES&H staffing has increased significantly and surveillance activity by the line, support, and independent oversight organizations has substantially increased. Considerable effort has been expended to identify the standards and the level of compliance at RFP. Many RFO oversight activities are now formalized into written procedures and oversight plans have been developed. An active, structured quality assurance program is functioning in RFO and EG&G.

EG&G has instituted many changes and improvements in their ES&H oversight program. Numerous significant initiatives are in progress to develop and implement sitewide management systems (referred to at RFP as the "infrastructure") that will strengthen and provide more consistency and substance to the contractor oversight program. These initiatives include area such as procedures, document control, issues management, corrective action tracking, independent safety review, conduct of operations, and self-evaluation. An active, structured, independent Standards, Audits, and Assurance Organization provides independent audit, assessment, and review elements of ES&H oversight. Staffing related to independent oversight has increased significantly. Line oversight has been improved.

However, weaknesses in both the RFO and EG&G oversight programs impede the timely achievement of compliance and excellence in ES&H matters. The oversight programs for both RFO and EG&G have not yet been clearly defined in several areas and are not being performed in a manner that provides management with all needed information and assurance that the ES&H program is being effectively implemented at RFP. Although RFO and EG&G are aware of many of these weaknesses, corrective action implementation plans and compensatory measures have not always been clearly determined, nor are they being aggressively addressed in a planned, prioritized manner.

- The current organizational alignments of RFO and EG&G ES&H oversight organizations with respect to their line management organizations, in principle, provide each organization with sufficient independence. Both RFO and EG&G have undergone significant reorganizations, including numerous reorganizations of varying scope and magnitude within EG&G involving the General Manager and/or his direct reports since January 1990, that have altered the relationships within and between all RFP organizations. Attendant realignments down through the entire EG&G organization associated with these major changes has maintained EG&G in a constant state of flux. This has inhibited both RFO's and EG&G's ability to establish, communicate, and ensure a common understanding of roles, responsibilities, and authorities throughout the site, particularly as they are expressed in mission and function statements and policies and procedures. As a result, occasional confusion surrounding roles, responsibilities and authorities exists within RFP, and to some extent EM, with respect to areas such as environmental protection, environmental monitoring, stop work authority (i.e., the authority to stop the work of others), stop working (i.e., the authority to

stop one's own work), and restart authority. RFP documents such as mission and function statements, policies and procedures, and implementation plans that would formally define and communicate roles, responsibilities, and authorities are frequently incomplete, in draft form, outdated, or nonexistent.

- The DP, EM, and RFO strategic planning processes have matured into an integrated planning process that can form the foundation of the RFP planning, budgeting, and resource allocation process. While an RFO strategic plan exists, a RFP plan does not, and a comprehensive sitewide integrated RFP planning, budgeting, and resource allocation process is only in the definition stages. While much has been accomplished, deficiencies in the approach and the pace of implementation are evident. RFO and EG&G subordinate implementation plans that would define, set priorities for, and guide RFO and EG&G ES&H activities, are often incomplete, outdated, or nonexistent. The failure to provide comprehensive working level implementation plans has led to confusion at RFP with respect to programmatic responsibilities for waste characterization. While implementation planning deficiencies persist, there is ample evidence that substantial progress has been made since the 1989 Assessment. The first sitewide RFP mission plan and Mission Transition Program Management Plan was prepared in 1992; a program management plan for the Integrated Planning Process exists; a Strategic Planning Steering Committee has been formed; a set of ES&H-related Program Plans developed to support the RFP resumption initiative exist as models for future plans; and the RFP Management Control System (MCS) was introduced in 1991 to provide managers at all levels with a planning, scheduling, and budgeting tool to facilitate their control of program scope, schedule, and costs.
- RFO and EG&G have made significant progress in establishing, improving, and implementing formal systems for directives and procedures since the 1989 Assessment. Standards documents, requirements, and compliance reviews have focussed considerable attention on ES&H related directives and implementing policies and procedures in both RFO and EG&G. EG&G has established a formal hierarchy for EG&G documents. RFO and EG&G have formal directives systems in place. EG&G has an established and formal system of RFP ES&H policies. A sitewide EG&G document control program has been initiated. EG&G has established a foundation for an effective overall procedures system, and developed many top level procedures and implementing procedures in resumption buildings. However, the EG&G procedures program is not yet fully developed nor implemented. Much work remains to be done to identify needed procedures and procedure changes, to develop and implement them sitewide. Although a number of administrative and implementing procedures have been developed in RFO, their procedures program is still not well defined, needs have not been clearly identified, and procedure use and adherence is not receiving proper management attention.
- RFO has instituted many elements of an effective training program including the establishment of a separate Training Development

Office, identifying long and short term training needs, issuing a Training Development Plan and course catalogue, performing job task analyses, and the developing 13 in-house training courses, including four related to ES&H. Weakness in the formality of the Training Development Office are minor in nature.

- EG&G has made progress in the development of a performance based training program. Development of EG&G's Job Task Analysis process and Qualification Standard Package process has been implemented in resumption Building 559. Efforts are now being made to apply training elements elsewhere within the protected area and then sitewide.
- EG&G has established and implemented a formalized engineering and design change/configuration control process. The Conduct of Engineering Manual specifies the necessary attributes consistent with sound engineering practice. The review demonstrated a system that was formal and rigorous but cumbersome and inefficient. These are known to EG&G and are the subject of past and current process improvement efforts.

Nine concerns and one strength related to the Cost/Productivity Improvement Program were identified in the area of management systems.

2.2.1 Corrective Action Program

The Progress Assessment Team looked specifically at management systems and programs for tracking, trending, verifying, and closing of corrective actions. In addition, the RFO and EG&G roles and responsibilities regarding corrective action plan implementation were evaluated.

The Progress Assessment Team reviewed the progress of RFP in addressing the issues raised during the 1989 Assessment. The Team considers satisfactory progress was made in this area. Specific corrective actions were evaluated by technical specialists on the Team and determined to be adequate. The 1989 Assessment observation that the site lacked "a strategy to integrate the existing management and information systems. . .," (Executive Summary,) is a reflection of inadequate elements of a fully effective corrective action program. The Team examined both the establishment and implementation of policy and requirements, and the ability of RFO and EG&G corrective action programs to meet DOE requirements.

A corrective action program is the heart of an effective application of all ES&H management systems. It provides an understanding of the comprehensive sitewide risks, vulnerabilities, and priorities; enables managers to make informed decisions regarding ES&H planning priorities and goals; and aids in the efficient application of resources as to which issues need the most oversight attention.

The key standards against which the site was assessed include performance objectives PA-1.4, "Oversight" (DOE Headquarters); PA-2.4.3, "Management Systems"; and PA-4.4, "Oversight."

The elements of a sound corrective action program consist of an approved program plan, an organization in place to implement and manage the program; and a program that is guided and controlled by detailed formal procedures.

A sound corrective action program also captures and collects all ES&H deficiencies; expeditiously develops corrective action plans (including milestones and schedules); formally tracks and reports the status of corrective actions; ensures complete, documented and verified closure of action items; incorporates lessons-learned; and embodies mechanisms for processing information for management decision-making.

ES&H corrective action management systems for DP, EM, RFO and EG&G are in various stages of development. None of these organizations presently possesses a comprehensive, integrated corrective action system for managing organization-wide ES&H deficiencies.

DP corrective action activities in line organizations are not fully integrated to provide a DP-wide assessment of compliance status across the complex. DP is conducting ES&H assessments of field activities. DP-67 formerly conducted Technical Safety Appraisal (TSA)-like appraisals of 11 functional areas. No DP-67 TSAs have been conducted at RFP and these assessments have been put on hold by DP. The DP Office of Self-Assessment and Emergency Management (DP-9) does not carry out systematic assessments. DP-9 assesses problem areas by tracking, trending, and analyzing Occurrence Reporting and Processing System (ORPS), and other sources of information related to the condition of the DP complex such as DP-67 assessments. DP-9 has conducted specific functional appraisals of the RFP including a DOE Order 5000.3A, "Field Implementation Review" which was conducted at RFP on March 22-26, 1993. The DP-9 assessments do not have a provision for formal corrective action plans or a corrective action closure process. Furthermore, there is apparently no provision within DP for mandated corrective action of deficiencies identified in these appraisals. This issue was identified as a concern in the Nevada Test Site Progress Assessment Report (August 1992).

EM issued an "EM Management Plan for Self Assessment" (January 25, 1993) that promulgates EM policy objectives and general requirements for self-assessment for the RFP. EM has also developed a Draft Report "EM Headquarters Self-Assessment Corrective Action System" (May 1993); however, detailed procedures describing roles, responsibilities, and authorities for implementation of these requirements have not been developed.

RFO does not have a comprehensive corrective action program that captures all deficiencies, assures correction of root causes, identifies adverse trends, assures correction of problems on a generic (sitewide) basis, provides for tracking, verification of closure, incorporates lessons learned, or communicates results to management.

RFO recently issued an interim procedure (May 12, 1993) for the identification, tracking, and closure of RFO commitments made to external agencies and internal authorities. The procedure does not address how RFO implements lessons learned or provides the direction for trending of deficiencies. Training for implementation of this procedure has not been developed or scheduled. RFO has initiated development of a computer listing of items; however, RFO staff estimates this list has approximately 700 RFO commitments. This only represents about 10 percent of the total open RFO commitments. Many major commitments may not be listed and followed by RFO (I-A-16).

The implementation of RFO corrective action activities, and its relationship to its contractors is fragmented and informal. There is an effort underway to revise the existing office-wide procedures and develop new procedures to address all elements of a corrective action program, however, a formal plan and schedules to support this activity have not been developed.

The RFO staff informally review individual deficiency reports from both EG&G and RFO organizations within their purview. The depth of these reviews depends on the expertise of the reviewer and not on an office-wide approved procedure to ensure consistency of the reviews.

The RFO staff is also participating in the development of EG&G's sitewide corrective action program, and will have an identified data field in the sitewide Plant Action Tracking System (PATS), which is reserved for RFO identified deficiencies.

Although numerous corrective actions "systems" of varying levels of sophistication are in place within the EG&G organization, there is no sitewide corrective action program.

EG&G has over 20 individual corrective action systems tied to individual facilities, organizations, and programs. EG&G management had recognized that these fragmented systems are ineffective, redundant, and difficult to use for tracking and trending information. However, it was not until December 1992, when the Operational Readiness Review (ORR) identified the lack of a sitewide corrective action program, that EG&G began an aggressive and formalized effort to develop and implement a sitewide system.

Much progress has been made by EG&G to develop the sitewide corrective action program: A comprehensive plan was developed to address immediate corrective actions for pre-resumption activities in building 707 and a long range plan, ORR Response/Action Plan was prepared for the sitewide program. A summary of the tasks of the plan are as follows:

- Develop and publish a plant policy; (action completed March 30, 1993); establish a team and develop and publish a level one procedure (completion due date May 30, 1993); identify and review existing Corrective Action Systems and procedures for opportunities to reduce redundancies and combine systems and procedures (completion due date July 30, 1993); require that all plantwide deficiency reporting system owners develop an implementation plan and schedule to come into compliance with the policy and procedure (completion due date August 15, 1993); develop and provide training (completion due date August 30, 1993); develop and submit to PATS an approved implementation plan for deficiency reporting systems (completion due date October 15, 1993); develop modules with the Plant Action Tracking System (PATS) completion due date March 30, 1994); and assess the effectiveness of the plantwide corrective action system (completion due date May 30, 1994) (D-A-6).

The EG&G plan captures most elements of an effective corrective action program. Until these actions are accomplished, the EG&G corrective action system will remain fragmented and ineffective. However, the plan does not require detail planning and implementation verification to accomplish the

listed tasks for the long range goals and objectives. It also does not identify the lessons learned program as being part of the overall corrective action system.

In addition to a formal corrective action program process, improvements often reach beyond the scope and breadth of that process. To address this need, in June 1992, the EG&G General Manager appointed a steering committee to support development of a team oriented, process improvement approach to improve performance at EG&G Rocky Flats. By October 1992, EG&G had established the Cost/Productivity Improvement Program, incorporating project management teams, process improvement teams, management initiatives, and new ideas to improve work processes at the RFP.

In May 1992, a Quality Assurance Corrective Action Request (CAR) was prepared documenting a succession of noncompliance with the Conduct of Engineering procedures. Without correction, the effectiveness of engineered ES&H related systems and barriers was in question. Management's assessment, confirmed by a survey of engineers, was that the complexity of the configuration management and change control program was a fundamental cause. The AGM of Engineering and Technology decided to use the evolving process improvement team concept as a means of addressing the CAR issues. Fifteen process improvement teams were selected, trained, and charged to address the following: quality of engineering products; responsiveness of engineering support; inefficiency of engineering systems; ad hoc methods for many engineering processes; and inability to prioritize and resource load commitments. Accomplishments of the C/PI program include the following:

- Reduced backlog of old Non-Conformance Reports (NCR) by 85 percent.
- Quality Assurance rejection of NCR disposition was reduced from 80 to 10 percent.
- Engineering approval signatures were reduced from 35 to 17 while accountability improved.
- Delinquent items were reduced from approximately 3,700 to less than 400 in 6 months.
- The typical Vital Safety System (VSS) procedure development time was reduced from 2.1 persons-month to 1.2 persons-month

These achievements were accomplished with a reduced commitment of resources as well as improving the site's ability to deal with emergent problems.

The Progress Assessment Team identified one concern related to the RFO corrective action program development; one concern related to the lack of an EG&G implemented sitewide corrective action program; and one strength related to the EG&G Engineering Process Improvement Teams efforts to solve and minimize engineering problems. These are identified in Appendix B-1 (see Concerns M/C-1, RFO Corrective Action Program; M/C-2, EG&G Corrective Action Program; and Strength M/S-1, Cost/Productivity Improvement Program).

2.2.2 Self-Assessment Program

In the self-assessment area, the Progress Assessment Team evaluated the status of development and implementation of the DP, EM, RFO, and EG&G self-assessment programs. In conducting the review, the Progress Assessment Team evaluated each program's compliance with DOE-HQ guidance, status of implementation, and effectiveness. Self-assessment elements that were examined included program plans, assessment processes, implementing procedures, related management systems, and assessment products to determine if the programs regularly and accurately evaluate and report the status and quality of all aspects of the ES&H performance, determine root causes for deficiencies, and ensure that corrective actions are taken.

The 1989 Assessment, the first of 35 Tiger Team Assessments, was conducted before the promulgation of the Department's January 1990 policy that self-assessment should be adopted as a management tool to identify deficiencies and improve performance Department-wide. Thus, the 1989 Assessment did not focus specifically on the evaluation of self-assessment programs. This Progress Assessment was the first comprehensive examination of the RFO and EG&G self-assessment programs.

The primary standards used to assess the progress were the DOE-HQ's January 26, 1990, self-assessment mandate and July 31, 1990, ES&H Self-Assessment Guidance, and subsequent revisions, and the following specific performance objectives: PA-1.5, "Program-Wide Self-Assessment Program" (DP/EM); PA-2.5, "Field Office-Wide Self-Assessment Program" (RFO); and PA-4.5, "Sitewide Self-Assessment Program" (EG&G).

The approach of this Progress Assessment was to examine the self-assessment programs of DP, EM, RFO, and EG&G by taking vertical cuts down through these organizations. Emphasis was on the effectiveness of RFO's and EG&G's self-assessment programs and RFO's ability to provide guidance to and hold its contractors accountable for implementing their own self-assessment programs. In addition to the vertical cuts through these organizations, a horizontal slice across these organizations was taken to examine the degree to which various self-assessment programs are coordinated and integrated by RFO to provide a sitewide picture of ES&H performance at the RFP. Specifically, a vertical cut through EG&G focused on the Facility Management and Operations Division. The evaluation of RFP self-assessment programs was accomplished by reviewing related documents and interviewing DP, EM, RFO, and EG&G staff involved in their respective self-assessment programs.

The Progress Assessment Team determined that DP, EM, RFO, and EG&G have made varying degrees of progress toward the development of effective self-assessment programs. Neither the DOE organizations nor EG&G have fully implemented self-assessment programs that provide a comprehensive view of both functional and management areas; communicate lessons learned and trends across and among their organizations; reinforce ownership of ES&H by their line managers and line operator staff; and enable their managers to make informed decisions concerning organization-wide ES&H priorities.

The process of self-assessment must be applied at all levels in an organization; from the office worker or shop floor operator up to the most senior manager. Evaluations done at lower levels in an organization are then progressively rolled up into ever broader assessments until senior management

has a comprehensive self-assessment of the ES&H performance of the complete organization. Once identified, deficiencies (both technical and programmatic) are evaluated through prioritization, trend analyses, and root cause analyses to provide the organization-wide risks, vulnerabilities, and priorities. An effective self-assessment program enables senior managers to make informed decisions concerning the organization's planning goals and priorities, the allocation of resources, and the areas that need the most oversight attention.

Currently, the DP Office of Self-Assessment and Emergency Management (DP-9) does not carry out systematic assessments, nor does it mandate corrective action of deficiencies identified in its appraisals and fully integrate DP-wide information concerning the compliance status of its sites. DP-9 assesses problem areas by tracking, trending, and analyzing Occurrence Reporting and Processing System (ORPS), and other sources of information related to the condition of the DP complex such as DP-6/ assessments. DP-9 has conducted specific functional appraisals of the RFP including a DOE 5000.3A Field Implementation Review (FIR) which was conducted at RFP on March 22-26, 1993 (D-B-28). The DP-9 assessments do not have a provision for formal corrective action plans or a corrective action closure process. This issue was identified as a concern in the Nevada Test Site Progress Assessment Report (August 1992). While DP-9 has instituted new self-assessment initiatives such as the development and distribution of DP self-assessment guidance, and the establishment of field office roundtable meetings, it has not fully addressed this issue.

EM has established a number of new initiatives associated with self-assessment related activities. The Office of Oversight and Self-Assessment within EM is responsible for assisting the line organizations in the implementation of an EM wide self-assessment process that provides an accurate picture of programs and management systems through identification of performance strengths and weaknesses and corrective actions and remediation weaknesses (D-B-10). Currently, EM-20 self-assessment activities in line organizations are not fully integrated to provide an EM-wide assessment of compliance status across the complex. EM-20 has developed the draft EM Headquarters Self-Assessment Corrective Action System: Requirements & Preliminary System Description Report (May 1993) which describes requirements and characteristics for a planned EM corrective action system to address this issue (D-B-149). This report implements an element of the EM self-assessment program as described in its Self-assessment Management Plan (November 1992) (D-B-111).

Although RFO and EG&G have established self-assessment programs that have elements of an effective program, neither of the organizations have fully developed and implemented comprehensive ES&H self-assessment programs. The state of development and the degree of comprehensiveness of the various self-assessment programs is varied across RFO and EG&G. For example, there is no fully functioning, comprehensive corrective action management system including a sitewide trend analysis and lessons learned program at RFP and the state of development of the constituents of such a system varies widely throughout RFP (see Concerns M/C 1 through M/C-4). However, in the case of both organizations, components of self-assessment programs such as ES&H assessments, appraisals, and audits are in place and working for many functional areas.

RFO has simultaneously pursued the development of its own self-assessment program and directed its contractors to implement their own programs. Due to

the low priority placed on self-assessment by the RFO senior managers (I-B-3). RFO's progress in developing a self-assessment program has been relatively slow and is in the rudimentary stages of development (I-B-3). RFO has developed a sitewide self-assessment procedure, Rocky Flats Instruction (RFI) 7300, "Rocky Flats Plant Self-Assessment Program" (July 10, 1992). RFI 7300 does not serve as an implementing procedure, but does identify elements of a self-assessment program within RFO. The RFO self-assessment program lacks most of the elements of an effective self-assessment program. The RFO established an independent assessment office, the Performance Assessment Office (PAO). The responsibility of the PAO includes coordinating RFO self-assessment activities as well as the performance of independent oversight activities of RFO and its contractors. RFO established the PAO in 1991 and as part of the January 1993 reorganization, integrated the Quality Assurance Office within the PAO to form the Performance Assessment and Quality Assurance Office (PAQAO).

The RFO self-assessment program lacks many of the elements of an effective self-assessment program, including the development of a Self-Assessment Program Implementation Plan that describes the architecture of the RFO self-assessment program and provides for the development of the enabling self-assessment management systems necessary for fully implementing an effective program. While the PAQAO has developed PAO Procedure (PAOP) 7300-01, "DOE Office of Performance Assessment Self-Assessment Procedures" (August 3, 1992) which describes the implementation of PAQAO independent assessments of RFO and its contractor activities, RFO has not gone through the exercise of identifying the management and functional areas within their own organization that should be reviewed as part of an effective self-assessment program, and which of those areas are addressed by existing programs. RFO has not developed a strategy for reviewing those areas which are not addressed along with clearly defined roles, responsibilities, organizational interfaces, assessment activity interfaces, goals, objectives, schedules, and resources necessary to implement an effective self-assessment program.

The lack of direction and senior management involvement coupled with the recent reorganization of RFO has resulted in confusion among RFO managers concerning the roles and responsibilities associated with the self-assessment program (I-B-21 and I-B-25). For example, there does not appear to be a common understanding between the PAQAO and the Safety and Health Division regarding their individual and interfacing roles and responsibilities for conducting self-assessments.

While EG&G has made a sound beginning, the EG&G self-assessment program does not currently provide a self-assessment program that is consistent with current DOE guidance. For example, it does not contain provisions and protocols for line-management assessments or for the assessment of the management of ES&H activities and ES&H management systems. The EG&G self-assessment program also does not address the effectiveness of ES&H management and sitewide management systems. The results of self-assessments and self-evaluations are not currently captured on a sitewide basis and rolled up to demonstrate the sitewide ES&H priorities or to communicate common problems across the plant site (I-B-31 and I-B-33). As a result, EG&G managers and supervisors do not have ready access to information that is vital to their decision-making process (I-B-31). EG&G management recognizes the importance of fully implementing these management systems, however, and is working towards that end (I-B-26, I-B-31, and I-B-33).

The EG&G self-assessment program has the potential to serve as a foundation for a comprehensive ES&H self-assessment program consistent with DOE-HQ guidance and total quality management (TQM) concepts to build on existing appraisal activities. Recent EG&G initiatives include the establishment of the Total Quality Management Directorate (TQMD) under the Standards, Audits, and Assurance (SAA) Organization. The mission of the TQMD includes the assistance of management in the coordination of Process Improvement Teams (D-B-140). The Process Improvement Teams include an Assessment Directorate Process Improvement Team whose tasks include the development of an integrated, 5-year assessment schedule (I-B-33). EG&G also instituted the "Management by Walking Around" initiative on March 30, 1993. Although the technical benefits of this new walk around program have not been proven, it appears to be an effective vehicle for demonstrating management commitment to ES&H programs.

The Progress Assessment Team identified two concerns related to the self-assessment program, which are presented in Appendix B-1 (see Concerns M/C-3, EG&G Self-Assessment Programs, and M/C-4, RFO Self-Assessment Program).

2.2.3 Oversight

In the area of oversight, the Progress Assessment Team evaluated the adequacy and effectiveness of the RFO and EG&G programs for oversight of ES&H activities at RFP and the progress made in this area since the 1989 Assessment. This portion of the Progress Assessment focussed primarily on the assessment and review element of oversight. Other key elements of ES&H oversight and related management systems such as self-assessment, corrective action, management information systems, and directives systems were addressed in other sections of this report.

In conducting the assessment, the Progress Assessment Team reviewed the policies, plans, and procedures detailing how oversight activities are performed by line and independent oversight organizations of both RFO and EG&G. The Team also reviewed samples of documentation that reflect the adequacy of implementation of these oversight policies, plans, and procedures. The assessment addressed both line and independent oversight elements for both structural and implementation adequacy.

Performance objectives used in this assessment were PA-2.4.2, "Assessment and Review"; PA-2.4.3, "ES&H Management Information Systems"; PA-4.4.2, "Assessment and Review"; and PA-4.4.3, "ES&H Management Information System."

Oversight is an essential management system which provides assurance that all activities related to RFP are performed in accordance with ES&H-related requirements and drives individual and organizational performance towards excellence in ES&H. Oversight of ES&H involves many systems that inform and assure management that the ES&H program at RFP is being fully and effectively implemented. These systems include line and independent assessment (DOE and regulatory-body-mandated management, functional and internal appraisals, audits and surveillances) and review (committees, councils, and documents), including integral or supporting subsystems that provide management and staff with information on performance issues management, corrective action, commitment tracking, trending, root cause analysis, and lessons learned (see Section 2.2.1 in this report). The 1989 Assessment of RFP clearly identified inadequate oversight and a lack of oversight program elements in many of the

technical deficiencies. The RFP Action Plan acknowledged these weaknesses and described rigorous auditing, quality assurance, quality control, and self-appraisal programs to be implemented at RFP.

RFO and EG&G have made significant progress in establishing, improving, and implementing ES&H oversight program elements since the 1989 Assessment. RFO ES&H staffing has increased significantly (direct ES&H positions, line staff that provide ES&H oversight, as well as support contractors). Surveillance activity by the line organization (Assistant Manager Facility Operations and Assistant Manager for Transition and Environmental Restoration) and supporting Safety & Health Division has substantially increased. RFO Facility Representatives have been assigned and located in the high hazard, "production" facilities. A separate oversight organization has been established in RFO, reporting directly to the Manager, to provide independent QA and assessment functions. Considerable effort has been expended to identify the standards applicable to RFP activities and the level of compliance, both in RFO and EG&G. An active, structured QA program is functioning in RFO and is just now diversifying from auditing of only the historical QA program elements (e.g., document control, calibration, and design control) to include environmental areas also (see Section 2.3.5 in this report). Many RFO oversight activities are now formalized into office-wide, Assistant Manager, division, or branch level procedures. Oversight plans are being developed by each RFO division and by each branch in the Safety and Health Division. Another positive initiative is the recently established Safety and Health Division "Building Assessment Team" (BAT) program; multi-discipline surveillances conducted in the non-resumption buildings where oversight attention has been minimal during the past years RFP focus on Buildings 559 and 707.

EG&G has instituted many changes and improvements in the oversight program. Numerous significant initiatives are in progress to develop and implement sitewide management systems (referred to at RFP as the "infrastructure") that will strengthen and provide more consistency and substance to the contractor oversight program. These initiatives include areas such as procedures, document control, issues management, corrective action tracking, independent safety review, conduct of operations, and self-evaluation. An active, structured, independent Standards, Audits, and Assurance Organization provides independent audit, assessment, and review elements of ES&H oversight. Staffing for the independent review and assessment activities has increased significantly. Line oversight has been improved through implementation of the conduct of operations program (primarily in resumption Buildings 559 and 707 that received significant management attention) and through initiatives such as the Line Safety Program and self-evaluations.

Notwithstanding the significant progress noted above, there are a number of weaknesses in both the RFO and EG&G oversight programs that impede the timely achievement of compliance and excellence in ES&H matters. RFO and EG&G are aware of many of these weaknesses, but corrective action implementation plans and compensatory measures have not always been clearly determined, nor are they being aggressively addressed.

The oversight programs for both RFO and EG&G have not yet been clearly defined in several areas and are not being performed in a manner that provides management with all needed information and assurance that the ES&H program is being effectively implemented at RFP.

Many of the RFO oversight responsibilities and requirements detailed in Rocky Flats Office Procedure (RFOP) 7100, "Contractor Oversight Activity," are not being formally or properly implemented by RFO. The Performance Assessment Office (PAO) review of annual surveillance plans submitted by RFO divisions is not documented. The plans vary greatly in the information and detail provided and are not being updated quarterly as required. RFO divisions (with the exception of SHD) have not developed implementing procedures and instructions as required. Oversight activities are not generally being scheduled or tracked to assure completion of planned oversight. The documentation, followup, and closure of surveillance findings is being inconsistently performed. EG&G is not always being held accountable for responding to identified adverse conditions or for addressing these conditions in a generic way. The Facility Representative Program is not performing inspections and reporting as required by Branch procedures. The triennial management appraisals of the ES&H program mandated by DOE 5480.1B are not being performed by RFO.

The use of independent ES&H review committees by EG&G is not being consistently and effectively applied. Some committee charters are out of date, meeting minutes are not always well documented, and issues are not typically input to the site issue tracking system. Delays and questionable decisions in the review and issuance of the Triennial Assessment of the Independent Review Program by the Safety Review Board undermined the credibility of this review effort.

An EM-25 lead conduct of operations assessment, performed in Building 374 in late 1992, which identified over 90 formality of operations and radiological protection findings, was never formally transmitted to the responsible organizations by EM, DP, RFO, or the EG&G Assessment organization. Thus, no response was required of the responsible organizations and the action plans were not reviewed for acceptability. Although the building operations manager has input these items into the Plant Action Tracking System (PATs), assessment organizations did not review the responses for disputed findings or the stated corrective actions for accepted findings. This apparent communication breakdown, and the failure of existing RFO and EG&G corrective action systems to properly address these identified deficiencies are examples of weaknesses in the RFP oversight program.

Other specific examples of deficiencies in RFP oversight programs are detailed elsewhere in this report in the areas of occupational safety and health (Section 2.4.1), the surface water program (Section 2.3.3), the waste characterization program (Section 2.3.4), and environmental quality assurance (Section 2.3.5).

In summary, these findings reflect oversight programs at RFP that have many fundamental elements in place and functioning, with significant improvements in both structure and performance over the programs in place in 1989. However, weaknesses in the formality and rigor with which these programs have been established and implemented require correction to assure that this progress will continue towards ES&H excellence.

The Progress Assessment Team identified two concerns related to oversight at RFP which are presented in Appendix B-1 (see Concerns M/C 5, RFO Oversight, and M/C-6, EG&G Oversight). In addition, at least 4 concerns and 3

weaknesses presented in Appendix B relate to oversight deficiencies in other individual assessment areas.

2.2.4 Organization

The ES&H roles, responsibilities, and authorities of DOE (EM, DP, and RFO) and the EG&G, the RFP contractor, were examined to determine if they are clearly defined, formally documented, communicated, and understood. Specifically, roles, responsibilities, and authorities were assessed to determine if they are clearly assigned to the line organization as evidenced by mission and function statements, goals and objectives, and individual job descriptions. In addition, they were also assessed to determine if they defined the interface and functional relationships between the various line organizations, and between the line organizations and the ES&H oversight organizations.

Roles, responsibilities, and authorities were also examined to determine if they provided staff with ES&H independent oversight responsibilities with sufficient independence and authority to conduct their activities and to elevate unresolved issues to appropriate management levels; and placed decision authorities, including the authority to stop work, stop working, and restart work at the appropriate level, and clearly defined, formally documented, communicated and ensured this authority is understood by all involved parties. This was accomplished by determining the adequacy of documentation; if appropriate checks and balances existed; the independence and objectivity of the independent ES&H organizations; and how well these roles, responsibilities, and authorities were understood.

In conducting the assessment, the Progress Assessment Team examined organizational charts, mission and function statements, manuals, ES&H program plans, safety committee charters, Memorandum of Agreements (MOAs) between RFO and other organizations, and other relevant documents. The Progress Assessment Team also interviewed line and ES&H program managers in all the cited organizations.

The 1989 Assessment provided several observations that were related to organizational deficiencies, including "Implementation of the environmental programs lack coordination and is hindered by poor communication. The lines of authority and responsibility are fragmented and not clearly defined."; and "Effective implementation of the site remediation program has been adversely impacted by poor communications, coordination, planning and scheduling." The key standards against which the site was assessed include PA-1.2, "Organization" (DP and EM), PA-2.2, "Organization" (RFO), and PA-4.2, "Organization" (EG&G).

The current organizational alignments of RFO and EG&G ES&H oversight organizations with respect to their line management organizations, in principle, provide each organization with sufficient independence. The degree to which this independence is preserved and exercised is discussed in another section of this report (see Concerns M/C-1 and M/C-2).

Both RFO and EG&G have undergone significant reorganizations in the past 6 months that have altered the organizational relationships within and between each organization, an event that has become commonplace at RFP. EG&G has undergone numerous of varying scope and magnitude involving the General Manager and/or his direct reports since January 1990. Attendant realignments

down through the entire EG&G organization associated with these major changes has maintained EG&G in a constant state of flux. The frequency of reorganizations appears to inhibit both RFO's and EG&G's ability to establish, communicate, and ensure a common understanding of roles, responsibilities, and authorities throughout the site, particularly as they are expressed in mission and function statements and policies and procedures. As a result, general confusion surrounding roles, responsibilities, and authorities exists throughout RFP, and to some extent EM, with respect to areas such as environmental protection, environmental monitoring, and to stop work (i.e., the authority to stop the work of others), stop working (i.e., the authority to stop one's own work), and restart authority. RFP documents such as mission and function statements, policies and procedures, and implementation plans that would formally define and communicate roles, responsibilities, and authorities are generally incomplete, in draft form, obsolete, or nonexistent.

Roles, responsibilities, and authorities between the RFO Assistant Manager for Transition and Environmental Restoration (AMTER) and the Assistant Manager for Facility Operations (AMFO) with respect to RFP environmental monitoring, environmental protection, and transition activities have not been formally defined through a management agreement or mission and function statements. This confusion on the part of DOE management with respect to the roles, responsibilities at RFP extends to senior officials.

The RFO Assistant Manager for Financial and Administrative Services, the Contracting Officer, has a firm understanding of stop work authority that is consistent with formal RFO documents. Stop work authority is vested in the RFO Contracting Officer, and aspects of that authority are formally delegated to the RFO Facility Representative(s), in the case of imminent danger, as part of the implementation of the RFO Facility Representative Program. EG&G Facility Managers and Building Operations Managers share a common understanding of the RFO Facility Representative's authority that is consistent with the contract. Furthermore, they share a common understanding of their own stop work authority, believing it is derived from their understanding of conduct of operations. EG&G Operators can stop their own work, and operations managers and shift technical managers can stop the work of others. Formal EG&G stop work authority is granted in a level one procedure entitled "Stop Work Action" (D D 94). While some EG&G personnel are aware of this procedure, its existence is not widely known.

The above examples are exceptions to the understanding of roles, responsibilities, and authorities with respect to stop work. In general, neither RFO nor EG&G senior management shared a common understanding of stop work authority that was internally consistent with each other or with DOE policy as described in the contract. Interpretations of stop work authority varied throughout RFP; EG&G management was not always aware of the source of its staff's stop work authority. Some RFO managers believed their stop work authority was derived from the fact that as DOE employees they can direct contractors to stop work and they will comply.

The Progress Assessment Team identified one concern related to organizational matters, which is presented in Appendix B-1 (see Concern M/C 8, RFP Planning).

2.2.5 Planning

The 1989 Assessment was conducted before the Department's emphasis on strategic and subordinate implementation planning was fully defined, communicated, and implemented. Consequently, the 1989 Assessment did not place the emphasis on the planning process throughout DOE and its contractors that it now receives. Nevertheless, the 1989 Assessment report is replete with deficiencies that can be related directly to the lack of a comprehensive sitewide planning, budgeting, and resource allocation process. A second and equally important reason for examining this area is that planning, budgeting, and resource allocation management systems plays a central role in the successful transition of the RFP mission from weapons production to waste management and environmental restoration. The key standards used to assess the progress in addressing these deficiencies were Secretary of Energy Notice (SEN)-25-A and the Performance objectives PA-1.1, "Planning" (DP), PA-2.1, "Planning" (RFO), and PA-4.1, "Planning" (EG&G).

The approach of this assessment was to examine the planning, budgeting, and resource allocation process of DP, EM, RFO, and EG&G. Vertical cuts were taken down through these organizations; from DP and EM through RFO to the first several levels of EG&G management. The assessment process involved interviews and document reviews. Primary emphasis was on the ability of DOE to formulate its vision of the RFP mission, plan and set priorities for its own activities, communicate its expectations to its contractors, and hold its contractors accountable for defining and executing their missions in a disciplined, planned fashion. The strategic and subordinate implementation planning processes of DOE and EG&G were examined to evaluate their effectiveness. Specifically, a vertical cut taken through RFO and EG&G focused on the Facilities Operations and Environmental Management Divisions. In addition to the vertical cuts through these organizations, a horizontal slice across RFO and EG&G was taken to examine the degree to which various interrelated subordinate planning processes are coordinated and integrated.

It was evident during this assessment that DP, EM, and RFO strategic planning processes have matured into an integrated planning process that can form the foundation of the RFP planning, budgeting, and resource allocation process. DP has issued a strategic plan and associated planning guidance to RFO. EM has also prepared a strategic plan and has guided the preparation of an RFP Transition Plan. RFO has conducted strategic planning exercises, prepared a strategic plan, and assigned strategic goals and objectives to RFO offices for further development. However, a comprehensive sitewide integrated RFP planning process is only in the definition stages and the RFP contractor, EG&G, expects to develop a strategic plan in the near future.

Along with the RFP operating contract EG&G assumed in 1989, it inherited a plant that was a loose confederation of independent activities and autonomous facilities; a work force that relied on experience and planning initiatives external to the site rather than locally-formulated planning initiatives; and a planning, budgeting, and resource allocation process that lacked formality, accountability, and discipline (I-D-2, 6, and 11).

This situation has been further aggravated by the fact that RFP has faced a rapidly changing mission and external influences beyond its control over the past several years. For example, DOE has acknowledged that a logical plan for

removing plutonium residues from RFP must be founded on a long-term strategy for managing the nation's plutonium inventory. In the absence of such a strategy, RFP management is faced with the challenge "... to develop plans for eliminating the backlog (of plutonium residues) without knowing how much plutonium DOE intends to retain ..." (D-D-11). Coupled with this challenge is the EM Congressional budget request that has been based on a strategy to "... maximize compliance with regulatory agreements" and the FY 1994 program plan which was structured with an approach that supports "... all activities related to near-term health and safety" (D-D-58).

Notwithstanding these competing priorities, RFO and EG&G have embarked on an effort to address these challenges by attempting to establish a comprehensive, sitewide, integrated planning, budgeting, and resource allocation system that will serve its current and future mission. While much has been accomplished, deficiencies in the approach and the pace of implementation are evident. RFO and EG&G subordinate implementation plans that would define, set priorities for, and guide RFO and EG&G ES&H activities are, in general, incomplete, obsolete, or nonexistent. The failure to provide comprehensive working level implementation plans has lead to confusion at RFP. For example, the RFO Waste Programs Division oversight plan does not contain roles, responsibilities, and authorities with respect to waste characterization. This has lead to confusion in EG&G with respect to programmatic responsibilities for waste characterization that required a clarifying letter from RFO to EG&G (also see Concern M/C-7 and Weakness E/W-2).

While implementation planning deficiencies persist, there is ample evidence that substantial progress has been made since the 1989 Assessment. The first sitewide RFP Mission Plan and Mission Transition Program Management Plan was prepared in 1992; a program management plan for the Integrated Planning Process exists, a Strategic Planning Steering Committee has been formed, a set of ES&H-related Program Plans developed to support the RFP resumption initiative exist as models for future plans, and the RFP Management Control System was introduced in 1991 to provide managers at all levels with a planning, scheduling, and budgeting tool to facilitate their control of program scope, schedule, and costs.

While the RFP planning process is currently limited to annual planning activities, there was much evidence during this assessment that RFP management is committed to developing and implementing a comprehensive planning, budgeting, and resource allocation process. If the RFP integrated planning, budgeting, and resource allocation process is fully defined, developed, and implemented, it has the potential to provide DOE and EG&G management with a powerful tool for planning and controlling RFP activities on a sitewide basis.

The Progress Assessment Team identified one weakness related to the planning area, which is presented in Appendix B-1 (see Weakness M/W-8, Planning).

2.2.6 Directives, Policies, and Procedures

In the area of directives, policies, and procedures the Progress Assessment Team evaluated the adequacy and effectiveness of these systems at RFO and EG&G to provide rigorous and formal vehicles to assure that ES&H requirements are met at the Rocky Flats Plant (RFP), and the progress made in this area since the 1989 Assessment. In conducting this assessment, the Progress Assessment Team examined the procedures for identifying and implementing the ES&H

requirements of applicable standards, for translating these requirements into formal policies, plans, procedures, and instructions; controlling the changes to the requirements and these implementing documents; and the application of these documents in practice. Although there were no specific findings addressing the directives system in the 1989 Assessment, numerous findings were related to elements of a directives management system such as inadequate communication of ES&H requirements and noncompliance with DOE directives. Numerous findings in the 1989 Assessment involved the lack of, or inadequate, procedures.

The assessment approach taken by the Progress Assessment Team was to review pertinent policies, plans, and procedures, to interview RFO and EG&G personnel responsible for these programs, and to determine the existence and adequacy of ES&H-related procedures for a sampling of RFP programs to determine the overall adequacy of the directives, policies, and procedures program; both its structure and implementation. Performance objectives used in this assessment were PA-2.4.1, "Directives System," PA-2.4.2, "Assessment and Review," PA-4.4.1, "Directive System," and PA-4.4.2, "Directive System."

RFO and EG&G have made significant progress in establishing, improving, and implementing formal systems for directives and procedures since the 1989 Assessment. The Defense Nuclear Facility Safety Board/DP-driven program to identify standards, documents, requirements, and the level of compliance has focussed considerable attention on ES&H related directives and implementing policies and procedures in both RFO and EG&G. The RFO directives and procedures program is defined in Rocky Flats Instruction (RFI) 1321.1, "Rocky Flats Office Directives System" (D-C-4), RFI 1321.2, "Responsibility for DOE Orders, Notices, and SENs" (D-C-2), and RFI 4200.3, "Standards Compliance Requirements for RFO Prime Contractors." RFO generated procedure documents defined in RFI 1321.1 include RFIs, which apply to RFO, prime contractors, and subcontractors; Rocky Flats Office Procedures (RFOPs), which apply to RFO only and can stand alone or supplement DOE directives; and standard operating procedures (SOPs) which are working level instructions for RFO staff that are developed and controlled at the AM, division or branch level. RFO has developed and revised many RFIs, RFOPs and SOPs since the 1989 Assessment.

EG&G has established a formal hierarchy for EG&G RFP documents defining and delineating the various documents, their relationships to each other, and related organizational responsibilities (D-C-27). EG&G has a formal directives system to process DOE Orders, identify requirements, determine the level of compliance, and develop action plans to implement the requirements. EG&G has an established and formal system of RFP policies, compiled into the Policy Manual, including those related to ES&H.

EG&G has developed and improved a significant number of administrative and technical procedures since the 1989 Assessment, especially in the resumption buildings such as 559 and 707. EG&G is in the process of identifying, generating, and revising procedures sitewide as a part of conduct of operations implementation and implementation of a Policies and Procedures Program Plan (D-C-33; I-C-6, 7, and 25), as well as numerous other functional and program driven initiatives. A centralized document control program has been initiated (D-C-28) and a process of consolidation of disparate document control systems is underway (I-C-15 and I-C-16).

However, there are weaknesses in the procedures system and its implementation at RFO, and in the overhaul of the EG&G procedures system, which will impede timely and effective establishment of strong and useful management systems that will help assure formal, rigorous performance of ES&H activities. Examples of these deficiencies are summarized below.

RFO is utilizing procedures vehicles such as inspection and management plans to perform ES&H related work that are not defined in the RFO procedures policy and systems documents. In addition, working level procedure development, review, and control systems are not in place in most RFO organizations. Many new procedures, as well as existing procedures needing revision, that will be required to fully implement the ES&H program throughout the RFO organization are not yet in place and have not been formally identified nor scheduled for issue. ES&H related activities are, in a several instances, not being performed as detailed in RFO procedures.

The Progress Assessment Team notes that the frequent reorganizations within EG&G have caused significant and repeated changes to the organizational names and responsibilities delineated in issued procedures. Confusion over roles, responsibilities, and authorities have resulted and added to the existing large volume of site procedures which require updating and upgrading. It is not clear that EG&G has a reliable understanding of the scope of this work effort, either sitewide or at individual organization levels, nor a detailed plan for completing this task.

In summary, although a number of administrative and implementing procedures have been developed in RFO, their procedures program is still not well defined, needs have not been clearly identified, and procedure use and adherence is not receiving proper management attention. EG&G has established a foundation for an effective overall procedures system, and developed many top level procedures and implementing procedures in resumption buildings. However, the EG&G procedures program is not yet fully developed nor implemented. Much work remains to be done to identify needed procedures and procedure changes, to develop and implement them site-wide, and effect the formality of operations culture change throughout the organization.

The Progress Assessment Team identified one concern related to the directives and procedures systems, which is presented in Appendix B-1 (see Concern M/C-9, RFO Directives, Policies, and Procedures). In addition, at least eight concerns and two weaknesses presented in Appendix B relate to policy and procedural deficiencies in other individual assessment areas.

2.2.7 Staffing and Training

The Progress Assessment Team looked specifically at RFO and EG&G plans and programs to assess the adequacy ES&H training and qualifications of the site work force. The assessment utilized performance objectives PA-2.3, "Human Resource Management" and PA-4.3, "Human Resource Management," DOE Orders, and RFO and EG&G policies and procedures related to staffing and training.

Currently, RFO and EG&G plan for human resource needs based on near term mission requirements and DOE initiatives. Staffing allocations are developed for the upcoming fiscal year, and needs are revised based on budget constraints, ceilings, and other priorities established at DOE-HQ. When RFO officially became a Field Office, its approach to office staffing was to hire

qualified personnel at the onset (I-E-1). In cases where qualified staff were unavailable to RFO and EG&G because of recruitment difficulties, RFO and EG&G awarded support services contracts and subcontracts to ensure the availability of such specialized personnel. This was a mitigating approach in response to the situation at the time; RFO officially became a Field Office and had a pressing need to obtain qualified staff in excess of the 50 employees who ran the previous area office under the cognizance of the Albuquerque Field Office; EG&G came on board as the new management and operating (M&O) contractor for RFP; and DOE direction to prioritize a resumption campaign of Buildings 559 and 707 came shortly thereafter.

Progress has been made in all areas of staffing at RFO and EG&G. The RFO organization grew from approximately 50 employees as an area office to approximately 218 as of this date. ES&H professional staffing for RFO has increased from 32 to 100. EG&G has grown from approximately 5,600 employees at the time of contract award to approximately 6,900 at present. In comparison, ES&H professional staffing for EG&G has increased from 226 to 301 since M&O contract award.

EG&G has made progress in developing a training program at RFP. The EG&G training program is defined and implemented through the Training User's Manual (TUM), a level one document which was developed in February that is applied sitewide. The TUM was developed to provide administrative procedures and standards for the administration, conduct, and control of training at RFP. It provides formal training program guidelines as required by the elements of DOE 5480.18 and 5480.20. The program is a performance-based training and qualification program that provides training development, administration, documentation, testing, verification, and requalification. EG&G's Training Implementation Matrix (TIM) has been approved by DOE-HQ and RFO. As a result of this training program, there are various examples of site personnel who are appropriately qualified within their disciplines such as the areas of solid radioactive waste generators, fire protection, solid waste treatment, and laboratory analysis.

- The TUM reflects current standards and procedures and is revised, as necessary, through formal revisions and Procedure Change Notices (PCNs). There is also a formal system in place based on a graded approach, to facilitate the overall revision of the TUM and change as format to the Standard Procedure Format utilized at RFP.
- General training requirements are prescribed on a sitewide basis; area-specific training requirements are prescribed for personnel working in certain areas; and job specific requirements are prescribed for those persons whose positions mandate training in certain areas to enable performance. Additionally, performance-specific training is prescribed as necessary, such as confined space entry, respirator fit training, and hearing conservation. Requirements are identified based on applicable regulations, DOE Orders, site-specific requirements, and risk assessment addressed in the TIM.
- Prioritization, milestones, schedules, and resource loading are provided in annual budget documents rather than the TUM, as the TUM is procedural in nature.

- The TUM provides a system for evaluating the overall effectiveness of the training program. Prescribed periodic evaluation responsibilities are placed on Training Department Managers and Branch Managers, the Training Verification Manager, Plant Supervisors, Operations Managers, first line supervisors, and employees. Additionally, the Assessment Organization within the Office of the Associate General Manager (AGM) for Standards, Audit, and Assurance is responsible for assessing performance to determine the existence of any training, procedural, or qualification problems. To facilitate continuous improvement, the TUM includes instructions for the completion of Training Modifications Requests, when it is apparent that revision or change to training is necessary. In addition, occurrence reports and "Lessons Learned" are also reviewed for training related information which may result in revisions to or improvements in the training program.

Specific instances have been observed which indicate a lack of training in certain areas. Specifically, lack of waste training and spill response training was cited as a contributing factor by the Colorado Department of Health (CDH) upon issuance of the Colorado Hazardous Waste Act (CHWA) Notice of Violation (NOV) to EG&G in June 1992. "Lack of training" as cited by CDH refers to those employees in Environmental Restoration who have not been trained to work plan development procedures and their management who have not been trained to position-specific criteria. The work plan development training has been developed and training will commence on June 1, 1993. Managerial staff has received general training and some position-specific training, however, this position-specific training is incomplete to date. These employees perform their duties predominantly outside the Protected Areas. The Progress Assessment Team determined that the qualification process, which utilizes Job Task Analysis (JTA) to identify specific tasks which an employee must be formally trained and/or qualifies to, was initially focused on resumption related positions (Building 559 was used as a test facility for the JTA/qualification process). In late 1992, the qualification process used in resumption buildings (559 and 707) was expanded to other buildings/areas in the protected area. The application of the qualification process outside of protected areas is already underway, and these efforts will continue in FY 1994 and beyond to meet the plant's new mission. It should be noted, however, that the JTA/qualification process has already been implemented for radioactive waste generators and Resource Conservation and Recovery Act (RCRA) custodians. In the case of the solid radioactive waste generator training and qualification program, significant waste characterization improvements have been observed at the waste generator level.

EG&G recognizes that the JTA/qualification process was not applied uniformly across the site and that this has resulted in some training deficiencies; however, the deficiencies are not sitewide and EG&G is making efforts to correct for this shortcoming. Otherwise, EG&G's training program is viewed as effective within the context of applicable DOE Orders governing DOE contractor training programs.

The RFO Training Development Office (TDO) was established in June 1992. This office reports directly to the RFO Manager. In the short time this office has been in existence, it has developed many components of an effective training program.

- Short and long term training needs are identified through the use of Individual Development Plans (IDPs). The needs are then compiled in the Annual Training Plan.
- A Training Development Plan was developed for FY 1993. This plan encompasses a TDO mission statement, TDO organizational information, methods employed to identify RFO training needs, prioritization of the identified RFO training needs, and training goals.
- RFO has a system in place to identify training needs that provides for emphasis on program objectives while considering individual training needs; input from management and employees through the use of IDPs; publication of an annual Training Course Catalog to identify available training and training sources; and prioritization of training needs pursuant to stated mission priorities.
- RFO's Annual Training Plan includes a needs assessment with priorities assigned and an estimated number of employees to be trained.
- RFO has a system in place to determine if its training objectives are met. This is accomplished pursuant to the TDO procedure covering self-assessment. Assessments are performed in the areas of compliance; formal functional areas; compilation review and trending of performance indicator data; and review of occurrence reporting for immediate and long range improvements. RFO also takes a planned approach in accomplishing annual surveillances.
- RFO has a number of planning and procedural systems in place such as the FY 1993 Training Plan, the RFO Training Office Course Catalog, and nine TDO procedures which cover such procedures as self-assessment, surveillance methodology, and training request processing.
- RFO has developed 13 courses in-house, 4 of which are ES&H related; has tracked employee training data through a computerized networking data base; and has developed a Rocky Flats Instruction (RFI) detailing the responsibilities outlined in DOE 3410.1B.
- RFO is performing JTA on all positions within the organization pursuant to a Defense Nuclear Facilities Safety Board (DNFSB) recommendation. Thirty-eight positions have been completed to date (including 9 ES&H positions); 54 positions are currently being analyzed (including 45 ES&H positions). Completion of this JTA process is scheduled for late FY 1994.

These training program elements are in line with the requirements of the DOE Training Order. A few aspects of the program indicate minor deficiencies.

- The FY 1993 training program is not formal, in that it is unsigned, undated, and has no indication of approval.

- The TDO mission statement does not include ES&H as a specific element of priority. It should be noted, however, that ES&H training needs receive a number one priority in the Training Plan.
- The Training Plan does not indicate the TDO resources required, based on projected work scope; rather, completion of the projected work scope is qualified based on available funding, resources already in place, and changing program direction.
- The system TDO utilizes for assigning and revising priorities is not explained in an instruction, procedure, or the annual Training Plan.

The Progress Assessment Team did not identify any concerns, strengths, or weaknesses related to the staffing and training area. The RFO training program is considered adequate.

2.2.8 Engineering Design Bases and Configuration Management

A focused review of the current state of the engineering configuration management and change control processes as they relate to ensuring the adequacy of engineered barriers and ES&H procedures was conducted. The DOE Special Assignment Group for Rocky Flats Plant Operations and Practices following the 1989 Assessment identified safety envelope definition, technical engineering base, and work authorization and control process as insufficient to support formal conduct of operations. Without adequate design basis and a formalized change control and configuration management process, the ability of engineered ES&H barriers to perform their design function was in question. In addition, the subsequent EG&G efforts to develop adequate procedures were compromised by the lack of design basis documentation and verified drawings of safety systems.

The Team examined the formal engineering processes adopted by EG&G to control the conduct of engineering. In addition, the effectiveness of those processes was measured by an evaluation of a sampling of engineering packages for ES&H modifications. A comparison of the quality and timeliness of package preparation for several different ES&H disciplines and several different facilities was performed to evaluate the consistency of application across the site. Performance objectives PA-2.4.2.2, "Configuration Management," and TSA-TS.3, "Facility Modifications," were used in the conduct of the evaluation.

The Rocky Flats Conduct of Engineering Manual (D-F-10) was used in the assessment as the controlling document for engineering changes and design control. It was reviewed to determine if the engineering process specified for use at Rocky Flats included the necessary attributes for formalized configuration management. The review confirmed that the necessary attributes are specified consistent with sound engineering practice. These include proper design, review, control, implementation, and documentation. Also provided are a formal log of controlled engineering documents, a record of verified as-built drawings, and a change control process (D-F-12) that requires that changes to other affected baseline records (for example; FSARs, procedures, OSRs, training courses, and surveillance test procedures) be submitted with the change (D-F-5). The process includes mandatory provisions for review by Health and Safety, Environment/Waste Management compliance

committee, and Fire Protection Engineering. Incremental reconstruction of the design basis is achieved through the requirement for Calculations and Design Input Review and Approval (DIRA) for the section of the system affected by the modification. The DIRA specifies functional parameters, regulations, codes and standards, and other design requirements necessary to augment the calculations in defining the design basis. These design basis documents are filed with the design package and not in separate systems files. While this process does not presently yield a design basis readily accessible for use in operability assessments and Safety Analysis Report (SAR) preparation, this is considered a correctable weakness in an otherwise well constructed process.

The procedures making up the Conduct of Engineering Manual (D-F-10) have been written incrementally and added to the process throughout 1992 so that only recent design changes reflect all of the current requirements. Of the packages sampled during the review (D-F-1 through D-F-4), only the minor modifications were fully reflective of all current requirements. The review demonstrated a system that was formal and rigorous, but also cumbersome and inefficient (multiplicity of approvals and little gradation in detail, even for minor modifications). For example, a minor modification (D-F-1) to add a safety hand rail requested in April 1992 required a year to process and yielded a design package 27 pages in length. EG&G stated that since the work was not resumption related, it did not receive priority until recently (I-F-3 through I-F-8). It demonstrates a system that has a number of other complexities and inefficiencies that preclude timely execution and have resulted in noncompliance with procedures. The compliance issues were reported in a May 1992 Corrective Action Request, which was the genesis for actions by EG&G directed at resolution. The Process Improvement Teams described in the corrective action section were chartered to improve engineering responsiveness and compliance. In addition, a priority system imported from Oak Ridge Y-12 is being adapted for RFP to provide a means of addressing priority conflicts on a sitewide basis.

To resolve issues surrounding timeliness, a Central Maintenance Action Center has been established to track and expedite completion of tasks specified by facility operations managers. This is a system that was developed for Building 707, but based upon experience with its use during resumption, is now being expanded to sitewide use. Meetings are held on a facility or area basis several times weekly to track the progress of modifications through engineering, procurement, safety reviews, installation, and closeout. Performance indicators have been developed to support the process including separate indicators for vital safety system and Resource Conservation and Recovery Act (RCRA) actions. It provides a vehicle for expediting timely completion of facility upgrades of both an ES&H and mission related nature and for integrating the sitewide priority system discussed above into the conduct of maintenance. This has contributed to the reduction in delinquent engineering actions and improved responsiveness of the engineering organization (I-F-18). When completed, implementation of the system is intended to aid directly in focusing engineering resources at sitewide priorities.

The Progress Assessment Team did not identify any concerns related to Engineering Design Basis and Configuration Management.

2.3

OVERVIEW OF ES&H ENVIRONMENTAL PROGRAM ASSESSMENT

The Progress Assessment Team evaluated five specific environmental disciplines at RFP: (1) restoration activities required by the Inter-Agency Agreement (IAG); (2) management of other environmental compliance agreements; (3) surface water program management; (4) the waste characterization program; and (5) environmental quality assurance. These areas were selected for review based on previous concerns identified in the 1989 Assessment or because they are indicators of ES&H program performance. The assessment was conducted by interviewing key personnel, reviewing documents, touring certain facilities, and performing limited field inspections.

The Progress Assessment Team concluded that RFP has made significant progress in the environmental disciplines reviewed. Weaknesses were identified indicating a need to continue to refine specific environmental programs, including RFO and EG&G management systems for the IAG; EG&G implementation of the waste characterization program; RFO oversight of programs for waste characterization, surface water, and environmental sampling and analysis; and EG&G oversight of the environmental sampling and analysis program. Strengths noted in the assessment include the formation of a Quality Action Team to address environmental restoration issues; EG&G's operational control of the Sewage Treatment Plant; the solid radioactive waste generator training and qualification program; and EG&G's management and oversight of offsite laboratories that perform environmental analyses.

With respect to the specific environmental disciplines evaluated, the Progress Assessment Team reached the following conclusions:

- RFO and EG&G have made significant progress in environmental restoration activities associated with the IAG. An overall environmental restoration major systems acquisition project management structure is nearing completion and awaiting DOE-HQ approval. This management system is intended to facilitate integration of the environmental restoration programs among DOE-HQ, RFO and EG&G. At this time, however, DOE and EG&G have not yet fully established or integrated certain management systems or processes, which may inhibit their ability to effectively meet future commitments identified in the IAG. Specific areas of weakness include oversight, planning, training programs, roles and responsibilities, and regulatory interface.
- Since the 1989 Assessment, RFO and EG&G have demonstrated a serious commitment to management of environmental agreements with regulatory agencies. Federal Facility Compliance Agreements and Compliance Orders were reviewed, spanning the years 1989 to 1993 and resolving compliance issues with the Resource Conservation And Recovery Act, the Clean Water Act, and the Clean Air Act. The effectiveness of systems in place to manage the agreements is best demonstrated by the fact that all major milestones contained in the agreements were met. In addition, RFO and EG&G continue to develop and refine management tools such as the Environmental Compliance Action Center (the "War Room") to assist in the timely execution of activities required by regulatory agreements.

- The Surface Water Management Program has made significant progress in programs that minimize the potential for, and ensure appropriate response to, unplanned releases. A sitewide program is in the early stages of implementation to form the structure for coordination of activities. This program identifies potential sources sitewide, establishes a framework of requirements, and provides for inspections to ensure implementation. However, the program has not yet been fully integrated into operational control systems and oversight programs.
- The waste characterization program at RFP has made significant progress since the 1989 Assessment. Programs that increase the formality of operations pertaining to waste characterization at the point of generation have been established in many buildings onsite. training programs have been established for radioactive and hazardous waste generators, and a comprehensive waste characterization program has been developed. Oversight from RFO and EG&G has increased significantly. Weaknesses were identified with respect to implementation of the waste characterization program by EG&G, and formality of oversight by RFO.
- Significant progress has been made in the area of environmental quality assurance. Actions taken in response to the 1989 Assessment findings have addressed the deficiencies in sufficient detail that adequate programmatic controls exist to ensure confidence in the accuracy and reliability of data generated by RFP sampling and analysis activities. Onsite analytical laboratories now have approved, controlled procedures for all analyses. Equipment control and calibration logs are maintained. Quality control samples are used and results are tracked. The onsite laboratories participate in several interlaboratory comparison programs. All laboratories have independent QC officers. Oversight of environmental sampling and analysis was identified as a weakness.

2.3.1 IAG Environmental Restoration Program

In the Environmental Restoration Area, the Progress Assessment Team evaluated the adequacy of the RFP Program to manage the environmental restoration requirements of the Interagency Agreement (IAG). In conducting the assessment, the Team looked specifically at the adequacy of the Environmental Restoration (ER) Program at RFP. Topics addressed included: management processes and systems (i.e., organization, policies, planning, procedures); roles and responsibilities; internal and external communications; and training. The assessment also evaluated RFO's effectiveness in directing and overseeing implementation of environmental restoration activities.

At the time of the 1989 Assessment, RFP was conducting environmental restoration activities under a 1986 Compliance Agreement that did not reflect the new requirements of Superfund Amendments and Reauthorization Act (SARA) of 1986. It also did not include the requirements governing Federal facilities pursuant to Section 120 of the Comprehensive Environmental Response and Liabilities Act (CERCLA) (D-H-2). Since the 1989 Assessment, RFP has experienced two mission changes, one of "resumption" of weapons production, and in 1992, one of stabilization, cleanup, and transition. This assessment

evaluated the ER Program's ability to change commensurate with the change in mission. The Progress Assessment team conducted interviews with DP and EM line organizations who oversee the RFO ER Program, as well as management and staff within RFO and EG&G ER line organizations. Review of key program planning and implementation documents was also conducted. The key standards against which the site was assessed included the requirements of the IAG, DOI 5482.1B, and DOE 5400.4; performance objectives PA-1.2.2, PA-1.2.4, PA-1.4.3, PA-2.1.1, PA-2.2.2, PA-2.6.2, and PA-4.3.2; and the Inactive Waste Sites and Environmental Monitoring Sections in the Performance Objectives and Criteria for Conducting Environmental Audits.

Inactive waste sites at RFP are managed pursuant to the IAG with the EPA Region VIII and the State of Colorado Department of Health (CDH). The IAG provides the legal and procedural framework for the conduct of site cleanup activities and waste operations. The IAG was signed January 22, 1991, and requires the RFP to clean up more than 217 individual hazardous substance sites (IHSSs), otherwise called inactive waste disposal and unplanned release sites. The IHSSs are grouped into 16 Operable Units (OUs) that are managed pursuant to CERCLA and the Resource Conservation and Recovery Act (RCRA).

Within RFO, the Environmental Restoration Division is responsible for overall management of the RFP environmental restoration program. The Environmental Restoration Division reports to the Office of Assistant Manager for Transition & Environmental Restoration. The responsibility of the Environmental Restoration Division is to provide oversight of environmental restoration activities conducted by EG&G, ensuring that ER activities are carried out according to the IAG. OU managers have been assigned to work closely with EG&G OU counterparts.

The principal management and operating contractor (M&O) for RFP is EG&G. EG&G is responsible for technical management and implementation of the ER Program. Additionally, EG&G provides support in the development of overall ER management systems. In this role, ER is a Major Systems Acquisition (MSA) Project and as such supports RFO in this management system. The Office of Environmental Restoration Management (ERM) reports directly to the Office of the General Manager. The Associate General Manager for ERM is responsible for environmental restoration activities at the RFP, while Assistant General Manager for Environment and Waste Management is responsible for environmental monitoring and assessment of surface and ground waters, air emissions, and implementation of the National Environmental Policy Act (NEPA). ERM manages cleanup and environmental restoration at RFP per the requirements of the IAG. ERM is divided into eight groups: (1) Program Integration and Reporting group; (2) ERM Remediation Project Management group; (3) ERM Environmental Science and Engineering group; (4) ERM Solar Pond Projects group; (5) ERM Facility Operations group; (6) ER Records and Documentation group; (7) ERM Sample Management group; and (8) the Environmental Quality Support group. These eight groups provide technical implementation of the ER Program.

The ER Program has developed significantly since the 1989 Assessment. ER infrastructure was practically non-existent in 1989. Today, a management system to support the ER Program includes the development of the MSA Project (D-H-36 through D-H-38). While the MSA Project is not fully developed or in place, it should provide the management structure required by DOE 4700.1 that the site, until now, has been lacking. The EM-40 MSA Project Plan, RFO Project Management Plan, and the EG&G Management Implementation Plan are

expected to be approved by mid 1993. Another area of improvement includes increased formal and informal lines of communication with regulators (I H 1, 8, 9, 40, and 47). Until 9 months ago, there was little to no communication between RFO and the regulators, and most was adversarial (I H 38 and I H 40). Another improvement area is in the site's development of a Rocky Flats Plant Community Relations Plan for the IR Program (D H 8). The plan, approved in December 1991, describes mechanisms through which the RFP will inform and involve the public in environmental restoration and related activities at the facility (D H 8). Since 1989, RFP has also developed an administrative records file documenting the information used to make decisions on the selection of response actions under CERCLA (D H 161). Administrative records consist of documents that are to be considered in selecting a response action and those which demonstrate the public's opportunity to participate in selection of an action.

Another area of improvement is in RFP's identification, formal documentation, and reporting of all IHSSs at RFP. The 1989 Assessment Team determined that RFP had not identified all IHSSs (i.e., solid waste management units) under 3004(u) as required by the 1986 Compliance Agreement (D H 145). By June 1992, RFP had an approved Historical Release Report as required by the IAG (D H 2; D H 7). The Historical Release Report provides information on existing and potentially new IHSSs, e.g., a complete listing of all spills, releases and/or incidents involving hazardous substances occurring since the inception of RFP (D H 7). Since July 1992, EG&G has produced two Historical Release Report quarterly updates on newly identified areas of known, suspect, and potential environmental releases or discoveries at the plant site (D H 154 and D H 155). Quarterly updates are also required by Section I.B.3 of the IAG (D H 2 and D H 16).

Another area the site has done especially well in has been in meeting scheduled milestone commitments in the IAG. To date, RFP has missed only one milestone date; a request for extension for submittal of the draft OU2 Phase II RCRA Facility Investigation/Remedial Investigation (RFI/RI) Bedrock Investigation Report was denied and a Notice of Violation (NOV) was issued RFP by EPA and CDH on March 16, 1993 (D H 130; D H 159). A dispute resolution process was not invoked and penalties and fines are presently accruing (D H 84 and D H 30).

The Progress Assessment Team also identified one RFP strength related to the RFP Quality Action Team, which is comprised of DOE, EG&G, EPA, and CDH personnel. The Quality Action Team has proven successful in identifying and resolving significant issues involving environmental restoration activities, with some having direct application to issues involving the IAG.

Adequate progress in some program areas has not been achieved by the ER Program. Certain management processes and systems lack formality or have not been fully developed or implemented. These include training programs, procedures, a deficiency tracking system that is not current or yet comprehensive, and program guidance. As was the case during the 1989 Assessment, internal (RFO and EG&G) and external (DOE-HQ) management level written reviews of RFP environmental restoration documents have not been performed in a timely manner, if at all (D H 145). Field work, data analysis, and document preparation continue to proceed on an aggressive schedule, without the benefit of an adequate review and comment period due to aggressive milestone schedules. Some decisions on changes to IAG milestone commitments

and Scopes of Work also have been made without formal approval from the regulators (I-H-8 and I-H-9).

Independent oversight, both from DOE-HQ (EM/DP) of RFO and from RFO of EG&G is insufficient to ensure effective ER program management. RFO oversight is inadequate due to lack of sufficient full-time equivalents (FTEs). Interface and functional relationships between Program Secretarial Officers (PSOs) and across DP and EM line organizations both at the DOE-HQ level and at RFO are not formally defined, documented, communicated, or understood (I-H-5 and I-H-46).

Prior to September 1992, RFO, citing lack of direction and funding from DP, performed no assessments of RFP environmental activities by internal, independent organizations (I-K-26 and I-H-32; D-H-162). Only since January 1993, has the EG&G QA Standards, Audits, and Assurance (SAA) Organization been conducting independent audits of environmental activities, citing they had been directed by the EG&G site manager not to assess environmental activities (I-K-38, 39, 40, and 48). The change now to do audits and assessments is due to present mission change.

The Progress Assessment Team identified one concern related to weaknesses in DOE and EG&G management systems and processes which may inhibit the site's ability to meet future IAG milestone commitments, and one strength related to the Quality Action Team, a group process that has proven successful in identifying and resolving significant issues associated with the IAG; all of which are presented in Appendix B-2 (see Concern E/C-1 and E/S-1).

2.3.2 Environmental Compliance Agreements

The Progress Assessment Team evaluated the effectiveness of RFO and EG&G in managing environmental compliance agreements entered into with regulatory agencies since the 1989 Assessment. The key standards used in this assessment include Performance objective PA-4.6.2, "Regulatory," which states that management cooperate fully and openly with regulatory agencies to facilitate compliance with ES&H laws and regulations. The agreements reviewed in this assessment included (1) Compliance Orders resolving alleged violations of the Resource Conservation and Recovery Act (RCRA) in the management of mixed residues at RFP; (2) Federal Facility Compliance Agreements (FFCA) resolving issues associated with RCRA's Land Disposal Restrictions (LDR); (3) an FFCA settling Clean Water Act issues associated with a National Pollutant Discharge Elimination System (NPDES) permit issued to RFO; and (4) a Compliance Order addressing National Emission Standards for Hazardous Air Pollutants (NESHAP) regulations issued pursuant to the Clean Air Act. A separate assessment of an Inter-Agency Agreement is contained in Section 2.3.1. A short history and current status of the agreements is provided below.

The Compliance Orders on mixed residues followed a complaint filed by the Sierra Club in 1989 against DOE and its former RFP M&O contractor, alleging violations of RCRA in the management of mixed residues at RFP. In 1989, the Colorado Department of Health (CDH) and RFO entered into the first Compliance Order, which required preparation of a Mixed Residues Compliance Plan. In 1991, CDH issued a second Order and filed a lawsuit in support, alleging that the Mixed Residues Compliance Plan submitted by RFO did not adequately address the requirements of the 1989 Compliance Order. In a good faith effort to comply with the terms of the 1989 Compliance Order, RFO submitted to CDH a Mixed Residue Reduction Report and a Mixed Residue Tank Systems Management

Plan in 1992. A revised Compliance Order on mixed residues was successfully negotiated and signed by CDH, RFO, and EG&G in April 1993.

A Federal Facility Compliance Agreement for mixed wastes at RFP subject to RCRA Land Disposal Restrictions was signed by DOE, EPA, and CDH in 1989. Following its expiration, Federal Facility Compliance Agreement II was signed by DOE and EPA in 1991 and expired in May 1993. Under the terms of the agreements, a Comprehensive Treatment and Management Plan, and other plans and deliverables related to waste minimization, shipment of non-radioactive hazardous waste, and waste characterization continue to be submitted and implemented. Efforts to negotiate Federal Facility Compliance Agreement III had been impacted by the need to complete negotiations on the latest mixed residues Compliance Order, which was recently signed. Negotiations of Federal Facility Compliance Agreement III have resumed.

The NPDES Federal Facility Compliance Agreement, signed in 1991 by EPA-Region VIII and RFO, required the submittal of three work plans: a Groundwater Monitoring Plan for the Sewage Treatment Plant Sludge Drying Beds; a Sewage Treatment Plant Compliance Plan; and a Chromic Acid Incident Plan (in response to a chromic acid spill at RFP in 1989). These plans continue to be implemented.

The NESHAP Compliance Order was issued by EPA-Region VIII to EG&G in 1992 to bring RFP monitoring systems into compliance with NESHAP regulations requiring specific monitoring protocol to be used in determining radionuclide air emissions. The Order required the preparation of duct assessment reports to assess the compliance status of 63 air ducts at RFP with the potential for emitting radionuclides. The reports were submitted to demonstrate that 61 of the radionuclide sampling systems meet the regulatory-specific protocol. EG&G sought EPA approval for the use of alternative sampling methodology on two ducts. Approval for one has been granted. The Order expired in March 1993, and EPA-Region VIII has transmitted the remaining information to EPA-HQ for final determination.

The conduct of this assessment did not lead to the discovery of strengths or weaknesses as defined by the DOE ES&H Progress Assessment Manual (December 1992). Strict adherence to the terms of compliance agreements should be expected at DOE sites and is not viewed as a strength under the guidelines of this assessment. Likewise, some extensions (discussed below) in implementing work plans required by agreements may be expected, and unless denied by the regulatory party to an agreement, do not meet the definition of weakness used in this exercise. However, several observations on RFP management systems, including management tools under development, and the conduct of RFO and EG&G management in implementing the agreements are worthy of mention.

RFO and EG&G have, to date, met all major milestones required by the subject agreements on or ahead of schedule. This was accomplished despite the fact that, as recognized by management for RFO and EG&G, sitewide environmental compliance management systems at RFP are not yet mature. This may be in part the result of changes in management at RFP over the last few years and associated reorganizations. However, these changes have not yet impacted the timely implementation of the subject environmental compliance agreements. For some agreements, the designation of a project manager responsible for ensuring that all requirements of the agreement are met has been very effective. For the Land Disposal Restriction agreement, the designation of an RFO project

manager also has served to enhance communications between Rocky Flats and EPA through monthly meetings with the regulator. These meetings provide a forum for early resolution of differences in interpretation regarding the requirements of an agreement, and sharing of information regarding potential impacts to work plan schedules. As a result, use of an agreement's dispute resolution process, which may be adversarial and lengthy, may be avoided.

During the Progress Assessment, examples were identified of RFP senior management's commitment to strictly complying with environmental agreement milestones. For example, the EG&G General Manager directed management in writing to support whatever efforts were necessary to meet the requirements of the NESHAP Compliance Order, and that the priority for support was above that given for Building 707 resumption efforts, at the time one of the highest priorities at Rocky Flats. As a result, the deliverables were submitted to EPA ahead of the schedule required by the Order.

Some activities being conducted pursuant to the NPDES agreement are experiencing delays, although efforts to mitigate the delays are being made. This agreement requires RFO, as signatory, to notify EPA Region VIII of the need for extensions and supporting reasons in quarterly progress reports. To date, no extension request has been denied although some have not yet been formally approved. Whether and when EPA Region VIII chooses to respond to an extension request is not within RFO's control. Nevertheless, if a project is extended remains unapproved, this may appear to environmental citizen groups, among others, as an uncertain compliance status with the terms of the agreement.

A Plant Action Tracking System (PATIS) is being developed for sitewide tracking of RFP corrective actions, including those required by environmental agreements. In its current configuration, the system is not considered to be user-friendly and does not have a mechanism for highlighting compliance agreement milestones, which should be managed as priorities. Moreover, all environmental milestones have not yet been entered into the system. This may prove to be problematic as work plans required by the agreements continue to be executed. While RFO and EG&G have been successful in timely developing the plans, difficulties routinely arise in keeping plans on schedule, such as those required by the NPDES agreement.

RFO and EG&G continue to pursue improvements in their management systems designed to ensure compliance with environmental requirements, including those arising out of agreements with regulatory agencies. For example, an Environmental Compliance Action Center (the "War Room") was designated to organize environmental issues, deficiencies, programs and regulatory agreements in an integrated manner. The goals of the War Room, opened in January 1993 to coincide with a joint meeting among RFO, EG&G, EPA, and CDH include providing RFP management and regulatory agencies with an up-to-date status of environmental deficiencies and schedules for corrective actions. Information on compliance agreements are revised bi-weekly. The War Room, though still in its infancy, is likely to become a valuable tool in assisting Rocky Flats management in ensuring continued success in managing activities required by regulatory agreements.

2.3.3 Surface Water Program Management

In the area of surface water protection, the Progress Assessment Team focused on issues that require sitewide program management to protect public health and the environment by preventing or minimizing pollutant releases. The development and implementation of a surface water protection program to prevent, control, and report unplanned releases was evaluated. Also, the current status of the long-term surface water management program referenced in the "Report To Congress, Rocky Flats Transition Plan, July 1992" was conducted to assess environmental planning systems.

The approach taken was two fold. First, an assessment was conducted of current facility operations and procedures required by the Clean Water Act through design and implementation of a Spill Prevention Control and Countermeasures and Best Management Practices (SPCC/BMP) Plan. Second, a review was conducted of the history and current status of the draft Surface Water Management Plan, July 1992, which was developed jointly by DOE, EPA, the State of Colorado, and local communities to address both onsite and offsite issues.

Multiple sets of regulatory requirements and compliance interfaces affect surface water management at Rocky Flats. The key standards used for the assessment included Performance Objectives and Criteria for Conducting DOE Environmental Audits (DOE/EH-0229), and Environment, Safety and Health Management Performance Objectives and Criteria for Progress Assessments. Site-specific requirements such as the National Pollutant Discharge Elimination System (NPDES) Permit and SPCC/BMP Plan, the NPDES Federal Facilities Compliance Agreement (NPDES FFCA) of March 25, 1991; the DOE Rocky Flats Office Draft Surface Water Management Plan dated July 22, 1992; the Inter-agency Agreement (IAG) signed in January 1991 between RFO, EPA, and the State of Colorado implementing Resource Conservation and Recovery Act (RCRA)/Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) remedial activities; and specific state water quality criteria were also used.

There are several programs onsite that address various aspects of a comprehensive approach to surface water protection. The draft Surface Water Management Plan is an umbrella description of both current systems and long term planning commitments. In the area of preventing, controlling, and reporting of unplanned releases, which may impact surface water, there are multiple program interfaces, plans, and procedures that must be integrated to assure coordinated implementation, including the RFP SPCC/BMP Plan.

The RFP SPCC/BMP Plan was issued in September 1992. The purpose of the plan was to document existing plans and programs pertaining to unplanned releases. Among these are tank management, transportation requirements, spill response, controlling releases to building drains, waste management storage, environmental cleanup activities, multiple release reporting requirements, and several site inspection programs. These and other existing programs, plans, and procedures were evaluated by EG&G in development of the SPCC/BMP Plan. Where deficiencies were found they were corrected within the scope of the SPCC/BMP Plan.

With respect to spill response, the SPCC/BMP Plan explains the overall framework of coordination and references other specific, more detailed

emergency plans and procedures. The SPCC/BMP Plan is not intended to be a spill response manual. The SPCC/BMP Plan is comprehensive in addressing potential sources located throughout the site, which have potential to impact surface waters, in the event of an unplanned release. It provides a structure to identify the multiple existing organizations, programs, and procedures associated with preventing, minimizing, responding, and reporting of releases. Incorporated into the document is a reference that promotes the importance of control of radiological environmental releases to "As Low As Reasonably Achievable" consistent with DOE Policy and Orders. The SPCC/BMP Plan has established a structure for development of formal performance criteria in implementing a sitewide surveillance program to minimize the potential for release.

The Progress Assessment Team concluded that the SPCC/BMP Plan has been effectively integrated with the sitewide Emergency Preparedness Plan (EPlan) with respect to drills, release response, control, and reporting. The EPlan establishes a planning, preparedness, and response architecture for all types of potential emergencies at RFP such as radiological releases, severe weather conditions, and hazardous material spills. A review of a limited number of documents associated with a response drill and a hazardous material release indicated that the RFP has a program that is able to effectively respond to such releases. In addition, through multiple external interface arrangements such as the Joint Planning Team, RFP Drill and Exercise Committee, Local Emergency Planning Committee, and the Emergency Planning Zone Oversight Committee the local communities have become informed and active members in site decision processes designed to respond to emergencies. This level of open communication is a positive improvement from the 1989 time period.

Responsibility for the SPCC/BMP Plan on behalf of RFO rests with the Surface Water Division (SWD) within EG&G. The Surface Water Division is tasked to coordinate various groups within the RFP organization to implement the overall requirements of the SPCC/BMP program. Other EG&G groups that have responsibilities include: Utilities, Plant Environmental and Waste Engineering, Traffic, On-Site Transportation Committee, Plant Engineering, Waste Programs, Remediation Programs Division, and the Fire Department. The Progress Assessment Team concluded that this program has not been fully and effectively integrated.

The RFO Environmental Protection Division under the Assistant Manager for Transition and Environmental Restoration has responsibility for oversight of RFP surface water programs. The RFO Waste Operations Division has responsibility, which includes programs to prevent, control, and report unplanned releases. By the sitewide nature of the implementation of these programs, many RFO organizations have responsibilities for oversight and, sometimes, implementation. For example, the responsibility to report releases within the DOE system is the responsibility of the Waste Operations Division. The Progress Assessment Team concluded that weaknesses exist in the way that RFO ensures effective oversight.

With respect to long-term planning issues related to RFP overall surface water management and protection planning, the Progress Assessment Team evaluated the status of the program referenced in the "Report To Congress, Rocky Flats Transition Plan, July 1992" and found that it has not been finalized. In 1989, the Chromic Acid Spill, as well as an FBI investigation, prompted local communities to demand additional protection for, or replacement of, drinking

water supplies located downstream of RFP. In response to public concerns and to provide sound water management practices, DOE prepared a Surface Water Management Plan (SWMP). The draft SWMP dated July 22, 1992, addressed details of DOE's commitment to a long term onsite and offsite program of surface water management. The ultimate objective of this program plan is to provide increased protection and reduced risk to adjacent communities. Regulatory requirements within the context of the IAG have impacted the draft plan with respect to onsite retention pond management and NPDES discharge points of compliance to the extent that the draft plan must be rewritten. Offsite actions do not appear to have been impacted by these changes.

RFO originally objected to the new pond management requirement, but is currently developing plans to scope interim management practices and remedial actions. It is the conclusion of the Progress Assessment Team that RFO and EG&G continue to work in good faith to implement a long term surface water program plan, and that environmental management concerns raised in other sections of this report have not at this time been a barrier in finalizing long-term planning. However, the concerns raised by the Progress Assessment Team with respect to management of environmental programs may result in problems if corrective measures are not taken.

In comparing the current status of environmental management programs for the protection of the public health and surface waters to the situation as it existed during the 1989 Assessment, the Progress Assessment Team found that significant progress has been made in coordinating programs that minimize potential for releases to surface waters, establish a unified spill response and reporting system, and actively involve local citizens in planning activities. No immediate concerns were identified and onsite programs were found to be in place and maturing to better ensure regulatory compliance and protection of the public and the environment. However, these programs are not currently effectively integrated sitewide within RFP nor are they fully developed and implemented.

The Progress Assessment Team identified one concern related the lack of some elements and full implementation of a sitewide program coordinated by the SPCC/BMP Plan. Also identified was a strength associated with the operation of the Sewage Treatment Plant (STP), which was, in 1989, the focus of regulatory and public concern related to a chromic acid spill. The Concern and the Strength are presented in Appendix B-2 (see Concern E/C-2, RFP Surface Water Program for Unplanned Release Control, and Strength E/S-3, Sewage Treatment Plant Operations Have Demonstrated a High Level of Control).

2.3.4 Waste Characterization Programs

The Progress Assessment Team examined three issues: (1) DOE oversight of waste characterization; (2) waste characterization programs at RFP; and (3) training of waste generators and handlers. The lack of adequate systems to characterize wastes was indicated in many of the waste management findings in the 1989 Assessment. Because RFP generates a variety of wastes and stores and treats large quantities of liquid and solid wastes, proper waste characterization is critical to ensure safe and compliant operations at RFP.

The key standards used for this assessment included relevant DOE Orders including DOE 5400.3, "Hazardous and Mixed Waste Program," DOE 5480.19, "Conduct of Operations," DOE 5820.2A, "Radioactive Waste Management,"

applicable Federal and State regulations pertaining to waste management, and Performance objective ENV-WM.1, "Characterization/Certification."

The waste characterization program at RFP has made significant progress since the 1989 Assessment. Programs that increase the formality of operations pertaining to waste characterization at the point of generation have been established in many buildings onsite, training programs have been established for radioactive and hazardous waste generators, and a comprehensive waste characterization program has been developed (WSRIC). Oversight from DOE (RFO) and EG&G has increased significantly.

Waste management at RFP has been the subject of intense scrutiny since the 1989 FBI investigation and subsequent assessment. The types of wastes managed at RFP include residues, mixed residues, transuranic waste, mixed transuranic waste, low-level waste, mixed low-level waste, hazardous waste, TSCA (Toxic Substances Control Act) waste, infectious waste, and sanitary waste. RFP has facilities onsite to dispose of sanitary waste (sanitary landfill), perform size reduction of some radioactive mixed wastes (Supercompactor and Repackaging Facility and Advanced Size Reduction Facility), treat some liquid radioactive mixed wastes (Building 374), and store radioactive, radioactive mixed, and nonradioactive hazardous wastes.

RFP generated residues that were a by-product of plutonium processing and recovery operations. Under the terms of a Compliance Order, RFP is required to manage all mixed residues in compliance with the Colorado Hazardous Waste Regulations, including waste characterization. Currently, RFP does not have the full capability to perform sampling and analysis on some of these residues.

Transuranic and transuranic mixed wastes are packaged and stored onsite. The majority of these wastes are certified or certifiable in accordance with requirements of the Waste Isolation Pilot Plant (WIPP) for shipment. WIPP is not scheduled to receive waste until 1999; however, RFP is participating in an experimental waste program where a selected amount of waste will be shipped to WIPP. RFP currently meets the requirements of the WIPP waste acceptance criteria and has implemented a program plan for transuranic waste management. As is the case with residues, RFP does not have the capability to perform sampling and analysis on some transuranic wastes.

Low-level radioactive mixed waste is generated and stored onsite. EG&G has prepared a program plan for the management of these wastes. RFP has accumulated a backlog of these wastes dating back to the 1980s due to the lack of treatment and disposal capacity for these wastes. Much of this backlog waste requires recharacterization to meet the waste acceptance criteria of candidate treatment and disposal facilities (e.g., Nevada Test Site). A central management point for the recharacterization effort was established April 1993 in response to a recent waste characterization problem associated with the supercompactor (this issue also applies to some transuranic mixed waste).

Low-level radioactive waste generated by RFP is currently stored onsite. RFP is only allowed to ship some process wastes generated in Building 559 to the Nevada Test Site (NTS) for disposal. An application to expand the number of buildings and waste types that RFP may ship to NTS has been submitted for approval. Preliminary indications from NTS indicate that the RFP low-level

waste management program is a model for DOE, and the application is likely to be approved following a formal audit.

Programs for TSCA, infectious, and nonhazardous waste are in varying degrees of development at RFP. RFP has prepared program plans for these wastes and is in the process of developing additional training and procedural requirements.

Responsibility for waste characterization at RFP rests with the generator. The Environmental and Waste Management Division, through the Waste Programs organization, provides a number of tools that the generator can use, including the Hazardous Waste Requirements Manual, training programs for waste generators, and technical experts that are available to assist generators in making waste characterization decisions. A major initiative for waste characterization is the Waste Stream and Residue Identification and Characterization (WSRIC) system. WSRIC is a comprehensive program to document all current waste generating processes at RFP based on process knowledge and, in some instances, sampling and analysis. The WSRIC program is not fully implemented. Along with the WSRIC books, RFP places tight controls on radioactive waste generation through the use of a "traveler" system, which requires detailed characterization information from the generator each time a waste is added to a container along with verification by a trained and qualified "Key Custodian."

Within EG&G, programmatic responsibility for waste characterization is with the Waste Programs organization. Waste Programs has a number of suborganizations with responsibility for specific waste types (i.e., radioactive, RCRA-regulated, and TSCA, infectious and nonhazardous). Each organization has developed a program plan that is in various degrees of implementation, however there is no program plan for the entire Waste Programs organization.

Oversight of waste characterization is provided by RFO through the Waste Programs Division, with support from Defense Programs Division regarding mixed residues. RFO oversight is not formalized in an oversight plan. Despite the lack of formality, a significant amount of oversight occurs primarily through monitoring of the implementation of various work packages that pertain to waste characterization. RFO also conducts a limited number of surveillances of waste management on an "as-needed" basis.

EG&G oversight is provided primarily by the Assessment organization within the Standards, Audits, and Assurance Organization. The Assessment organization was funded in FY 1993 to perform 1,000 surveillances of waste management areas. Because there are more than 1,000 of these areas onsite, surveillances are conducted at a frequency of less than once per year. Consequently, verification of closure of previous surveillance findings, which occurs during the next surveillance of an area, is not performed in a timely manner. In addition, there is currently no formal trending of surveillance findings. The Assessment organization also provides monthly summaries of waste nonconformance reports (NCRs), which are filed each time an unacceptable waste is encountered at Building 664 (the location where waste containers are screened prior to packaging for ultimate shipment to NTS or WIPP). These reports are a valuable tool for tracking waste characterization performance and have been used to make changes in the radioactive waste generator training program. However, these reports do not consider all waste types generated at RFP (e.g., nonhazardous, nonradioactive hazardous).

The Progress Assessment Team identified two weaknesses in waste characterization (see Weaknesses E/W-1, Waste Characterization; and E/W-2, Formality of RFO Oversight of Waste Characterization). The first weakness involves incomplete implementation by EG&G of a comprehensive waste characterization program. The second weakness is in the formality with which RFO conducts oversight activities pertaining to waste characterization. The Progress Assessment Team also identified a strength in the Solid Radioactive Waste Generator Training and Qualification Program, which is a key component of the radioactive waste characterization program (see Strength E/S-3, Solid Radioactive Waste Generator Training and Qualification Program).

2.3.5 Environmental Quality Assurance

The Progress Assessment Team evaluated the adequacy of the RFO and EG&G programs to ensure the quality of environmental activities. Particular attention was focused on systems implemented to ensure the quality of sampling and analysis (S&A) activities because the 1989 Assessment identified deficiencies in the environmental monitoring program with respect to environmental sampling and analysis.

The approach taken by the Progress Assessment Team included tours of the site laboratories and observations of environmental sampling and analysis activities. The assessment included reviewing action items for nine findings from the 1989 Assessment related to environmental sampling and analysis activities.

The key standards against which this site was assessed included Performance objectives ENV-QA.1, "Quality Assurance Program;" ENV-QA.2, "Audits/Appraisals/ Surveillance;" ENV-QA.3, "Procedures;" and ENV-QA.4, "Laboratory and Field Quality Assurance;" and action plans developed in response to deficiencies identified in the Assessment of Environmental Conditions findings related to environmental sampling and analysis activities. In addition, DOE 5400.1, "General Environmental Program," and DOE 5700.6C, "Quality Assurance," were included as standards used to evaluate environmental QA programs.

The RFO Quality Assurance Division is the DOE organization that is responsible for performing independent quality assessments of EG&G environmental activities. The RFO Environmental Restoration, Waste Programs, and Environmental Protection Divisions are responsible for line oversight of EG&G environmental programs.

The EG&G Environment and Waste Management (E&WM) organization is responsible for environmental protection and waste management activities at RFP. Laboratory analysis for environmental protection activities is the responsibility of the Analytical Laboratories organization. Line-level QA responsibilities are performed by the Systems Integration and Modernization Group.

The EG&G Environmental Restoration Management (ERM) organization is responsible for environmental restoration activities at RFP. Laboratory analysis for environmental restoration activities is performed by offsite analytical laboratories under the purview of the Sample Management Office. Responsibility for ERM line-level QA and oversight are performed by the Environmental Quality Support organization.

The EG&G Assessment Division within the Standards, Audits, and Assurance Organization is responsible for independent sitewide quality assessment oversight at RFP, including environmental activities. Responsibilities for the quality of procurement of goods and services, including offsite analytical laboratories, is shared by the Procurement Quality Engineering and Procurement Quality Support organizations within the Standards, Audits, and Assurance Organization.

Prior to October 1, 1992, the total oversight responsibilities for environmental activities rested with the environmental program organizations at both RFO (ER, EP, and WP divisions) and EG&G (E&WM and ERM). The RFO Quality Assurance Division and the EG&G Standards, Audits, and Assurance Organization were responsible only for production and resumption activities. This limitation of oversight has been attributed to the fact that these quality assurance organizations were funded solely through the DP Program Secretarial Officer.

As PSO responsibility for Rocky Flats Plant transitions from DP to EM, RFO and EG&G site quality organizations have been assuming broader oversight responsibilities for environmental activities. The Progress Assessment Team observed situations where recent organizational changes have resulted in unclear definition of oversight roles and responsibilities between the environmental program and site quality organizations.

Around the time the DOE transition was initiated, EG&G reorganized its existing Environmental Management Division into the two environmental organizations currently in effect, ERM and E&WM. The revised Quality Assurance Programs for these organizations are currently under development independently. In the interim, both organizations are using the Environmental Management Quality Assurance Program and administrative procedures.

The Rocky Flats Plant has made significant progress in the area of environmental quality assurance since the 1989 Assessment. The actions taken relative to the Assessment findings addressed the deficiencies in sufficient detail that adequate programmatic controls exist to ensure confidence in the accuracy and reliability of data generated by RFP sampling and analysis activities. The analytical laboratories have approved controlled procedures for all analyses. Equipment control and calibration logs are maintained. Quality control samples are used and the results are tracked. The laboratories participate in several interlaboratory comparison programs. All laboratories have independent QC officers.

The Progress Assessment Team found the staff in the environmental sampling and analysis programs at RFP dedicated to performing quality work. The initiative and enthusiasm demonstrated by the environmental staff reflects strong internalization of the importance of quality.

There are infrastructural and programmatic inadequacies at RFP that need correction. Both RFO and EG&G site management appear aware of these deficiencies and are working to correct them.

The Progress Assessment Team identified one weakness related to oversight of environmental sampling and analysis and one strength related to sample management, presented in Appendix B-2 (see Weakness E/W-3, Oversight of RFO Sampling and Analysis Program, and Strength E/S-4, Sample Management Office).

2.4

OVERVIEW OF SAFETY AND HEALTH PROGRAM ASSESSMENT

The Progress Assessment Team evaluated the overall effectiveness of the RFP safety and health program. The assessment was conducted through a combination of interviews; review of key documents; and where appropriate, field inspection of activities and processes. Specific safety and health disciplines were selected for review based on areas of concern from previous assessments, or because those disciplines were believed to be highly characteristic of safety and health program performance. The safety and health disciplines assessed at RFP were worker safety and OSHA programs, fire protection, and industrial hygiene.

Based on the review of these areas, the Progress Assessment Team concluded that the RFP safety and health program has positive attributes; however, programmatic deficiencies continue to exist in the areas assessed.

- The Progress Assessment Team found that many areas of the RFP worker safety and OSHA programs were technically sound. EG&G has initiated or enhanced a number of programs to involve management and labor in proactive sitewide occupational safety and health programs that provide OS&H training, and evaluate, identify and resolve workplace hazard issues. An occupational safety and health hazard abatement tracking system has been initiated that when fully implemented will track to final correction, and trend, identified workplace hazards. However, many concerns remain: Full implementation of effective sitewide basic OS&H programs and compliance initiatives has not occurred; EG&G and RFO do not yet have effective management systems that hold line management and employees accountable for OS&H compliance; and RFO and EG&G lack effective management systems that measure OS&H performance and provide accountability.
- Based upon the findings from previous Technical Safety Appraisals (TSAs) significant progress has been made in specific areas of fire protection. Increases in staffing has occurred in both the SS&S Fire Protection organization and the E&T Fire Protection Engineering group. The Emergency Services group has received new fire equipment and implemented a hazardous materials response unit, fire prevention/fire protection surveys and surveillance of fire protection systems are being conducted. However, deficiencies still exist in the overall fire protection program and related systems. EG&G management has not ensured prompt and effective corrective action to identified deficiencies; full and effective implementation of a life safety program; and a proactive approach to fire protection.
- Industrial hygiene at RFP has increased in formality and documentation since the 1989 Assessment. They have recently received full staffing and are increasing their oversight program considerably, including a surveillance program. EG&G has increased the size of its staff and programs, but many programs have not yet been extended sitewide. The pace of development and implementation of the Industrial Hygiene Program has not demonstrated an appropriate level of commitment to worker health. Health Hazard Assessments in individual buildings are beginning

but are not expected to be completed until after the year 2000. Routine workplace exposure monitoring has been conducted for only beryllium and asbestos.

2.4.1 Worker Safety and OSHA Programs

The Progress Assessment Team examined management systems and programs that support and ensure effective implementation and oversight of occupational safety and Occupational Safety and Health Act (OSHA) programs, this was coupled with limited site visits (see Appendix I), to ascertain the effectiveness of implementing the EG&G safety and health program and RFO's oversight program.

Key standards against which the site was assessed included 29 CFR 1910, "Occupational Safety and Health Standards," and 29 CFR 1926, "Safety and Health Regulations for Construction"; "Safety and Health Program Management Guidelines" (voluntary guidelines) as published in Federal Register (January 26, 1989); DOE Orders and directives relating to occupational safety and health programs; Environmental, Safety and Health Management Performance Objectives and Criteria for Progress Assessments; Performance Objectives and Criteria for Technical Safety Appraisals relating to Occupational Safety (OS), Worker Safety (WS), and Personnel Protection (PP); and the 1989 Assessment Corrective Action Plan for the RFP.

Both EG&G and RFO have developed professional safety and health organizations staffed by qualified, competent professionals. The RFO Safety and Health Division is responsible for surveillance oversight of activities relating to EG&G safety and health programs. The Safety, Safeguards & Security organization of EG&G provides EG&G line management with day-to-day support of sitewide occupational safety and health matters.

An effective occupational safety and health management program includes provisions for the systematic identification, evaluation, and prevention or control of general workplace hazards, specific job hazards, and potential hazards that may arise from foreseeable conditions. An effective program addresses not only specific regulations but goes beyond specific requirements of law to consider all hazards. It seeks to prevent injuries and illnesses, regardless of compliance issues. As the size of a worksite or the complexity of a hazardous operation increases, the need for formal guidance is amplified in order to ensure clear communication of policies and priorities and consistent program application.

The RFP has incorporated many of these elements of a sound program in their sitewide occupational safety and health (OS&H) program (D-L-15, 20, 22, 23, and 39). However, deficiencies have been identified in management systems that require employee occupational safety and health accountability, establish meaningful career developmental plans for OS&H professionals, measure and assure OS&H accountability and performance, and provide effective OS&H oversight.

On-the-job evaluations of safety and health professionals by their immediate supervisors are not included as part of written performance objectives or formally required to be conducted on a routine basis by either RFO or EG&G.

Specific and measurable performance goals and objectives are not reflected in the RFO OS&H professional performance evaluation documents.

Employee development plans are not required by and have not been established and implemented by EG&G. While RFO's safety and health professional staff Individual Development Plans (IDPs) have been established, many are either too general or generic, and do not specifically address the professional career development needs of all its staff (D-L-41).

Success of the overall site occupational safety and health programs hinges on active employee involvement in the total safety process, including participation in walkaround inspections of their work areas. The concept of active employee involvement in occupational safety and health inspections of their respective work areas ensures continued proactive employee involvement in workplace safety and health matters. EG&G has initiated or enhanced a number of programs to involve management and labor in proactive sitewide occupational safety and health programs. Examples include: the Joint Company/Union Safety Committee (JCUSC) that provides a credible, open forum for all RFP employees; the "Walkaround Wednesday" program, an EG&G management tool dedicated to continued self-assessment and self-improvement in matters relating to worker safety and OSHA compliance; and the EG&G Line Control Safety and Health Program, an innovative and proactive training and management tool to implement management's commitment towards achievement of OS&H excellence.

Finally, EG&G has initiated an occupational safety and health hazard abatement tracking system; the Plant Action Tracking System (PATs). When fully implemented, it will provide safety and health baseline information for each building and facility at RFP. Results of all workplace inspections will be entered into a master data base, tracked to final correction, and trended. "Health and Safety Performance Indicators" are trended and published on a monthly basis. These indicators assist both EG&G and RFO management with establishing the direction of OS&H resources as well as provide feedback on the effectiveness of the overall occupational safety and health program.

Despite management's compliance efforts, the Progress Assessment Team identified the existence of numerous safety and health noncompliance issues relating to electrical safety, machine guarding, hazard communication labeling, storage of compressed gas cylinders, emergency egress, and housekeeping. Many of these deficiencies would be considered by OSHA to represent serious safety and health exposure hazards for workers in these areas. These deficiencies indicate an OS&H program which is not coordinated and does not appropriately prioritize its efforts. Lack of prioritization and coordination handicap EG&G's and RFO's ability to effectively define, manage, communicate and enforce uniform compliance with the requirements of the RFP sitewide occupational safety and health program.

RFO's OS&H program direction and oversight has emphasized the attainment of safety and health program excellence in specific areas. However, RFO does not have a formalized system in place that can accurately assess the impact of its OS&H mandates to the contractor, that exceed those required by regulatory requirements. Although safety and health program excellence is highly desirable, RFO's failure to first ensure full implementation of effective sitewide basic OS&H programs and compliance initiatives have contributed to

the concerns in this report. This may result in EG&G relying on RFO for decisions regarding all safety and health priorities.

The Progress Assessment Team identified one concern relating to the worker safety and OSHA program. The concern is presented in Appendix B-3 (see Concern S/C-1, Worker Safety and OSHA Programs).

2.4.2 Fire Protection Program

The Progress Assessment Team looked specifically at management systems and programs that support and ensure effective implementation and oversight of the fire protection program.

The approach included a review of selected fire protection documents; coupled with limited site visits to ascertain the effectiveness of the EG&G Fire Protection Program, program oversight, corrective action, accountability and coordination of activities. The key standards against which the site was assessed included performance objectives from the PA and TSA documents, DOE Order 5480.7A, and selected National Fire Protection Act (NFPA) standards.

Key fire protection items identified during the Progress Assessment included the lack of an in-depth Life Safety Code analysis for buildings, the lack of formality of operations for certain water based fire suppression systems, and certain specific weaknesses in the overall EG&G fire protection program as identified by the number of deficiencies. The Progress Assessment Team recognizes that one factor which may have negatively impacted the overall Fire Protection Program was the effort diverted to resumption; however, this was not the root cause of all issues identified by the Team.

The RFO Safety and Health Division is the organization that is responsible for surveillance and oversight of the EG&G fire protection program. RFO has conducted fire protection surveillance of selected buildings, compliance audits, and functional audits of the EG&G fire protection program (D-M-32, D-M-33 and D-M-45).

Within EG&G, responsibility for the RFP fire protection program is divided between four separate organizations (I-M-1, 37, and 52). The Associate General Manager for Safety, Safeguards and Security has stated that the overall responsibility for the Fire Protection Program at RFP is his responsibility; however, he also acknowledges that his organization relies upon others to perform some tasks and that he may not have the capability to direct all aspects of the effort.

Staffing levels within Fire Protection (Fire Department) and Fire Protection Engineering have increased in recent years (I-M-1 and I-M-7). In 1986, RFP had one fire protection engineer. Today RFP has eight fire protection engineers and technicians and a manager assigned to Plant Facilities Engineering.

The current system to assign priorities to the repair of fire protection systems relies solely upon the judgement of the facility manager, although he may factor in priorities established by Fire Protection, rather than a formal risk evaluation. EG&G personnel have stated that priorities among buildings were heavily influenced by now defunct resumption activities.

The Progress Assessment Team noted a high degree of reliance placed on fire watches rather than automatic systems. The Team also observed that 83 automatic fire protection systems are in varying degrees of impairment. Twenty-three of these systems had been impaired for over a year.

EG&G is actively working the development of standard work packages for common recurring maintenance repairs/issues affecting the fire protection systems. During March, April, and May of 1993 fire watches were maintained in Building 707 at a cost of \$566,500 (I-M-63).

The EG&G Programs and Operations Assessment group provides assessment of programs and operations including fire protection; however, there are no professional fire protection engineering personnel in this group (I-M-11).

The Progress Assessment Team reviewed the effectiveness of DP's oversight and guidance to RFO. The Team concluded that DP has not conducted fire protection oversight efforts outside of the ORR process for Buildings 559 and 707. DP had not conducted an overall assessment of the Operating Contractor's overall fire protection program.

During the Progress Assessment Team walkthrough of Building 707, missing sprinklers were identified within B-Module. Although the building had undergone a number of readiness reviews, including DOE and EG&G corporate reviews the missing sprinklers had not been identified.

DP's oversight of RFO's fire protection program has not ensured that required corrective actions are accomplished. During resumption activities associated with Building 707, potential inadequacies with assumed fire barrier walls were identified by EG&G. A DP-6.1 memorandum provided direction to RFO that the requirement for fire subdivision based upon property values should be validated upon additional information contained in the memo (D-M-42). RFO has not taken action regarding the memo.

The Progress Assessment Team identified one concern relating to management of the EG&G Fire Protection Program, which is presented in Appendix B-3 (see Concern S/C-2, EG&G Fire Protection Program).

2.4.3 Industrial Hygiene Program

In the industrial hygiene area, the Progress Assessment Team assessed the adequacy and formality of RFP management systems to implement an effective industrial hygiene program, the systems to prioritize and integrate health and safety into the work control process, and the effectiveness of systems to identify, prioritize, track, correct, and trend industrial hygiene and worker health deficiencies.

The Progress Assessment Team conducted interviews with RFO and EG&G managers and employees responsible for the industrial hygiene program. The Team also interviewed union representatives and workers effected by the program. The Team examined manuals, program plans, Compliance Schedule Approvals, project files and other documentation, and inspected selected facilities.

RFO and EG&G management systems affecting industrial hygiene were evaluated relative to the 1989 Assessment. Although RFO had done some surveillances, primarily in response to perceived difficulties, until 3 months ago RFO did

not have a sufficient number of qualified staff to implement a rigorous program of oversight and compliance assessment in the industrial hygiene area. Most of the findings from previous RFO surveillances have been corrected. RFO staffing problems have now been corrected with two DOE and three contractor industrial hygienists on staff (I-N-10). Several work plans for industrial hygiene surveillance are in place (I-N-33 and I-N-37). Surveillance for the industrial hygiene surveillance program was scheduled to begin April 1, 1993.

EG&G's industrial hygiene program is established through the Director of Industrial Hygiene and Safety, and implemented through two of his organizations and line management. The Industrial Hygiene Department is responsible for the development of program, policy, and procedures, while day-to-day guidance to the line organization is normally furnished by or through the Area Management Group. The Industrial Hygiene Department has developed management plans, established critical program elements through the Health and Safety Practices Manual (D-N-13), and developed an Industrial Hygiene Procedures Manual (D-N-22). The Occupational Health (Medical) Department also has an important role in occupational health and reports directly to the Associate General Manager of Safety, Safeguards and Security. They now receive industrial hygiene personnel monitoring data and information on employee occupational exposures.

EG&G has established several company-wide initiatives to improve line management accountability for health and safety. The "Line Control Safety Program" and its accompanying training was begun on a pilot scale within the maintenance organization in 1992 and has the potential to increase line management accountability and knowledge, resulting in a healthier and safer workplace (I-N-5, 6, and 7; D-N-28, 77, and 78). When fully implemented, the program should meet the training requirements of Draft DOE 5483.XX, Chapter 6. A formal program of "management by walking around" by foremen and all other management personnel was announced in March 1993 and also has the potential to improve worker health and safety (D-N-79; I-N-7).

Concerns in past technical safety appraisals (TSAs) have centered on staffing issues and, although actions have been taken to improve the situation, the pace of development and implementation of the EG&G Industrial Hygiene Program has not demonstrated an appropriate level of commitment to worker health. The Progress Assessment Team acknowledges that management and human resources issues, particularly staff turnover within the industrial hygiene organization (100 percent in 3 years) have impeded industrial hygiene program development and implementation. The Team is also aware that salary market adjustments and professional development opportunities have been instituted to attempt to keep qualified staff (I-N-2, 3, 4, and 57). These actions have been fully supported by RFO (I-N-9, 10, 11, and 33). It is hoped that they will accelerate the correction of weakness in the pace of industrial hygiene program implementation identified in this report. The Team was concerned that the budget for Industrial Hygiene and Safety has been reduced twice this year and further reductions are projected for FY 1994.

The identification and monitoring of chemical and physical agents that may adversely effect health is integral to an effective industrial hygiene program. At the time of the 1989 Assessment, identification of health hazards was largely through employee or supervisor inquiries. The only routine monitoring programs were for asbestos and beryllium (D-N-1). Since then, procedures requiring hazard assessment inventories and sampling plans for each

building have been issued and a quality assurance program for industrial hygiene samples has been established. However, health assessment inventories and their accompanying sampling plans have been established for only two buildings with two others in progress. Routine exposure monitoring is still performed only for asbestos and beryllium (I-N-57). Noise and other industrial hygiene measurements are made more frequently than in the past but normally on an ad hoc basis.

The Occupational Health Department has also exhibited less than full support of the occupational health program with physical examinations performed less frequently than required by DOE Orders. This is a direct result of not having the number of medical professionals required by the DOE Orders. Records management within medical is also less than adequate because of staffing issues. Nevertheless, improvements have been made. Identification of occupational health hazard exposures to the occupational medical department has improved since the 1989 Assessment (I-N-32).

EG&G has recognized the need for additional training for the Area Management group and many of the Safety and Health Administrators have received outside training. However, a pre-planned training program has been deferred because of the current workload. In the absence of training and professional development programs or other job-specific qualification program for the Area Management group, the quality of their work cannot be ensured (I-N-21, I-N-28, and I-N-30).

EG&G management systems to prioritize and correct program weaknesses and maintenance and engineering needs were evaluated and found to be functional (I-N-20). Items requiring maintenance and/or engineering resources are handled by EG&G through the Integrated Work Control Program (IWCP). This system allocates resources within each building, giving some priority to safety and health protection items (I-N-20 and D-N-35). However, during resumption, correction of industrial hygiene deficiencies in non-resumption buildings were often resource limited (I-N-1, 2, 3, 57, and 58). The IWCP priority system is being adjusted to prioritize work on a plant wide basis to further reduce risks to health and safety (I-N-20).

The Plant Action Tracking System is used to track health and safety commitments/deficiencies and Compliance Schedule Approvals (CSAs) are in place or in the approval cycle for several long standing industrial hygiene program deficiencies. RFO has not established their own data base but makes use of PATS to track EG&G corrective actions (I-N-9, I-N-19, and I-N-33).

Self-evaluations and self-assessment activities at EG&G have begun, but are somewhat limited. Since the 1989 Assessment, the industrial hygiene organization has performed self-evaluations of confined space, hearing conservation, and portions of the respiratory protection programs (I-N-1). However, additional self-evaluations are unscheduled at this time. Corrective actions resulting from these self-evaluations have been implemented. The EG&G Technical and Safety Assessment group has reviewed occupational medicine, drinking water, and performed a partial assessment of Material Safety Data Sheets. They plan to review one industrial hygiene or industrial safety assessment per quarter (I-N-60).

Industrial hygiene program improvements were noted during this assessment in a number of specific programs. For example:

- EG&G now has asbestos workers with EPA accredited training. They have performed sitewide walkthrough surveys to identify damaged material that may contain asbestos. Appropriate exposure control measures have been taken. Potential asbestos containing material is being sampled, inventoried, and labeled in Building 707. However, funds have not yet been made available to extend the program to other areas of the plant (I-N-34, 39, 57, and 33).
- Previously, there was no backup of monitoring or exposure records (medical or industrial hygiene). Backup copies of industrial hygiene records now exist, however, they are not readily retrievable (I-N-13 and I-N-36) and medical records are still not stored in fire resistant cabinets or fully duplicated (I-N-32).
- A hazard communication program has been implemented sitewide. Supervisors are trained and are responsible for job specific hazard training for their subordinates (D-N-37, I-N-41, and I-N-42). However, some hazard-specific training for workers (e.g., asbestos awareness) has not yet been completed.
- The respiratory protection program has been upgraded sitewide with the designation of a program administrator. Air carts and compressors have been improved in selected locations. Supplied air respirator fittings are now unique to the breathing air system and their procurement is controlled. Medical clearance for the assignment and use of respirators is now required. Additionally, approved alternatives to the S-bag (supplied air suit) are scheduled to be in place by August 1993 (I-N-1 and I-N-33). However, half mask and full face filter respirators are still used for egress and alarm response in unknown atmospheres in violation of 29 CFR 1910.134 and ANSI Z88.2 (I-N-23 and I-N-39). The problem of air purifying respirator use for emergency egress in unknown atmospheres was identified in EG&G internal correspondence in 1990 and in the RFO respirator surveillance. Progress is being made on eliminating their use. The problem of air purifying respirator use for selective-alpha-air-monitor (SAAM) alarm response was identified in an EG&G internal audit in 1989, but not in the RFO surveillance. It appears that it is not being given priority.
- Advances have been made in the hearing conservation program with the identification and posting of high noise areas and the institution of a program to ensure baseline audiograms for exposed employees.

The Progress Assessment Team identified one weakness related to the industrial hygiene area, which is presented in Appendix B-3 (see Weakness S/W-1, Industrial Hygiene Program Implementation).

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Appendix A

Summary Table of Concerns, Weaknesses, and Strengths

**SUMMARY TABLE OF
CONCERNS, WEAKNESSES, AND STRENGTHS**

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Management Systems		
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Appendix B

Concerns, Weaknesses, and Strengths by Discipline

Appendix B-1

Assessment Details - ES&H Management Systems/Concerns, Weaknesses, and Strengths

Assessment Concern Number:

M/C-1

Assessment Concern Title:

RFO Corrective Action Program

Performance Objective

Performance objective PA-2.4.3, "ES&H Management Information System," states that a formal management information system provides management at all levels with the current status of ES&H compliance and the necessary information for day-to-day decision making. This system captures, on a sitewide basis, ES&H deficiencies and tracks corrective actions through closure. The system identifies performance indicators, performs trend analysis and root cause analysis, and prioritizes issues based on risk. The system also includes a lessons learned element.

Concern

RFO does not have a comprehensive corrective action program that captures all deficiencies, assures correction of root causes, identifies adverse trends, assures correction of problems on a generic (sitewide) basis, provides for tracking, verification of closure, incorporates lessons learned, or communicates results to management.

Discussion

An effective corrective action program establishes systems for capturing all ES&H deficiencies; tracking, followup, completion, and closure of corrective actions; conducting root cause analyses and trends; incorporating lessons learned; and communicating results and trends to appropriate organizations. Further, a corrective action identifies significant deficiencies and delinquent action items and alerts management for review and action.

Although some elements of a corrective action are in place, these components do not collectively compose a comprehensive corrective action program. The following specific deficiencies in the RFO corrective action program were identified:

- The RFO corrective action program is neither fully developed nor fully implemented. RFO has not developed procedures describing duties, responsibilities, and authorities that will capture all ES&H deficiencies; incorporate a lessons learned program; and provide for conducting root cause analysis and trend analysis (I-A-14, 15, 16, 17, and 18).
- RFO has recently issued (May 12, 1993) an interim procedure for the identification, tracking, and closure of RFO commitments made to external agencies and internal authorities. Training for implementation of this procedure has not been developed or scheduled (I-A-16).
- RFO has initiated development of a computer listing of RFO commitments containing approximately 700 items. However, the RFO staff estimates this only represents about 10 percent of the total open RFO commitments (I-A-16).
- The RFO staff informally review individual deficiency reports from both EG&G and RFO organizations within their purview. The depth of these reviews depends on the expertise of the reviewer and not on a office-wide

approved procedure to ensure consistency of the reviews (I-A-14, 15, 16, 17, and 18).

Assessment Concern Number:

M/C-2

Assessment Concern Title:

EG&G Corrective Action Program

Performance Objective

Performance objective PA-2.4.3, "ES&H Management Information System," states that a formal management information system provides management at all levels with the current status of ES&H compliance and the necessary information for day-to-day decision making. This system captures, on a sitewide basis, ES&H deficiencies and tracks corrective actions through closure. The system identifies performance indicators, performs trend analysis and root cause analysis, and prioritizes issues based on risk. The system also includes a lessons learned element.

Concern

EG&G does not have a comprehensive corrective action program that captures all deficiencies, assures correction of root causes, identifies adverse trends, assures correction of problems on a generic (sitewide) basis, provides for tracking, verification of closure, incorporates lessons learned, or communicates results to management.

Discussion

An effective corrective action program establishes systems for capturing all ES&H deficiencies; tracking, followup, completion, and closure of corrective actions; conducting root cause analyses and trends; incorporating lessons learned; and communicating results and trends to appropriate organizations. Further, a corrective action program identifies significant deficiencies and delinquent action items and alerts management for review and action.

- Much progress has been made by EG&G to develop the sitewide corrective action plan. Numerous procedures related to corrective actions for QA, occurrence reporting, environmental program, maintenance, safeguards and security, reporting, and self-assessment issues have been developed, as well as general procedures related to stop work and issues management. The Progress Assessment Team believes that if EG&G develops and implements all of the identified actions listed in the ORR Response/Action Plan 13, Finding No. M.7-1, it will have an effective sitewide Corrective Action Program. The target completion date for this long range effort is May 1994. Until these actions are accomplished, the EG&G corrective action system will remain fragmented and somewhat ineffective (D-A-6).
- The activities that are being addressed by the plan are as follows:
 - Develop and publish a plant policy;
 - Establish a team and develop and publish a level One procedure;

- Identify and review existing Corrective Action Systems and procedures for opportunities to reduce redundancies and combine systems and procedures;
 - Require that all plantwide deficiency reporting system owners develop an implementation plan and schedule to come into compliance with the policy and procedure;
 - Develop and provide training;
 - Develop and submit to PATS an approved implementation plan for deficiency reporting systems;
 - Develop modules with the Plant Action Tracking System (PATS);
 - Assess the effectiveness of the plantwide corrective action system (D-A-6).
- The ORR Response/Action Plan 13 does not require detail in-process verification of the listed long range tasks prior to the completion date of each individual task. It also does not identify the lessons-learned program as being part of the overall corrective action system (D-A-17).
 - The EG&G sitewide Corrective Action program is neither fully developed nor fully implemented and some procedures, plans and schedules have not been developed to support program implementation (I-A-2, 11, and 12).
 - EG&G has over twenty individual corrective action systems. EG&G management had recognized that these systems are ineffective, fragmented, redundant and difficult to use for tracking and trending information. However, it was not until December 1992, when the Operational Readiness Review (ORR) identified the lack of a sitewide corrective action program that EG&G began an aggressive and formalized effort to develop and implement a sitewide system (D-A-6).
 - Other examples of where EG&G corrective action in the field is less than adequate are in the areas of self-assessment (Section 2.2.2), oversight (Section 2.2.3), and fire protection (Section 2.4.2).

Assessment Concern Number:

M/C-3

Assessment Concern Title:

EG&G Self-Assessment Program

Performance Objective

A January 26, 1990, Secretarial Directive required all line organizations to implement comprehensive self-assessment programs.

The July 31, 1990, Secretarial Directive concerning ES&H self-assessment provides further direction to DOE field offices to institute self-assessment programs, attaches guidance for improving and/or implementing such programs, and requires development of a formal systems for carrying out and auditing corrective actions.

Performance objective PA-4.5, "Sitewide Self-Assessment Program," states that a comprehensive, institutionalized, self-assessment program regularly evaluates and reports the status and quality of all aspects of its ES&H performance, determines root causes for deficiencies, and ensures that corrective actions are taken.

Concern

EG&G has not yet fully defined, developed, and implemented a comprehensive ES&H self-assessment program. In general, detailed implementation plans have not been developed; sitewide corrective action tracking systems, lessons learned programs, and trend analyses programs are incomplete and lack sitewide uniformity; and detailed self-assessment protocols are in draft form and incomplete.

Discussion

A fully functioning, comprehensive self-assessment program is an important tool in providing managers on the site with an understanding of the ES&H priorities on a sitewide basis, and identifying actions that are necessary to ensure proactive management of the site ES&H programs including the resolution of existing problems and the prevention of new ones. An effective self-assessment program builds upon existing programs and activities to provide a comprehensive view of site functional and management areas; communicates lessons learned and trends across the site; creates a sense of ownership of ES&H by line managers as well as line operating staff; and enables site managers to make informed decisions concerning sitewide ES&H priorities.

The EG&G self-assessment program has the potential to serve as a firm foundation for a comprehensive ES&H self-assessment program consistent with DOE-HQ guidance and total quality management (TQM) concepts to build on existing appraisal activities. Recent EG&G initiatives include the establishment of the Total Quality Management Directorate (TQMD) under the Standards, Audits, and Assurance (SAA) Organization. The mission of the TQMD includes the assistance of management in the coordination of Process Improvement Teams (D-B-140). The Process Improvement Teams (PITs) include an Assessment Directorate Process Improvement Team whose tasks includes the development of an integrated, 5-year assessment schedule (I-B-33). The first task accomplished by the group was the development of an integrated schedule

for the remainder of 1993. EG&G also instituted the "Management by Walking Around" initiative on March 30, 1993. Although the technical benefits of this new walk around program have not been proven, it could become an important vehicle for demonstrating management commitment to ES&H programs.

The EG&G Self-Assessment Program has not yet fully matured; a fact that EG&G management recognized and is starting to improve. While EG&G has made a sound beginning, the EG&G self-assessment program does not currently provide all of the attributes called for in the DOE-HQ July 31, 1990 directive, the DP implementing guidance, or the EM implementation plan. For example, it does not contain provisions and protocols for line-management assessments or for the assessment of the management of ES&H activities and ES&H management systems. While a variety of EG&G assessment activities (e.g., SAA Assessments, Conduct of Operations Assessments) address aspects of a comprehensive ES&H management assessment, taken collectively, they fall short of a comprehensive self-assessment program that would address the effectiveness of company-wide ES&H management and sitewide management systems. The results of self-assessments and self-evaluations are not currently captured at all levels within the organization on a sitewide basis and rolled up to demonstrate the sitewide ES&H priorities or to communicate common problems across the plant site (I-B-31 and I-B-33).

The EG&G self-assessment program relies on the identification of issues by external and internal ES&H oversight organizations and by line managers. This approach ignores the important self-assessment concept of line operator staff involvement in the ownership and continuous improvement of ES&H programs. The process of self-assessment must be applied at all levels in an organization; from the office worker or shop floor operator up to the most senior manager. Evaluations done at lower levels in an organization are then progressively rolled up into ever broader assessments until senior management has a comprehensive self-assessment of the ES&H performance of the complete organization. Once identified, deficiencies (both technical and programmatic) are evaluated through prioritization, trend analyses, and root cause analyses to provide the organization-wide risks, vulnerabilities, and priorities. An effective self-assessment program enables senior managers to make informed decisions concerning the organization's planning goals and priorities, the allocation of resources, and the areas which need the most oversight attention.

In summary, the EG&G self-assessment program does not provide site managers with all the information that can be effectively applied to the site's ES&H management systems. The status of important EG&G self-assessment elements are:

- EG&G SAA Office has an active functional appraisal program of ES&H activities including Assurance Audits, Program & Operations Assessments/Technical & Safety Assessments, Waste Surveillances, Environmental & Waste Assessments/Audits, and QA Surveillances. These formal appraisals have been scheduled through the 3rd and 4th Quarters of FY 1993 (D-B-106).
- EG&G has a system of formal policies and level one procedures to define and control the conduct of self-assessment related activities. EG&G issued its Self-Assessment Policy 7-23 on November 18, 1991, in response to the interim Rocky Flats

Instruction (RFI) 7300, "Rocky Flats Plant Self-Assessment Program (November 7, 1991) (D-B-131 and D-B-66). Policy 7300 which was revised on March 31, 1992, required the Performance Assurance Organization to develop and execute an implementation plan to schedule, plan, conduct, and document independent assessments. The policy also required all Associate General Managers (AGMs) to formally plan, schedule, and conduct self-evaluations within their organizations. Policy 7-23 was replaced by Policy 7-34 on January 29, 1993, which states that "EG&G, Inc. will employ an efficient program of management oversight wherein independent oversight activities are performed by independent oversight organizations and all line oversight activities are performed under the self-evaluation program." EG&G issued its Self-evaluation Program (1-11000-ADM-16.10) on January 20, 1992. This procedure established the process and responsibilities for performing self-evaluations at RFP.

- EG&G has developed elements of an issues management/corrective action program that includes a process for determining which issues should be tracked on a sitewide basis utilizing the Plant Action Tracking System (PATs). The program is controlled by a set of policies, level one implementing procedures, and program plans. The program is designed to assist EG&G in prioritizing, monitoring, and tracking issues from identification to resolution, and closure. Currently, the issues management and commitments tracking programs do not have the necessary implementing plans and procedures necessary to ensure that all the deficiencies and commitments that meet the defined issues criteria are captured on the systems (see Concern M/C-2). PATs functions primarily as a data base and captures most issues identified by SAA assessments, and to a lesser extent other internal assessments (e.g., Safety, Safeguards and Security), and tracks them to completion. Currently, the sitewide issues management system does not yet capture most of the deficiencies that meet the defined issues criteria arising from line management assessments (I-B-26, 31, and 33). Due to the lack of implementing procedures and plans Issues Management is often required to request the issues from line managers.
- EG&G has policies and procedures in place to conduct root cause analyses and trend analyses (D-B-73, 78, 85, 121, 123, 126, 127, 134, and 143). However, this information, as well as the corrective action tracking system data, are not yet applied in a consistent manner sitewide (I-B-26, I-B-33; D-B-10). As a result, EG&G managers and supervisors do not have ready access to sitewide information that is vital to their decision-making process (I-B-31). EG&G management recognizes the importance of fully implementing these management systems and is working towards that end (I-B-26, I-B-31, and I-B-33).
- The Self-Assessment Program Plan (D-B-145) was written as a resumption effort for Building 559. Although it was written with that activity in mind, it was intended to be applicable to all of RFP with respect to compliance and to 15 "program" areas in the case of the performance improvement processes. "Program" areas

are not defined in the traditional sense of programmatic areas such as materials production, but rather as activities such as Maintenance Program, Engineering Program, and Nuclear Safety Program. This plan lacks a number of important elements that characterize implementation plans: it does not reflect current activities or the current mission; it does not address ES&H activities on a sitewide basis; and while it identifies activities that require attention, it does not set priorities, identify required resources, or define a schedule for carrying out the program.

- The EG&G level one procedure for self-evaluations requires each AGM to develop an implementing plan for their organization. The implementation of this element of the program is fragmented with the inconsistent application of the program down through the individual AGM organizations and between levels within each AGM organization. For example, the AGM for Facility Management and Operations (F&O) and the AGM for Safety, Safeguards, and Security (SS&S) have not developed implementing self-evaluation plans for their organizations (I-B-7 and I-B-13). In addition, those self-evaluation plans that have been developed by individual directorates within these two AGMs are in draft form (D-B-146 and D-B-148) or no longer apply to the organization which wrote the plan due to the recent reorganization. As an example, a self-evaluation program was developed by the Plutonium Fabrication (PUFAB) Operations in Building 707 (D-B-146). As a result of the reorganization, the responsibility for self-evaluation of Building 707 has been redirected to another organization with responsibility for overall responsibility for Plutonium Operations (I-B-32). Thus the self-evaluation program has been further removed from the operator level.
- EG&G has constructed new site-specific terms to describe their self-assessment program. Self-assessments describe those assessments conducted by the EG&G SAA Office. Self-evaluations are those assessments conducted by the EG&G line manager's organizations. This language leads to confusion throughout EG&G (I-B-7, I-B-29, and I-B-32). For example, draft Operations Order No. 00-XXX-ZZ, "Facilities Management and Operations Environmental Compliance Operations Order for 771 Area Operations" (March 1, 1993) states that the Operations Manager is responsible for implementing a program for self-assessments of 771 Area Operations. This lack of a common understanding is especially disconcerting given that EG&G first issued its self-evaluation program (1-11000-ADM-16.10) on January 20, 1992.
- The inconsistent application of the self-evaluation programs across RFP, the lack of adequate communication of the program across and through the EG&G organizations, and the numerous organizational changes within EG&G have resulted in confusion concerning the overall roles and responsibilities of the line organizations regarding self-evaluation (I-B-7).
- The EG&G self-assessment program is not currently benefiting from the utilization of elements of what could make up a comprehensive,

effective, self-assessment program. A set of ES&H-related Program Plans were developed to support the RFP resumption initiative, specifically Building 559 Operational Safety Requirements, as it was defined over two years ago. These EG&G program plans include: Rocky Flats Policies and Procedures Program Plan, Radiological Protection Program Plan, Nuclear Safety Program Plan, Operations Program Plan, Industrial Health and Safety Program Plan, and Training Program Plan. These program plans provide a self-assessment of the RFP programs in 1991 against comprehensive baseline programs in that they summarize deficiencies, weaknesses, and define corrective actions for the programs within Building 559 (D-D-39 through D-B-44). The results of these program reviews have not been incorporated into the responsible AGMs self-evaluation programs.

In addition, EG&G Policy 7-34 requires all AGMs to identify committees, boards, panels, or review groups, that function within their areas of responsibility and incorporate those that perform sponsor and line oversight activities into their self-evaluation program. Although safety committee input may be solicited from the Assessment Directorate for a particular functional area as part of an individual assessment, the issues identified by site safety committees are not routinely incorporated into the self-evaluation programs (I-B-29 and I-B-33).

- EG&G has developed a procedure to establish the minimum requirements and responsibilities for tracking, trending, analyzing, and reporting performance indicators within the SAA Office, and the basic methods for evaluating performance through trending and analysis of performance indicators (2-53000-ADM-05.08, Rev. 0). According to this procedure, "Although some trending and trend analysis has been performed by various groups for many years, a sitewide program and procedure does not exist."

Assessment Concern Number:

M/C-4

Assessment Concern Title:

RFO Self-Assessment Program

Performance Objective

A January 26, 1990, Secretarial Directive required all line organizations to implement comprehensive self-assessment programs.

The July 31, 1990, Secretarial Directive concerning ES&H self-assessment provides further direction to DOE field offices to institute self-assessment programs, attaches guidance for improving and/or implementing such programs, and requires development of formal systems for carrying out and auditing corrective actions.

Performance objective PA-2.5, "Field Office-Wide Self-Assessment Program," states that the DOE Field Office maintains active, comprehensive oversight of contractor self-assessment programs to ensure that the DOE guidance is being followed.

Concern

RFO has not yet defined or fully developed a comprehensive ES&H self-assessment program including a program plan, detailed implementation plans and procedures, and a corrective action tracking system to support the program.

Discussion

A fully functioning, comprehensive self-assessment program is an important tool in providing managers on the site with an understanding of the ES&H priorities on a sitewide basis, and the actions that are necessary to ensure proactive management of the site ES&H programs including the resolution of existing problems and the prevention of new ones. An effective self-assessment program builds upon existing programs and activities to provide a comprehensive view of site functional and management areas; communicates lessons learned and trends across the site; creates a sense of ownership of ES&H by line managers as well as line operating staff; and enables site managers to make informed decisions concerning sitewide ES&H priorities.

RFO has simultaneously pursued the development of its own self-assessment program and directed its contractors to implement their own programs. Due to the low priority placed on self-assessment by the senior RFO managers, RFO's progress in developing a self-assessment program has been relatively slow and is currently, only in the rudimentary stages of development (I-B-3). RFO has developed a sitewide self-assessment procedure, Rocky Flats Instruction (RFI) 7300, "Rocky Flats Plant Self-Assessment Program" (July 10, 1992). RFI 7300 does not serve as an implementing procedure, but does identify elements of a self-assessment program within RFO. The RFO self-assessment program lacks most of the elements of an effective self-assessment program. Those elements include a formal program plan with clearly defined roles and responsibilities; a description of the self-assessment scope which addresses all ES&H functional areas and management issues on an integrated sitewide basis; the integration of external oversight activities into the

self-assessment program; the formal identification, tracking, and trending of corrective actions; and the development of lessons learned, trend analyses, and root causes from assessment findings.

RFO established the Performance Assessment Office (PAO) in 1991 and defined its responsibilities to include the management of the RFO self-assessment program. The PAO organization is described in PAO Procedure (PAOP) 1100.2, "Office of Performance Assessment Office Organization." As part of the February 1993 reorganization of RFO, the Quality Assurance Office was integrated into the PAO to form the Performance Assessment and Quality Assurance Office (PAQAO). PAOP 1100.2 has not been revised to define the new organization. The Director of the PAQAO reports directly to the RFO manager. The PAQAO is currently responsible for managing the self-assessment program, DOE Order compliance, issues management, providing technical input into the M&O contractor award fee determinations, and quality assurance oversight and technical support.

In summary, the elements of a self-assessment program that do exist within RFO are incomplete and inconsistently applied. The status of important RFO self-assessment elements are:

- While the PAQAO developed a procedure for the implementation of PAQAO independent assessments of RFO and contractor activities, PAOP 7300-01, "DOE Office of Performance Assessment Self-Assessment Procedures," (August 3, 1992), no RFO self-assessment program plan has been developed. RFO has not gone through the exercise of identifying the management and functional areas within their own organization that should be reviewed as part of an effective self-assessment program as well as which of those areas are addressed by existing programs. RFO has also not developed a strategy for reviewing those areas which are not addressed along with clearly defined roles, responsibilities, organizational interfaces, goals, objectives, schedules, and resources necessary to implement that strategy.
- RFI 7300 (July 10, 1992) requires each RFO Assistant Manager to establish and maintain a self-assessment program that contains an annual assessment plan (due each September), a proceduralized self-assessment process, implementation of the Rocky Flats Issues Management System, the development of plans for individual self-assessments, formal training programs, root cause analyses, trend analyses, and the assessment of every functional and management area on a 5-year cycle. To date, none of the RFO Assistant Managers have developed self-assessment programs and less than 50 percent of the division directors have developed self-assessment programs (I-B-21). Although RFI 7300 identifies important elements of a self-assessment program, it does not describe these elements or how they are to be applied within RFO.
- Currently, the PAQAO is in a reactive mode and does very few scheduled self-assessments of the RFO. Out of the 10 functional area appraisals of RFO activities scheduled in FY 1992, only one scheduled assessment was completed (Facility Representative Program) due to unplanned assignments from the RFO manager

(I-B-21). Of the six FY 1993 scheduled self-assessments through April 1993, only two assessments have been conducted (RFO Oversight of Solar Evaporation Pond Project and the Issues Management Program). Four unscheduled self-assessments have been conducted in FY 1993, Consultants Serving as Administrative Assistants, Facility Walkdowns, Hoisting and Rigging, and Electrical Safety.

- The RFO self-assessment program does not provide for the effective roll up of issues from the line operator level. Nor does its procedure (RFI 7300) effectively direct the RFP contractors to implement a self-assessment program that will capture and roll deficiencies from the operator level and integrate them in a way which will provide RFO managers with the information necessary to assign ES&H priorities on a sitewide basis.
- Currently, RFO has an interim tracking system for IAG milestones, EH site resident findings, and PAQAO issues and observations (see Concern M/C-1). RFO does not have a formal system to track all RFO issues and commitments from other RFO, DOE-HQ, and external agency oversight activities (I-B-21). EG&G has developed an issues management system that includes a process for determining which issues should be tracked on a sitewide basis, and an automated data base tracking system. The system is designed to assist RFO and EG&G in prioritizing RFP issues, and in monitoring and tracking them from identification to resolution, and through closure. Currently, RFO receives monthly summary reports on the identified EG&G issues. EG&G has developed a dedicated module for RFO which enable RFO to track its own issues and commitments specifically. RFO has not begun to use this module to date (see Concern M/C-1)(I-B-21 and I-B-26).
- Effective followup and closure of self-assessment results are not currently being conducted. No formal corrective action plans have been developed for the seven RFO functional self-assessments conducted by the PAQAO. For example, the PAQAO assessment of the RFO Facility Representative Program, conducted in May 1992 and issued in June 1992, identified 6 deficiencies and 19 observations. The cover letter for the report requested a response by June 30, 1992. The Operations Division never developed an action plan for the deficiencies and they have not been tracked to verify closure (see Concern M/C-5).
- RFO is not currently utilizing either the RFO or the EG&G self-assessment programs as an effective management tool in helping to set ES&H priorities on a sitewide basis. RFO self-assessments conducted to date have been for specific functional areas and have not been rolled up to identify ES&H issues at a management level which can be used to set priorities.
- Although the RFO policy, RFI 7300, calls for root cause analyses, trend analyses, and lessons learned, the processes or methods to be used and responsibilities for performing these elements are not defined. This information, as well as the corrective action tracking system data, are not yet applied in a consistent manner

sitewide (I-B-21; D-B-15). As a result, RFO managers and supervisors do not have ready access to information that is vital to their decision-making process (I-B-21).

- The RFO self-assessment procedures do not have a requirement that RFP contractor self-assessment programs be reviewed by RFO. Without formal review and resolution of comments, RFO will be faced with RFP contractor self-assessment programs that may not be fully compatible and thus easily integrated from the plant site activities into the comprehensive RFP self-assessment program.
- The lack of direction and senior management involvement, coupled with the recent reorganization has resulted in confusion among RFO managers concerning the roles and responsibilities associated with the self-assessment program (I-B-21 and I-B-25). For example, there does not appear to be a common understanding between the PAQAO and the Safety and Health Division (SHD) regarding their individual and interfacing, roles and responsibilities for conducting self-assessments (I-B-21 and I-B-25).
- RFI 7300 only specifies the conduct of assessments for every functional area on a five year cycle (D-B-10). DOE 5482.1B mandates that the quality, frequency, and depth of appraisals be commensurate with the hazard attendant with the respect of operating activities. In addition, DOE 3790.1A and 5482.1B both require conduct of management appraisals at least every 3 years. Because management findings generally have their origin in functional appraisal findings, unless the self-assessment program plans provide for the comprehensive evaluation of all portions of the facility in all functional disciplines at least once every 3 years, there can be no basis for comprehensive management appraisals. This becomes particularly important in the case of an organization that undergoes the tremendous growth, reorganizations and changes in mission that RFO has undergone in the past 3 years.
- EM issued its Self-assessment Management Plan (November 1992) on January 25, 1993. The transmittal memorandum for the plan directed RFO to prepare and submit a Program Implementation Plan (PIP) by April 22, 1993. To date, RFO has not prepared a Program Implementation Plan, and the responsibility for preparing the plan has not been formerly assigned (I-B-3).

Assessment Concern Number:

M/C-5

Assessment Concern Title:

RFO Oversight

Performance Objective

Performance objective PA-2.4.2, "Assessment and Review," states that staff are actively and personally involved in assessment (e.g., appraisals, audits, and surveillances) and review of Field Office/Site Office and site contractor activities to ensure that such activities are conducted with formality and rigor and that they comply fully with ES&H requirements established by law, regulation, and DOE policy.

Concern

The RFO oversight program is not structured and implemented to assure that adequate and effective ES&H programs are being implemented at RFP.

Discussion

RFO oversight includes, but is not limited to, the review of documents, assessments of the contractors (audits, appraisals, and surveillances), evaluation of contractor ES&H performance as a part of the Cost Plus Award Fee (CPAF) process, and self-assessment. These are the activities that assure and inform RFO management at all levels that the ES&H program at RFP is being effectively implemented. RFO (line, support staff, and independent oversight) is performing numerous, substantive assessments, audits, and inspections of the contractors' activities as they affect ES&H and identifying deficiencies that are communicated to the contractor and being corrected or scheduled for correction. However, the following conditions indicate that the oversight program is not structured nor functioning in a manner that provides RFO management with the needed information and assurance of the adequacy of the ES&H program at RFP.

Rocky Flats Office Procedure (RFOP) 7100, "Contractor Activity Oversight," requires that division directors establish instructions providing guidance on oversight procedures, specific guidance on reporting format to ensure consistency with the RFO Issues Management System, and that they implement oversight policies and procedures (D-C-1). It further requires division directors to submit annual surveillance plans to the Manager, RFO, for approval and to the Director, Performance Assessment Office (PAO), for a review for adequate oversight coverage. It also requires division managers to submit quarterly surveillance plan updates to the Manager, RFO and the Director, Performance Assessment Office with progress to date and any changes to the initial plan. The following discrepancies were noted in the implementation of this procedure:

- Although annual plans were submitted by all RFO divisions and were approved by the Manager, RFO, the level of detail and format varied greatly between divisions ranging from summary descriptions (procedures) of inspection plans for a building or functional area to the more appropriate detailed surveillance schedules indicating topics, frequencies, dates, locations, personnel, buildings, etc (D-C-36, 37, 38, 59-65, and 111) (also see Weakness E/W-2).

- There was no documented record of the PAO review for adequacy or any indication of comments or corrections from the Manager, RFO (I-C-4).
- No quarterly updates to surveillance plans have been prepared and Assistant Managers and division directors are not being held accountable to provide them (I-C-4).
- Not all Divisions have prepared formal guidance on oversight procedures and not all Divisions and/or Branches have prepared surveillance procedures. Some Branches are documenting all surveillances after-the-fact and not conducting any formally preplanned surveillances (e.g., predetermining the topics, techniques to be used, identifying requirements, establishing acceptance criteria).
- Branches are not preparing implementing schedules of surveillances or tracking performance against oversight plans (even those branches that provided detailed schedules in their annual oversight plan).
- The categorization of surveillance findings is inconsistent between organizations and does not always conform to the terminology delineated in Rocky Flats Instruction (RFI) 5700.6-05, "Rocky Flats Issues Management System" (D-C-52). For example, deficiencies identified in AM Environmental Management surveillances are called "findings", but RFI 5700.6-05, "Rocky Flats Issues Management System" and SHDP-003, "Surveillance Procedure" identify surveillance results as "issues," "deficiencies," and "recommendations."
- The Facility Representative Program is not performing inspections, documented meetings with EG&G management, monthly contractor assessments, or tracking of issues as specified in Operations Branch Standard Operation Procedures. A PAO assessment of the Facility Representative Program (D-C-31), conducted in May 1992, and issued in June 1992, identified 6 deficiencies and 19 observations. Although these items have been entered onto the PAO commitments tracking data base, there are no individual commitments or tasks identified and no proposed dispositions have been provided by the Operations Division for items they have been assigned. An "extension," apparently for providing the initial action plans, has been requested by the Operations Division with current "due" dates of July 30, 1993; 14 months after the assessment (I-C-4 and I-C-17).
- Followup and closure of surveillance findings is inconsistently applied within organizations and between organizations.
 - Procedures did not always clearly define what constitutes significant findings, what requires a formal response from the contractor, and how findings are to be closed out by RFO staff.

- Closure files did not contain sufficient documentation such as the response or action plan from EG&G.
 - In at least two divisions, Safety and Health and Facility Operations, there has not been any current, collective status of open (or closed) findings maintained to provide staff and management with timely, accessible status information. When implemented, the RFP Issues Management System should provide adequate status information and tracking for surveillance findings identified in the future. Recently, the Safety and Health Division issued Procedure SHDP-003, "Surveillance Procedure," which details the use of this system.
 - A few examples of surveillance closures reviewed by the Progress Assessment Team indicated a limited focus by EG&G on correcting the problem in the building or area where it was identified (typically resumption Buildings 559 and 707) rather than on a generic (sitewide or multi-area) basis. This limited response or corrective action was accepted by the RFO during the closure process. Furthermore, RFO surveillance closure procedures (e.g., RFI 5700.6-05 and SHDP-003) do not specifically require either the responsible organization or the validators to address generic issues or to routinely focus on correcting the root cause. Although there is obviously evidence that RFO and EG&G do address generic considerations and root causes for major issues, these important aspects of an effective corrective action program are not being routinely applied or directed by procedure (D-C-105, 106, and 133-136).
 - A conduct of operations assessment performed in Building 374 in late October 1992 by DOE-HQ, RFO, and EG&G personnel lead by an EM-25 representative, as a practical factors exercise after a DOE assessment training course, identified numerous conduct of operations and radiological control deficiencies (28 concerns composed of over 90 findings). However, this assessment, documented in the format of an EG&G Standards, Audits, and Assurance (SAA) assessment and given number A-PA-92-50, was not formally issued (signed) under cover letter by EM, DP, RFO or EG&G, and no response or action plan was required (D-C-132). It was apparently given directly to the building Operations Manager, who did in fact input the findings into the Plant Action Tracking System which resulted in the preparation of action plans and implementation of corrective actions. However, no one in the EM, DP, RFO, or EG&G Performance Assessment has reviewed the action plans or dispositions, some of which indicated no action to be taken because the responsible organizations disputed the assessment findings.
- Other examples of less than adequate RFO oversight in the field include the areas of Occupational Safety & Health, as identified in section 2.4.1 of this report, fire protection in section 2.4.2,

the waste characterization program in section 2.3.4., and the Interagency Agreement in section 2.3.2.

DOE 5482.1B, "Environment, Safety, and Health Appraisal Program" (issued September 3, 1986), requires that the Heads of Field Organizations conduct management appraisals of ES&H programs of subordinate field activities at least once every 3 years. RFO indicated in its compliance self-assessment of DOE 5482.1B that this requirement was not applicable to RFO, but is the responsibility of DOE-HQ (D-C-117). This position is not in accordance with the DOE Order. RFO has not performed any triennial management appraisals.

An RFO management inspection program, instituted in January 1993, as a result of DP-6.1 directive, implemented through a document titled "RFO Management Inspection Plan," has not been implemented (D-C-102 and D-C-103). Of approximately 50 managers designated to perform monthly walkdowns, only approximately 34 have participated, and only 40 total inspections were performed and documented in the program; 23 in January, 17 in February, and none in March, April, or May (I-C-4).

The Facility Representative Program has not been developed except for nuclear production buildings and their associated support buildings. Facility Representatives have not been assigned to non-nuclear production buildings and plans and procedures for training and the performance of these duties have not been developed.

Assessment Concern Number:

M/C-6

Assessment Concern Title:

EG&G Oversight

Performance Objective

Performance objective PA-4.4.1, "Directive System," states that staff are actively and personally involved in assessment (e.g., appraisals, audits, and surveillances) and review of site activities to ensure that such activities are conducted with formality and rigor and that they comply fully with ES&H requirements established by law, regulation, and DOE policy. Performance criteria PA-4.4.2.1 states that site activities are conducted with the formality, rigor, and quality assurance mandated by DOE ES&H requirements.

Concern

EG&G oversight systems are not structured and implemented in a manner that provides management with all needed information and assurance that the ES&H program is being effectively implemented.

Discussion

EG&G oversight of ES&H activities at RFP consists of all activities that assure and inform EG&G and RFO management that the ES&H program at RFP is being effectively implemented. The oversight program includes the review of documents, assessments of the ES&H related activities (audits, appraisals, and surveillances), independent review committees, and self-assessments. EG&G line, support, and independent oversight organizations are performing numerous, substantive assessments, audits, and inspections of site activities as they affect ES&H. Many deficiencies are being identified, corrected, or scheduled for correction. However, the following conditions indicate that the oversight program has not yet been clearly defined in several areas and is not being performed in a manner that provides EG&G management with all needed information and assurance that ES&H program is being effectively implemented.

The use of independent committees as ES&H management tools is not being consistently or effectively applied at RFP. Some ES&H oversight committees are well structured, functioning as designed, and documenting their activities. Examples of this include the ALARA Oversight Committee, the Traffic Safety Committee, the Nuclear Criticality Safety Committee and the Health Physics Instrument Committee. For other oversight committees, charters, and/or operating procedures, when written, are out of date (Senior Review Board, Emergency Preparedness Review Committee) and meeting minutes are not consistently generated, timely, or thorough (Emergency Preparedness Review Committee) (D-C-9 and D-C-13). Deficiencies and issues identified by many committees are not routinely input to the site Issues Management program.

The manner in which the Senior Review Board directed the preparation and issuance of the first Triennial Assessment of the Independent Review function at RFP undermined, at least, the perception of independence for this review effort. This assessment, mandated by DOE 5480.5, DOE 5480.6, and DOE 5482.1B,

was performed in June 1992, by an independent, offsite team lead by an individual from the EG&G Standards and Safety Review organization, as directed by the Senior Review Board per 1-52000-ADM-02.01 (D-C-122). The assessment

report (D-C-76) was not issued until February 23, 1993, due to delays in obtaining Senior Review Board approval. The SRB directed that a second "independent" team assess the "safety significance" and corrective actions of the findings of the draft Triennial Assessment prior to its approval. The SRB voted to append this second "assessment" to the Triennial Assessment report when it was approved in February 1993. However, although this appendix to the report characterizes the findings and in some instances disputes the significance of the assessment findings, there is no indication in the report or the assessment plan of who the authors of this attachment were or their qualifications. The resumes of the personnel involved are not included with the appendix containing the resumes of the assessment team. In addition, although there is SRB correspondence on file documenting the decision to perform a review and characterization of the reports findings prior to acceptance, there is no mention of the source or purpose of this added appendix in the EG&G letter submitting the Final Triennial Assessment to RFO. However, the questionable process used to approve and issue this report and the failure to clearly identify the purpose and source of amendments to an independent assessment, in either the report itself or the transmitting letters, begs the question of the independence of this DOE Order mandated assessment.

Procedure 2-11000-ADM-02.01, "Assessment Program and Schedule," (D-C-79) provides a listing of "core" programs to be assessed annually and for which "all aspects of the program" are to be addressed in a 5-year period. The various aspects that make up these programs have not yet been determined, documented, nor prioritized for assessment. A listing in this procedure of functional areas for assessment specifies a 5-year schedule and includes areas such as engineering, the assessment program, the procedures program, issues management, records, and document control. Considering that many new and upgraded ES&H related programs are just being implemented at RFP and the many changes in requirements within DOE, 5-year assessment intervals appear to be too long to provide timely information and assurance of the effectiveness of these vital ES&H management systems and programs. The Team notes that it appears that the actual performance of assessments in these areas are and probably will continue to be more frequent than that allowed by procedure. Assessment personnel also indicated that the various aspects of the "core" areas would be established in time to meet the procedural requirements for addressing the area.

There is a low participation rate of "issues" input into the Issues Management Program from outside of the EG&G assessments organizations; approximately one percent of issues are identified by individuals and few are voluntarily input by other organizations from their internal assessment activities. The Issues Management organization in Standards, Audits, and Assurance requests input from various site organizations and screens numerous reports for issues, but the sitewide issues management procedure (I-C-11 and D-C-52, 73, and 94), as well as procedures in individual organizations, do not direct potential issues or deficiency reporting documents to Issues Management. The actual utilization and input to this management system by other EG&G organizations has apparently not been assessed.

A conduct of operations assessment performed in Building 374 in late October 1992, by DOE-HQ, RFO, and EG&G personnel identified numerous conduct of operations and radiological control deficiencies; 28 concerns composed of over 90 findings. However, this assessment, although documented in the format of

an EG&G SAA assessment and given number A-PA-92-50, was not formally issued (signed) under cover letter by SAA (nor by EM or RFO), and no response or action plan was required of the responsible organization (D-C-132). It was apparently given directly to the building Operations Manager, who did in fact input the findings into the Plant Action Tracking System (PATs) which required the preparation of action plans and corrective actions. However, no one in EG&G Performance Assessment has reviewed the action plans or dispositions, some of which indicated no action to be taken because the responsible parties disputed the assessment findings. This apparent communication breakdown, and the failure of existing RFO and EG&G corrective action systems to properly address these identified deficiencies are examples of weaknesses in the RFP oversight program.

Although a new comprehensive document control program has been established and partially implemented by EG&G, the system lacks an internal monitoring/audit element to assure that the system is working as intended and is being implemented by field personnel to assure that work is being performed in accordance with the correct drawings and procedures (I-C-15 and I-C-16; D-C-28).

Other specific examples of deficiencies in EG&G oversight programs are detailed in other concerns and weaknesses in this report in the areas of Worker Safety and OSHA (Section 2.4.1), the Surface Water Program (Section 2.3.3), the Waste Characterization Program (Section 2.3.4), and Environmental Quality Assurance (Section 2.3.5).

Assessment Concern Number:

M/C-7

Assessment Concern Title:

RFP Organization

Performance Objective

Performance objectives PA-1.2, "Organization" (DP and EM), PA-2.2, "Organization" (RFO), and PA-4.2, "Organization" (EG&G).

Concern

RFO and EG&G organizational and individual ES&H roles, responsibilities, and authorities have not yet been fully and clearly defined, formally documented and communicated to, and understood by, all affected parties. Frequent reorganizations appear to inhibit RFP's ability to reach a common sitewide understanding of roles, responsibilities, and authorities.

Discussion

Both RFO and EG&G have undergone significant reorganizations in the past 6 months that have altered the organizational relationships within and between each organization, an event that has become commonplace at RFP. For example, an examination of the highest level EG&G organization charts (10,000-level charts) indicates that numerous reorganizations of varying scope and magnitude involving the General Manager and/or his direct reports have occurred since January 15, 1990 (D-D-105). Attendant organizational realignments associated with these major changes has maintained EG&G in a constant state of flux (I-D-2, 6, and 7). The frequency of reorganizations appears to inhibit each organization's ability to establish, communicate, and ensure a common understanding of roles, responsibilities, and authorities throughout the site, particularly as they are expressed in mission and function statements and policies and procedures (I-D-28, 29, and 30). Examples of roles, responsibilities, and authorities that remain undefined as a result of recent EG&G reorganizations abound. A few examples include the following:

- Role, responsibilities, and authorities are defined in plant procedures. While some procedures such as those for Trend Analysis (D-D-73) and Issues Management (D-D-78) have been approved, lower-level implementing procedure (see Concern M/C-9), and other important documents that would define roles, responsibilities, and authorities remain in draft form (e.g., see D-D-37, 38, 52, and 110).
- Roles, responsibilities, and authorities with respect to RFP Plant Infrastructure are defined in a draft EG&G policy (D-D-29).
- Qualifications and Training For Standards, Audits and Assurance Personnel is in draft form (D-D-72). This document defines both training requirements and responsibilities for oversight and implementation of the training program.

Similar problems exist at RFO with respect to documents that would formally define roles, responsibilities, and authorities. For example, the RFO Transition Management Division does not yet have a mission statement (I-D-8) and there is no management agreement that defines interface relationships

between the RFO Environmental Protection Division and Safety and Health Division (I-D-5 and I-D-8) (also see Concern M/C-8). Also, the Waste Programs Division oversight plan does not contain roles, responsibilities, and authorities with respect to waste characterization. This has led to confusion in EG&G with respect to programmatic responsibilities for waste characterization that required a clarifying letter from RFO to EG&G (D-J-26 and D-J-43) (also see Weakness E/W-2).

The confusion surrounding roles, responsibilities, and authorities throughout RFP, and to a lesser extent between and among DP, EM, and RFO, is best illustrated by examining relationships at RFO with regards to environmental protection and environmental monitoring throughout RFP with respect to stop work, stop working, and restart authority.

The roles, responsibilities, and authorities at RFO are the first link in the chain of DOE line management responsibility that extends from RFP up through DOE-HQ. Thus, unambiguous RFO roles, responsibilities, and authorities are vital to the execution of DOE obligations. An example where clear roles, responsibilities, and authorities are important at RFP is the area of surface water protection programs (see Concern E/C-2). Roles, responsibilities, and authorities between the RFO Assistant Manager for Transition and Environmental Restoration (AMTER) and the Assistant Manager for Facility Operations (AMFO) with respect to RFP environmental monitoring, environmental protection, and transition activities has not been formally defined through a management agreement or mission and function statements. However, both parties assert that there is no confusion on the roles, responsibilities, and authorities of each organization (I-D-1 and I-D-8). Furthermore, while both parties expressed a sense of ownership for their respective areas of responsibility, they did not seem to have a sense of ownership for each other. Also, AMTER indicated that a memorandum assigning the AMTER as the primary contact point is awaiting the Acting Manager's approval (I-D-24). EM management (I-D-16) indicated during this assessment that they believed that a Management Agreement between the RFO AMFO and AMTER concerning responsibility for environmental monitoring may have been signed. Thus confusion on the part of DOE management with respect to the roles, responsibilities, and authorities at RFP extends to senior officials. The lack of ownership, noted above, for areas outside the manager's primary responsibilities was also evident during interviews of DP managers (I-F-19).

In the case of stop work authority, the RFO Assistant Manager for Financial and Administrative Services, the RFO contracting officer, has a firm understanding of stop work authority that is consistent with formal RFO documents. Section H-7, "Stop-Work Order," in the Prime Contract between DOE and EG&G (D-D-31) clearly specifies the terms and conditions associated with DOE's authority to issue stop work orders. The contract vests stop work authority in the RFO Contracting Officer. Furthermore, as part of the implementation of the RFO Facility Representative Program, the RFO Contracting Officer has designated the RFO Facility Representatives as Contracting Officer's Representatives (COR) and delegated to them specific elements of the Contracting Officer's stop work authority (D-D-46). The formal documentation of the Facility Representative's authority includes: "Issue stop work direction in accordance with the Stop Work Clause contained in the contract" (D-D-46). Furthermore, in the case of imminent danger, everyone can and is expected to stop their own work and to ask their supervisor to stop work the work of others (I-D-7, 14, and 30).

EG&G Facility Managers and Building Operations Managers share a common understanding of the RFO Facility Representatives stop work authority that is consistent with the above RFO understanding. Furthermore, they have a common understanding of their own stop work authority, believing it is derived from the Conduct of Operations Manual (I-D-30). They also understand that operators can stop their own work, and operations managers and shift technical managers can stop the work of others (I-D-7 and I-D-30). A formal QA-specific type EG&G stop work authority is granted in the level 1 procedure entitled "Stop Work Action" (D-D-94) to "Quality Assurance (QA) assessment/verification personnel" While some EG&G personnel are aware of this procedure, its existence is not widely known (I-D-2 and I-D-6).

The above examples are exceptions to the understanding of roles, responsibilities, and authorities with respect to stop work. In general, neither RFO (I-D-1, 3, 5, and 8) nor EG&G (I-D-2, 6, 13, 14, and 15) senior management shared a common understanding of stop work authority that was internally consistent with each other or with DOE policy as described in the contract. Interpretations of stop work authority varied. For example, EG&G management was not certain if its staff had stop work authority, but believed that stop work authority is defined in both the Safety and Health Manual and the Conduct of Operations Manuals (I-D-6). RFO managers believed their stop work authority was derived from the fact that as DOE employees they can direct contractors to stop work and they will comply (I-D-1, 5, and 8).

Assessment Concern Number:

M/C-8

Assessment Concern Title:

RFP Planning

Performance Objective

Secretary of Energy Notice (SEN)-25A and Performance objectives PA-1.1, "Planning" (DP and EM); PA-1.3.1, "Human Resource Planning" (DP and EM); PA-1.5.1, "Program-Wide Self-Assessment Program Plans" (DP and EM); PA-2.1, "Planning" (DP and EM); PA-2.3.1, "Human Resource Planning" (RFO); PA-2.5, "Field Office-wide Self-Assessment Program Planning" (RFO); PA-4.1, "Planning" (EG&G); PA-4.3.1, "Human Resource Planning" (EG&G); and PA-4.5, "Site-wide Self-Assessment Program Plans" (EG&G).

Concern

RFP strategic and subordinate implementation planning processes that would transform the DP, EM, and RFO strategic and program plans into sitewide, integrated, working level ES&H implementation plans have not been fully defined, developed, and implemented by RFO and EG&G. As a result, RFO and EG&G implementation plans that would set priorities for and guide the activities and work throughout RFP, and would provide formality to ES&H activities are, in general, lacking.

Discussion

Along with the RFP operating contract EG&G assumed in January 1990, it inherited a plant that was a loose confederation of independent activities and autonomous facilities; a work force that relied on experience and planning initiatives external to the site rather than locally formulated planning initiatives; and a planning, budgeting, and resource allocation process that lack formality, accountability, and discipline. RFO and EG&G have embarked on an effort to correct these shortcomings by attempting to establish a comprehensive, sitewide, integrated planning, budgeting, and resource allocation system that will serve its current and future mission. While much has been accomplished, deficiencies in the approach and the pace of implementation are evident. A recent RFP confirms that this legacy persists: ". . . RFP has no tradition of planning and performing work according to 'process' of which infrastructure is a foundation" (D-D-25).

RFP has faced a rapidly changing mission over the past several years. Recent DP Budget Guidance (D-D-58) has clarified the RFP mission with respect to DP. DP guidance has terminated RFP efforts to maintain a production contingency, reaffirmed the need to continue nonnuclear work consistent with future weapons complex consolidation, and confirmed that the future RFP mission emphasis will be environmental clean up. However, RFO faces a planning challenge that includes factors beyond its control that arise from both DOE-HQ and compliance orders. DOE has acknowledged that a logical plan for removing plutonium residues from the RFP must be founded on a long-term strategy for managing the nation's plutonium inventory. In the absence of such a strategy, RFP management is faced with the challenge ". . . to develop plans for eliminating the backlog (of plutonium residues) without knowing how much plutonium DOE intends to retain . . ." (D-D-11). Coupled with this is the EM Congressional budget request that has been based on a strategy to ". . . maximize compliance with regulatory agreements" and the FY 1994 Program Plan which was structured

with an approach that supports ". . . all activities related to near-term health and safety" (D-D-58).

Notwithstanding these constraints, RFO has recently prepared a Strategic Plan (D-D-4) that is intended to implement the DP Strategic Plan (D-D-6) and gives consideration to the EM Strategic Plan (D-D-10). Furthermore, each strategic objective of the RFO Strategic Plan has been assigned to an Assistant General Manager for implementation (I-D-3). However, neither a RFP Strategic Plan nor a vision that would serve as the basis for a plan exist (I-D-3). An RFP Strategic Planning Steering Committee has only recently been formed to define a vision and strategic planning process (I-D-1, 3, and 8).

The first sitewide RFP mission plan, the Mission Transition Program Management Plan (D-D-50), was prepared in 1992. Other plans such as the Site Development Plans (D-D-51) and the annual Site-Specific Plan (D-D-90), a public communications document, are not intended to be comprehensive sitewide mission plans. The Mission Transition Program Management Plan (D-D-50) and the related report to Congress (D-D-49) were developed as an initial step in preparing and planning for an orderly transition for the RFP from its weapons production mission to its new mission of stabilization, cleanup, restoration and disposition of the Department's assets in a safe, responsible manner. RFO management acknowledged that while the Transition Plan (D-D-50) developed last year is comprehensive in that it identifies the most important issues on a sitewide basis, it is not integrated in the sense that the interrelationships and interdependence between and among transition issues have not been addressed (I-D-24 and I-D-27).

The integrated planning process will replace transition planning. EG&G has a draft policy on planning and a Strategic Planning Steering Committee (SPSC) consisting of program Associate General Managers (AGMs), and RFP contractor senior managers has been formed. The committee has a formal charter. There is a program management plan for the integrated planning process but a vision that would serve as the basis of a strategic plan has not been formulated. Sitewide integrated planning that does exist at RFP (I-D-11, 24, 27, and 31) is being conducted on a limited, ad hoc basis.

The current RFP integrated planning effort is a relatively recent initiative. As a result, it is in an early stage of development. EG&G's response to the RFO Manager's Meeting Agenda item (D-D-33) was for a commitment to provide a final Integrated Infrastructure Plan (IIP) by March 1993 (D-D-38). This milestone was revised to April 19, 1993 (D-D-26) and again to May 28, 1993 (D-D-27). Currently, the Draft Infrastructure Integrated Plan (D-D-30) provides a general architecture, defines the management infrastructure with attendant responsibilities, defines in general terms the graded approach process, and offers a proposed schedule for the fundamental elements of a program such as a policy, level 1 procedures and training. However, the draft plan cannot be considered more than a plan or architecture for an implementation plan that specifically details resource requirements and implementation schedules with attendant milestones.

RFP implementation plans, the system of interrelated plans that translate strategic and programmatic plans into working level plans, are generally incomplete, lack sufficient details, obsolete, or nonexistent (also see Concern S/C-1 and Weakness E/W-2). The failure to provide comprehensive working level implementation plans has led to confusion at RFP. For example,

the RFO Waste Programs Division oversight plan (D-J-26) does not contain roles, responsibilities, and authorities with respect to waste characterization. This has lead to confusion in EG&G with respect to programmatic responsibilities for waste characterization that required a clarifying letter (D-J-43) from RFO to EG&G (also see Concern M/C-7 and Weakness E/W-2).

The few comprehensive EG&G and RFO implementation plans that do exist are several years old (D-D-80). More recent plans exist in a scattered fashion in program plans; work breakdown packages; draft EG&G policy and procedures; and miscellaneous memoranda and formal and informal notes to file. The status of RFP implementation planning includes the following:

- Draft implementation plans that define tasks, deliverables, milestones, and associated resource requirements include the RFO Safety and Health Division FY 1993 Work Plan Package (D-D-63) and the companion oversight procedure (D-D-64). Other implementation plans such as the RFO/WMED Self-Assessment Plan (I-D-8) have existed as draft plans of over a year.
- The RFO Assistant Manager for Environmental Management, the predecessor organization of the Assistant Manager for Transition and Environmental Restoration, prepared formal surveillance schedules that defined responsibilities for oversight activities (D-D-83). These schedules when coupled with RFO oversight procedures approached the minimum rigor of useful implementation plans.
- A set of ES&H-related Program Plans developed to support the RFP resumption initiative, specifically Building 559 Operational Safety Requirements, as it was defined over 2 years ago. These EG&G program plans include: RF Policies and Procedures Program Plan (D-D-39), Radiological Protection Program Plan (D-D-42), Nuclear Safety Program Plan (D-D-40), Operations Program Plan, (D-D-45), Industrial Health and Safety Program Plan (D-D-44), and Training Program Plan (D-D-41). These plans lack a number of elements that characterize useful implementation plans: they do not reflect current activities or the current mission; they do not address ES&H activities on a sitewide basis; and while they identify activities that require attention, they do not set priorities, identify required resources, or define a schedule carrying out the programs. Some of these planning elements are contained in the annual Management Control System work packages that, as noted above, lack integration. While these program plans are not comprehensive implementation plans, they do provide a self-assessment of the RFP programs in 1991 against comprehensive baseline programs in that they summarize deficiencies and weaknesses and define corrective actions.
- The Self-Assessment Program Plan (D-D-35) is intended to describe a mature RFP Self-assessment Program applicable to all of RFP with respect to compliance and to 15 "program" areas in the case of performance improvement process. "Program" areas are not defined in the traditional sense of programmatic areas such as materials productions, but rather as activities such as Maintenance Program,

Engineering Program, and Nuclear Safety Program. This program plan is similar to those described above (e.g., Radiological Protection Program Plan) and as such falls short of an implementation plan for the same reasons.

- Neither RFO nor EG&G have a sitewide corrective action program plan (I-D-3, 5, 13, and 23). Currently, a variety of corrective action programs exist throughout RFP and there is no formal process or program plan that defines, controls, and integrates these programs.
- The Rocky Flats Plant Air Quality Management Plan (D-D-80) appears to be a thorough high-level plan upon which annual work plans can be founded. This plan sets forth a few milestones through 1994 but does not contain the detail, including interim milestones, that should be found in a working level implementation plan. A related plan for the assessment and integration of radioactive ambient air monitoring at the Rocky Flats Plant is more akin to a proposal to RFO rather than an implementation plan (D-D-81).
- RFO implementation plans are generally lacking. For example, RFO management estimates that nearly half the RFO groups do not have self-assessment plans or schedules (I-D-21). The only implementation plan within the RFO Assistant Manager for Facility Operations is the Operations Division Plan. The RFO Assistant Manager for Facility Operations does not have a corrective action program plan or self-assessment program plan (I-D-1).
- The RFO Safety and Health Division Self-Assessment Plan (D-D-88) has been approved. This plan establishes an important framework for a self-assessment implementation plan, including an architecture, approach, process, scope, objectives, and responsibilities and authorities. However, this is not an implementation or working level plan since it lacks important features of a working level implementation plan such as a schedule for full implementation, resource requirements, and specific performance objectives. The plan acknowledges that these elements are important; it assigns responsibility for developing work plans to the Safety and Health Division branch chiefs.
- RFO does not have an environmental protection implementation plan that defines and guides their activities. However, RFO management (I-D-8) indicated that it directed and provided oversight of the EG&G environmental protection implementation plans noted above and thus asserted that these plans contain RFO's position with respect to environmental protection. While this may be true, the EG&G plans do not define and guide RFO activities.
- Even those EG&G organizations that have comprehensive implementation plans in place acknowledge that additional plans remain to be developed. For example, while the EG&G Environmental and Waste Management Department has mature implementation plans for air quality and surface quality activities. They recognize that while a National Environmental Policy Act strategy exists, an implementation plan that will serve as a cornerstone of the

facility transition remains to be developed (I-D-15). The EG&G Toxic Substance Control Act (TSCA) management plan (D-D-89) establishes milestones for implementing a plan but is not in itself an implementation plan.

When EG&G assumed the RFP operating contract, costs were accumulated by cost centers (organization codes) not by activities and balanced against the budget (I-D-11). Over the past several years, RFO and EG&G have developed and begun implementing a centralized sitewide planning, budgeting, and resource allocation process that captures all RFP contractor activities. The RFP Management Control System, introduced in 1991, is designed to provide managers at all levels with a planning, scheduling, and budgeting tool to facilitate their control of program scope, schedules, and costs. The MCS architecture includes planning, work authorization, program baseline change control, and performance information management and analysis. The MCS is coupled with top down planning guidance, senior management review of all work packages, and a plant-wide change control board composed of senior RFO and EG&G officials who review all out-of-scope changes that exceed a threshold criteria. While this management system represents a vast improvement over past RFP business practices, its effectiveness is limited by several shortcomings.

- While all RFP contractor activities are contained in the Work Breakdown Structure (WBS), RFO activities are not included in a similar management system that defines and forecasts its own RFP activities (I-D-10). Since RFO is a vital and integral part of the RFP activities, particularly between and among its contractors, the exclusion of RFO from the planning formality that its contractor's are beginning to adopt (I-D-12, 27, and 31).
- The EG&G planning process is a bottoms-up activity that develops resource requirements in response to the mission statement as expressed in DOE Program Execution Guidance (I-D-2). However, the planning process and the Management Control System are not integrated across the site. For example, while resource requirements are identified and prioritized within a work package, requirements are not yet prioritized on the basis of risks and vulnerabilities between and among work packages (I-D-31). As a result, the planning process does not take into account the impacts of activities within one work package upon other interrelated work packages.

The EG&G planning process is currently limited to annual planning activities. However, there was much evidence during this assessment that RFP management is committed to developing and implementing a comprehensive planning, budgeting, and resource allocation process. Management indicated that as the RFP mission becomes clearly defined and the transition of the site progresses, multi-year plans will be included in the RFP planning process. In fact the first steps towards a multi-year planning process, one that forecast activities over a 5 to 7 year time frame, have been taken with the Fiscal Year 1994 planning process. Phase II of the MCS implementation process is expected to include multi-year planning elements that will be incorporated into the FY 1994 annual planning process (I-D-11 and I-D-12). When fully implemented, EG&G management expects that the planning process will be fully responsive to the EM/DP/RFO strategic plans (I-D-12).

Assessment Concern Number:

M/C-9

Assessment Concern Title:

RFO Directives, Policies, and Procedures

Performance Objective

Performance objective PA-2.4.1, "Directive System," states that a Directives System ensures that ES&H laws, regulations, DOE Orders, Secretary of Energy Notice (SENs), and other DOE requirements are translated into site-specific guidance and that such guidance is formally transmitted in a timely fashion to the site contractor. Performance criteria PA-2.4.1.3 states that the processes and responsibilities for receipt, control, and distribution of directive materials are clearly defined, formally documented, communicated, and understood.

Performance criteria PA-2.4.2.1 states that activities throughout the Field Office/Site Office are to be conducted with the formality, rigor, and quality assurance mandated by DOE ES&H requirements.

Concern

RFO's procedures policy and systems have not been structured and developed to assure consistent and effective performance of ES&H-related activities. Existing procedures are not always adhered to, or revised to reflect actual performance.

Discussion

The RFO procedures system is defined in Rocky Flats Instruction (RFI) 1321.1, "Rocky Flats Office Directives System" (D-C-4). RFI 1321.1 defines two types of documents for detailing RFO responsibilities, authorities and policies; "supplemental" (to a DOE Order) and "non-supplemental" (stand alone) directives (or procedures). Two types of documents are identified that specifically apply to RFO only; Rocky Flats Office Procedures (RFOPs) which can stand alone or supplement DOE directives, and standard operating procedures (SOPs), which are working level instructions developed and controlled at the Assistant Manager, Division or Branch level. Although RFO has developed and revised many RFOPs and SOPs since the 1989 Assessment to guide and direct RFO work activities and processes, several weaknesses were noted in the procedures system and in its implementation.

- No RFO document, including RFI 1321.1, defines policies or plans, places them in a hierarchy of RFO documents, or provides details on development, issue, control and use. RFI 1321.1 does not include "plans" as a directive or procedural vehicle for RFO. However, RFO issues documents that are titled as "management plans" and "inspection plans" which identify roles, responsibilities, and authorities and direct work activities, both RFO-wide and on the division level. Examples include a document approved by the Manager, RFO, and issued January 7, 1993, titled "RFO Management Inspection Plan for Facility Operations" (D-C-103). This document directed an ongoing (permanent) facility inspection program, but is not identified as an RFOP (the directive vehicle described for this type of activity in RFI

1321.1) and has no identifying number or designator. Other management plans also have been written to direct oversight work activities for restart of production facilities. Self-assessment plans are another example of documents directing work that are not defined in RFI 1321.1.

- RFO Assistant Manager (AM), Division, and Branch organizations do not all have document preparation and processing/control procedure(s) and do not typically maintain a consolidated index of procedures and their revision status and issue date. Tabulations of additional or revised procedures that have been identified as needed to complete a basic RFO procedures system, with schedules for development and issue and assignment of responsibility have not been developed at Branch, Division, AM, or office-wide levels.
- SOPs (with the exception of the Office of Performance Assessment) are not subject to any periodic review process, or if the annual review of RFO Directives stipulated in Chapter X of RFI 1321.1 is meant to apply to RFO SOPs, they are not being reviewed by responsible organizations on any regular or documented basis.
- Although each Branch in the Operations Division has issued a procedures manual, a number of these procedures and requirements are not being followed. Examples of requirements specified in these procedures that are not being met include the preparation of monthly reports detailing issues and assigning unique identifiers and assessment of contractor performance (Chapters 4 and 5), weekly Branch Chief meetings with EC&G managers with formal meeting minutes (Chapter 6), scheduling and conduct of inspections (Chapter 7) or development of action item folders and action item tracking forms (Chapter 9). The procedures have not been revised to reflect actual performance (D-C-96, D-C-97, and D-C-98).
- RFO does not have RFOPs for detailing the performance of a number of important/mandated activities, applicable office-wide, such as readiness reviews or DOE 5482.1B appraisals.
- The Environmental Restoration Division has no written internal procedures, nor are there AM for Transition and Environmental Restoration procedures, to detail responsibilities and requirements for Division operations including oversight activities (surveillances, document submittals and reviews, corrective action reporting and closure, etc).

Assessment Strength Number:

M/S-1

Assessment Strength Title:

**Cost/Productivity Improvement
Program**

Strength

The Cost/Productivity Improvement Program, as exemplified by the Engineering Corrective Action Team, has demonstrated the ability to make meaningful improvements in ES&H disciplines.

Discussion

The concerns expressed by the Progress Assessment Team most often relate to systemic issues which can only be corrected by fundamental changes to the management processes at RFP. Such process improvements often reach beyond the scope and breadth of corrective action programs. To address this need, in June of 1992, the EG&G General Manager appointed a steering committee to support development of a team oriented, process improvement approach to improve performance at EG&G Rocky Flats. By October 1992, EG&G had established the Cost/Productivity Improvement (C/PI) Program, incorporating project management teams, process improvement teams, management initiatives, and new ideas approaches to improve work processes at the RFP.

In May 1992, a Quality Assurance Corrective Action Request (CAR) was prepared documenting a succession of noncompliances with the Conduct of Engineering procedures. Without correction, the effectiveness of engineered ES&H related systems and barriers was in question. Management's assessment, confirmed by a survey of engineers, was that the complexity of the configuration management and change control program was a fundamental cause. The AGM of Engineering and Technology decided to use the evolving process improvement team concept as a means of addressing the CAR issues. Fifteen process improvement teams were selected, trained and charged to address: quality of Engineering products; responsiveness of Engineering support; inefficiency of Engineering systems; ad hoc methods for many Engineering processes; and inability to prioritize and resource load commitments.

Accomplishments of the Cost/Productivity Improvement program include:

- Reduced backlog of old Non-Conformance Reports (NCR) by 85 percent.
- Quality Assurance rejection of NCR disposition was reduced from 80 percent to 10 percent.
- Engineering approval signatures were reduced from 35 to 17 while accountability improved.
- Delinquent items were reduced from approximately 3,700 to less than 400 in 6 months.
- The typical Vital Safety System (VSS) procedure development time was reduced from 2.1 persons-month to 1.2 persons-month.

- The Waste Management Program Integration and Control team returned \$1,004,265 by streamlining several processes within that activity.
- The Maintenance Planning and Scheduling team returned \$581,138 increasing the efficiency of planners in developing IWCP maintenance work packages.

These achievements were accomplished with a reduced commitment of resources as well as improving the site's ability to deal with emergent problems.

While process improvement concepts are relatively commonplace throughout DOE, this program has demonstrated the ability to affect meaningful change at RFP. Other Process Improvement Teams have addressed issues ranging from radiological control to the laundry operations. Currently, there are approximately 40 Project Management Teams and 50 Process Improvement Teams and a trained staff of 1,500 employees that can apply this form of corrective action to the wide range of ES&H issues identified by the Progress Assessment Team.

Appendix B-2

Assessment Details - Environment Programs/Concerns, Weaknesses, and Strengths

Assessment Concern Number:

E/C-1

Assessment Concern Title:

**DOE and EG&G Management Systems for
Environmental Restoration Activities**

Performance Objective

Performance Objective PA-2.6.2, "Regulatory," states that "managers, supervisors and staff cooperate fully and openly with federal, state and local regulatory agencies to facilitate compliance with ES&H laws and regulations."

DOE 4700.1, "Program Management System," requires that all projects, but especially major system acquisition (MSA) projects, be managed such that "sound management principles provide a disciplined, systematic, and coordinated approach to project management resulting in efficient planning, organization, coordination, budgeting, management, review, and control of DOE projects" (D-H-34).

DOE 5480.20 and DOE 5700.6C require contractor training be defined, developed, and tracked for both core training and task specific activities.

DOE 5700.6C, Criterion 5, "Work Processes," requires that work be "performed to established technical standards and administrative controls. Work shall be performed under controlled conditions using approved instructions, procedures, or other appropriate means."

Federal Facility Agreement and Consent Order (IAG), Part 34, "Reporting" Paragraph 196, states that "Progress reports shall be submitted by the 20th day of each month following the effective date of this Agreement. The progress reports shall include:

- A. A detailed statement of the manner and extent to which the requirements and time schedules set out in this Agreement are being met.
- B. Any anticipated delays in meeting time schedules, the reason(s) for the delay, and action taken to prevent or mitigate the delay.
- C. Any potential problems that may result in a departure from the requests and time schedules."

IAG Part 50, "Funding," Paragraph 251.B, states that "DOE agrees to meet and confer with the State or EPA, at the request of either, up to and including the point at which the ADSs are submitted to DOE Headquarters for validation."

Concern

DOE and EG&G do not currently have the certain management systems or processes in place that are fully established and integrated; processes which have contributed to current problems and which will continue to inhibit the site's ability to effectively meet future scheduled milestone commitments identified in the 1991 Interagency Agreement (IAG). Specific areas of weakness include oversight, planning, training programs, roles and responsibilities, and regulatory interface.

Discussion

Since the approval of the Interagency Agreement (IAG) in January 1991, RFP has been confronted with significant challenges in establishing an environmental restoration program that could keep pace with changes in the program's growth, and more recently in mission change. The Progress Assessment Team would like to acknowledge, however, that RFP was, for the most part, aware of the deficiencies identified in this report.

At RFO and EG&G, environmental restoration management infrastructure is not yet fully developed or integrated with the rest of RFO or DOE-HQ. For example, EG&G quality assurance programs, training programs, and deficiency tracking systems are not fully developed or integrated within EG&G or with RFO programs and systems (I-H-8, 11, 32, and 37). The RFP ER Project, determined an MSA Project by DOE 4240.1K, must conform with mandated requirements outlined for DOE in DOE Order 4700.1, "Project Management System." Documents, required by the Project Management System, that define organizational roles and interfaces, are still in draft (e.g., HQ Project Plan, RFO Project Management Plan, and EG&G Management Implementation Plan) (D-H-36, 37, and 38). The ER Project mission is defined by the requirements of the IAG, and embodied in the Remedial Actions Subprojects. A number of deficiencies were identified that are indicators of management systems and processes that have not been fully defined, e.g., organizational lines of authority and oversight functions:

- Interface and functional relationships between Program Secretarial Officers (PSOs) and across DP and EM line organizations both at the HQ level and at RFO are not formally defined, documented, communicated, or understood for environmental activities (I-H-5 and I-H-46). There is no formal Memorandum of Agreement (MOA) or Memorandum of Understanding (MOU) between EM and DP PSOs that sets forth specific responsibilities, lines of communication, or authorities between the two programs, nor is there one between the PSOs and RFO.
- Contrary to the terms of the IAG, not all communications between RFO and the regulators goes through the designated Project Coordinator; for RFO, this is the Deputy Director for the ERD (D-H-147). Most often, correspondence is directly received by the Deputy Director for ERD as required by the IAG. However, correspondence to the regulators is sent from either the Assistant Manager of ERD or by the RFO Acting Manager (D-H-147, 150, 158, and 159).
- RFO has not provided formal guidance to EG&G on expected format and content of the weekly reports that must be submitted to them for roll-up into the weekly report to DOE-HQ (I-H-30 and I-H-31);
- Historically, and until as recently as 9 months ago, RFO Quality Assurance Division (QAD) did not conduct audits or assessments in environmental areas (I-H-32). DP's mandate was "safe operations in facilities is top priority" (I-H-46)(D-H-162). To date, QAD has completed five informal, level 2 audits, and two full level 1 audits of environmental programs (D-H-115). While the audit program is indicative of a functioning process, audit schedules

have not been prioritized, nor does the QAD have the technical staff to fully implement the program.

- Prior to January 1993, the EG&G Quality Assurance Standards, Audits, and Assurance (SAA) Organization did not conduct audits of environmental activities, citing they had been directed by the EG&G site manager not to assess environmental activities (I-K-11, 38, 39, 40, and 48).
- Though the ERM department has a recently defined QA organization, there is inadequate definition of organizational responsibilities and interfaces between the environmental line organizations (ERM and E&WM QA Programs) and SAA (D-H-146).

Since the 1989 Assessment, RFO has made significant progress in putting into place a number of management programs that were either previously lacking, ineffectively implemented, or not fully developed. Since September 1992, RFO has increased its openness and lines of communications with the regulators where there was little to none before (D-H-151; I-H-40); since December 1991, RFP has developed and implemented an approved Rocky Flats Plant Community Relations Plan (D-H-8 and D-H-9); since 1989, RFP has developed and implemented an approved administrative records file; and since June 1992, RFP has developed and implemented an approved Historical Release Report with associated Quarterly Updates (D-H-7 and D-H-154). However, adequate progress in some program areas has not been achieved by the RFP ER Program. Deficiencies identified are in the following areas:

- EG&G has not formalized task specific training needs or requirements for environmental restoration managers. Furthermore, EG&G ER managers have not been trained to the procedures for which they are responsible for supervising in the field, e.g., drilling and emplacement of groundwater monitoring wells, and best available technology testing for pressure grouting (I-H-24);
- While EG&G has developed an approved guidance document with accompanying procedure on the process of Document Change Control, training to the procedure has yet to be developed. Training to the procedures is formally planned but not yet implemented (I-H-8);
- EG&G does not have in place an approved guidance document on the development, review, approval, history file preparation, and controlling distribution instructions for Operable Unit (OU) Work Plans, OU Work Plan Technical Memoranda, Field Sampling Plans, Decision Documents, Geologic Characterization Plans, Deep Seismic Data Acquisition Plans, or Well Abandonment Plans (I-H-8, I-H-9, and I-H-24). EG&G, however, has begun preparation of such a document which is presently in draft (D-H-152).
- RFO & EG&G decided not to implement the August 1991 approved OU2 Phase II RFI/RI Bedrock Investigation Work Plan because of additional information they thought they could get from the ongoing Phase II alluvial investigations, as well as hopes for additional FY 1992 funding (D-H-157; I-H-47). A decision to postpone the bedrock investigation was not formally communicated

to or approved by the regulators at the time the decision was made (I-H-1, 8, 9, 17, 48, 148, and 149).

- The decision not to go forward with the OU2 bedrock investigation was partially due to funding shortfalls incurred when some IAG funds were diverted to fund the Solar Ponds; a funding issue that was not formally discussed with the regulators at the time the decision was made, even though the regulators requested to be party to funding concerns (D-H-2, 59, 60, 148, 149, and 150; I-H-1, 24, 29, and 38).
- When funds were diverted from the IAG to the Agreement in Principal (AIP) Solar Ponds project, the regulators were not informed of the impacts this would have on many other IAG milestones commitments downstream (e.g., OU2, OU4, OU5, OU6, OU9), until nearly 1 year after the start date for implementation of these milestones (D-H-2, 60, 82, 148, 149, and 150);
- Internal (RFO and EG&G) and external (DOE-HQ) ER program management level formal reviews of primary and secondary documents required by OU Work Plans are not routinely completed prior to the document being submitted to the regulators for their review and comment (I-H-1, 38, and 40; D-H-42, 145, 156, and 160). Oftentimes, documents will be reviewed by DOE-HQ, RFO, and EG&G program management at the same time regulators receive them, thus precluding benefits of DOE/EG&G quality assurance checks on document completeness, adequacy and accuracy before they go to the regulators. To a great extent, RFO and EG&G have been operating in a reactive mode rather than planning how they can most effectively manage and execute the work plan process to best meet IAG aggressive milestone schedules.

Assessment Concern Number:

E/C-2

Assessment Concern Title:

**RFP Surface Water Program for
Unplanned Release Control**

Performance Objective

40 CFR 110 and 112 require that surface water receptors be protected from release of oils by implementation of aggressive Spill Prevention, Control, and Countermeasures (SPCC) plans addressing each potential source. A best management practices (BMP) program is required by the Rocky Flats Plant National Pollutant Discharge Elimination System (NPDES) Permit Number CO-0001333, Part III. 40 CFR 125 requires BMP programs shall be developed for the control of toxic and hazardous pollutants associated with ancillary industrial activities, which may result in pollutants reaching waters of the United States.

DOE 5400.1, "General Environmental Protection Program," provides for establishment of an environmental protection program that assures compliance with applicable Federal, state, and local environmental protection laws and regulations.

Performance criteria PA-2.2.2, PA-2.4.1.4, PA-4.2.1, PA-4.4.2.5, and PA-4.4.3.1.

Concern

The RFP surface water program for unplanned release control, as coordinated by the SPCC/BMP Plan, is not fully integrated into operational control or oversight programs of RFO and EG&G.

Discussion

The structure, program, and procedures by which RFP protects surface waters from unplanned releases is coordinated and implemented through the requirements of the SPCC/BMP Plan Manual (No. 21000-SPCC/BMP, September 1992). The SPCC/BMP Plan was prepared in accordance with requirements of 40 CFR 112 and 125. Concerns were identified with implementation of elements of the plan regarding document control, roles and responsibilities, oversight, and training. These concerns are reflected in the implementation of tank management programs for storage of hazardous materials, surplus materials storage practices, training programs, and sitewide surveillance inspections.

This SPCC/BMP Plan is required to be implemented by the RFP NPDES Permit to prevent or minimize the potential for significant releases of toxic or hazardous substances to surface waters. The most recent SPCC/BMP update was prepared in September 1992 to address significant RFP operational and organizational changes, requirements of Resource Conservation and Recovery Act (RCRA) and concerns generated by the 1989 Chromic Acid Spill, which resulted in the NPDES Federal Facilities Compliance Agreement of March 1991.

Owners and operators of facilities subject to SPCC/BMP Plan requirements have a duty to prepare and implement the Plan as soon as possible, but no later than one year after the facility begins operation. SPCC/BMP Plans shall address specific points for ancillary facilities including material inventory,

material compatibility, employee training, visual inspections, preventive maintenance, and housekeeping. The program does not effectively ensure the full development and implementation of these elements.

DOE is the designated permittee for the RFP NPDES Permit. Regulation (40 CFR 112.7 and 125) requires that the SPCC/BMP Plan be carefully thought-out, prepared in accordance with good engineering practices, and have the full approval of management at a level with authority to commit the necessary resources. RFO indicated that comments were provided to the EG&G subcontractor on a draft version, but no formal approval of the final plan was provided (I-I-41 and I-I-42). This level of oversight and lack of approval does not demonstrate ownership commensurate with the review of monthly NPDES Discharge Monitoring Reports, which are signed by the Assistant Manager.

Operations Managers and building operations personnel responsible for compliance with BMP procedures contained in the text of the SPCC/BMP Plan were not on the controlled distribution list. The EG&G Surface Water Division (SWD) of Environmental Protection and Management within EG&G prepared and approved the SPCC/BMP Plan and distributed it to only 23 individuals at RFP. Operations Managers and staff in Buildings 707, 374, and 995 (the Sewage Treatment Plant) and staff from Buildings 771 and 444 interviewed with respect to BMP required procedures were not aware of the existence of the Plan (I-I-12 through I-I-16, and I-I-19 through I-I-23).

The purpose of the SPCC/BMP Plan ". . . is to document the procedures, programs, and structure by which RFP prevents or minimizes the potential for significant releases . . ." (D-I-1). Not all BMP procedures contained in the plan have been clearly identified or incorporated as formal RFP procedures (I-I-43) and therefore are not incorporated into a procedures training program. Some of these procedures are related to a recently implemented comprehensive Tank Management Plan. Section 8.4 requires Operations Managers to maintain results of all tank inspections currently conducted. Section 8.7 requires all RFP tank inspections follow written procedures and be signed by appropriate supervisor or inspector and kept on file for 3 years. Operations Managers and responsible tank "owners" interviewed were not aware of these new requirement with respect to all tank storage, including non-RCRA-waste above ground chemical storage tanks containing toxic or hazardous materials required by the comprehensive Tank Management Program. It is not surprising that these Operations Managers were not aware of these requirements in that the first inspections are only now being issued, the procedures have not been formally incorporated in site document requirements and the limited distribution of the SPCC/BMP Plan.

Current tank management systems may not ensure that high risk tanks are identified. There are over 2,000 tanks at RFP (D-I-1), many of which have secondary containment or are located in buildings designed to contain spills. There are numerous tank inspection programs onsite (I-I-35 and I-I-36). Section 7.3 of the SPCC/BMP Plan indicates that there are chemical feed and fuel storage tanks located outside that are not secondarily contained and some of which have inadequate secondary containment (D-I-1). A Chemical Inventory Program and an Excess Chemical Program are in place to survey outdoor tanks and provide information regarding tank construction material, contents, volume, and to "purge many chemicals from the site" (D-I-3). All tanks onsite are intended to be surveyed under the comprehensive Tank Management Plan required under the NPDES Federal Facility Compliance Agreement Chromic Acid

Incident Plan within the next 3 years. Currently, RCRA regulated tanks are given priority to be evaluated for tank integrity and preventive maintenance (I-I-11). Non-RCRA regulated storage tanks containing hazardous materials or hazardous substances, some of which have not been used in production processes for several years are located onsite. These tanks will be evaluated as resources and funding allow (D-I-1). Currently documented inspection of some of the above ground storage tanks containing toxic or hazardous substances are not conducted by tank "owners" (I-I-17 and I-I-19). Individual organizations responsible for these non-RCRA tanks do not currently have BMP formalized inspection procedures in place because of the priority placed on RCRA compliance. Those organizations that do inspections do not implement them consistently (I-I-19). The current evaluation priority system does not ensure that tanks which may have the greatest potential risk for release are identified. These risk were identified in the EG&G Federal Facilities Compliance Agreement (FFCA) Chromic Acid Incident Plan and Implementation Schedule (November 1990) (D-I-42) and action needs summarized in the Executive Report of the Tank Overfill Prevention Team, issued February 6, 1990. However, there is not a release risk based survey being conducted based on factors such as age, condition, contents, or location to identify tanks with the highest potential to have a release. The number of process tanks being taken out of production, but not given evaluation priority as RCRA regulated, will increase as a result of the site mission change. RFP has not developed a schedule to excess the materials and take these tanks out of service.

The SPCC/BMP Plan places acceptance criteria/operational standards for containing and managing mobile and portable tanks onsite. Observations during the assessment identified a portable fuel tank, without secondary containment, servicing a pump immediately adjacent to the landfill pond. Also, a portable tank located adjacent to the Building 218 nitric acid tanks, which was identified as unusable the Building 771 representative, was not tagged or labeled to prevent use. Use of this tank would not be in compliance with the Best Management Practice and the On-Site Transportation Manual.

A large volume of surplus equipment is being stored throughout the site as a result of concerns associated with inadequate offsite radiological contamination release criteria. This radiological contamination is being addressed by RFP. However, storage practices also negatively impact the sites ability to minimize and respond to spills. Equipment designated as scrap, excess, or salvage may contain oil or hazardous materials such as polychlorinated biphenyls (PCBs). No comprehensive program is in place to characterize the contents of this equipment prior to storage, nor to inspect it while in storage to minimize the potential for release to the environment. The SWD has implemented a sitewide surveillance program using the SPCC/BMP Plan as one criteria to minimize releases. The surveillance program is not fully developed, is currently staffed by three persons on a part time basis and findings are not integrated into a system to effect corrective action (I-I-26 and I-I-31). Other organizations which conduct sitewide inspections such as Industrial Hygiene, Utilities, and the Fire Department have not been formally trained to SPCC/BMP Plan as an inspection criteria for identifying potential releases associated with housekeeping issues.

Assessment Weakness Number:

E/W-1

Assessment Weakness Title:

Waste Characterization

Performance Objective

DOE 5400.3, "Hazardous and Mixed Waste Program," states that it is the policy of DOE to manage all Departmental hazardous and radioactive mixed wastes according to the requirements of the Resource Conservation and Recovery Act (RCRA) Subtitle C.

DOE 5480.19, "Conduct of Operations Requirements for DOE Facilities," requires that "the conduct of operations at DOE facilities be managed with a consistent and auditable set of requirements, standards, and responsibilities and that . . . Operators at DOE facilities have procedures in place to control the conduct of their operations."

DOE 5820.2A, "Radioactive Waste Management," states "Transuranic waste shall be certified in compliance with the Waste Isolation Pilot Plant Waste Acceptance Criteria, placed in interim storage (if required), and sent to the Waste Isolation Pilot Plant." Wastes that cannot be certified or otherwise approved for acceptance at the Waste Isolation Pilot Plant shall be disposed of by alternative methods. DOE 5820.2A also states: "low level radioactive wastes shall be characterized with sufficient accuracy to permit segregation, treatment, storage and disposal."

40 CFR 262.11 and Colorado Hazardous Waste Regulations (CHWR), 6 CCR 1007.3, Section 262.11, requires that any person who generates a waste determine if that waste is a hazardous waste.

40 CFR 264.13 and 265.13, and CHWR 264.13 and 265.13 state that owners and operators of hazardous waste management facilities are required to develop and follow a waste analysis plan for waste characterization.

Performance objective ENV-WM.1, "Characterization/Certification," states that a program should be in place to ensure that wastes are adequately characterized to meet applicable requirements.

Weakness

EG&G has not fully implemented a waste characterization program at RFP that provides complete characterization of all wastes, training for all types of waste generated at RFP, and a comprehensive oversight program.

Discussion

RFP generates, and is the steward for, a wide variety of waste types including residues, mixed residues, transuranic, transuranic mixed, low level radioactive, low level radioactive mixed, hazardous, infectious, and sanitary. The 1989 Assessment identified significant deficiencies with waste characterization programs at RFP. Since that time, noteworthy improvements in waste characterization have been made. However, implementation of a comprehensive waste characterization program has not been completed. For example:

- The Waste Stream and Residue Identification and Characterization (WSRIC) system has not been fully implemented (I-J-29 and I-J-31).
 - WSRIC and the associated waste traveler system, which documents waste container contents and WSRIC information, is not currently used in all buildings at RFP. Waste characterization processes in those buildings where WSRIC is not implemented (i.e., non-radioactive areas) are not proceduralized (I-J-29).
 - In one case, the WSRIC book for Building 460 has the same waste listed under two different WSRIC processes (D-J-27).
 - Wastes which ". . . may contain chemical constituents but there is insufficient information to adequately identify the constituents . . ." are being managed as nonhazardous in Building 460 based on the analysis of a subset of that waste (I-J-29 and I-J-32). The WSRIC book has not been changed to reflect the nonhazardous status of this waste (D-J-27).
 - Sampling and analysis of wastes generated from processes for which there is insufficient process knowledge to make a definitive waste characterization decision has not been completed (I-J-3).
 - Not all analytical results from waste characterizations, and process knowledge assessments from the WSRIC program are provided to the generator, who is responsible for proper waste characterization.
- There is a significant number of wastes, generated prior to the establishment of more rigorous waste characterization requirements, for which existing characterization data is incomplete or inadequate. These wastes must be recharacterized prior to treatment or disposal; however, RFP does not have a formal, integrated plan for characterizing all of these wastes (I-J-27).
- The Waste and Environmental Management System (WEMS), which serves as part of the RCRA operating record, has been found by EG&G to contain inaccuracies with respect to waste characterization data (D-J-12, 14, and 15). In addition, not all waste characterization data is entered into WEMS, including some investigation-derived material and residues classified as special nuclear materials. The system for tracking special nuclear materials does not have the capabilities of WEMS (I-J-18).
- Because of the high levels of radioactivity, analytical laboratories offsite and at RFP are not currently capable of analyzing some wastes for organics, ignitability and some RCRA metals (I-J-3). In addition, although funding was available in 1990 and 1991 to install needed analytical equipment to increase laboratory capability for waste characterization, the equipment is not yet operational (I-J-14).

- EG&G generates monthly summaries of nonconformance reports (NCR) that indicate improper waste characterization. There is no formal system to hold management accountable when there are excessive NCRs in specific line organizations (I-J 30). In addition, no formal trending is performed on findings generated from the approximately 1,000 waste surveillances conducted by the Assessment organization on an annual basis (I-J-30).
- The original schedule for waste surveillances was reduced from two surveillances per area per year to less than once per year, resulting in longer delays in verifying closure of previous surveillance findings, including those pertaining to waste characterization issues (I-J-30).
- The training program for nonradioactive waste generators has not been fully implemented, and the training programs for WSRIC, enhanced infectious waste, and sanitary waste awareness have not been implemented (I-J-31)
- The requirement of the Waste Isolation Pilot Plant for annual updates of waste generator training is not fully implemented into the waste management infrastructure. Currently, the Building 559 shift manager checks the qualification status of radioactive waste generators prior to approving a waste generating operation. However, this check, and a subsequent check by the "Key Custodian" of the waste container, only considers if biennial qualification is current. There is no similar verification of the annual training refresher.
- Several facilities that store wastes onsite operate in accordance to unit specific procedures. There is currently no system in place for review of these procedures by the EG&G Waste Programs organization to ensure that these procedures, or subsequent procedure changes, are in conformance with permit and/or regulatory requirements, including waste characterization (I-J-22).
- Waste generator training consists of classroom instruction followed by on the job training (OJT). OJT is administered by individual line organizations in accordance with building or operation specific OJT plans. These plans are prepared using guidance from the Waste Programs organization; however, this organization does not review the content of these plans prior to implementation (I-J-25).

Assessment Weakness Number:

E/W-2

Assessment Weakness Title:

Formality of RFO Oversight of Waste Characterization

Performance Objective

DOE 5400.3, "Hazardous and Mixed Waste Program," states "Program Senior Officials shall oversee Field Organization activities under their authority for compliance with the requirements of RCRA, applicable EPA and State requirements, applicable DOE policies, and the requirements of this Order " DOE 5400.3 also requires Heads of Field Organizations to develop and implement a program to assure that hazardous and radioactive mixed wastes at facilities for which they are responsible are managed in accordance with Resource Conservation and Recovery Act (RCRA) requirements.

DOE 5480.19, "Conduct of Operations Requirements for DOE Facilities," requires that "the conduct of operations at DOE facilities be managed with a consistent and auditable set of requirements, standards, and responsibilities. . . ."

DOE 5820.2A, "Radioactive Waste Management," requires Heads of Field Organizations with treatment, storage, or disposal facilities to conduct operations at their sites in compliance with the requirements of this Order.

Performance objective ENV-WM.1, states that a program should be in place to ensure that wastes are adequately characterized to meet applicable requirements.

Weakness

RFO oversight plans lack certain elements to ensure adequate oversight of waste characterization programs at RFP including specific objectives, roles and responsibilities, reporting requirements, personnel qualification, and schedules.

Discussion

Oversight of RFP waste characterization programs is the responsibility of the Waste Programs Division of the Assistant Manager for Facility Operations. Within the Waste Programs Division, the Waste Programs Branch oversees waste characterization work packages, and the Waste Operations Branch conducts field surveillances. Although there is a significant amount of waste characterization oversight by RFO, it is somewhat informal and lacks the infrastructure indicative of a comprehensive oversight program, for example:

- There is no formal oversight plan for the Waste Programs Division that governs waste characterization oversight by RFO, and includes specific objectives, roles and responsibilities, reporting requirements, personnel qualification, and schedules, and resource requirements (D-J-26; I-J-14 and I-J-15).
- Surveillances are currently conducted on an "as-needed" basis; there is no schedule or requirement to conduct surveillances (D-J-28).

- The current system for training Waste Program Division personnel does not inform branch chiefs of the status of any required annual refresher training (I-J-16).
- Many RFP buildings have not been subjected to a RFO surveillance by Waste Programs Division, and there is no documented oversight of waste characterization pertaining to the sanitary landfill (D-J-28).
- The stated policy of RFO Waste Programs is that waste characterization is the ultimate responsibility of the generating organization. Although the Director of Defense Programs Division, who is responsible for residue management at RFP, was clear on his specific responsibilities with regard to residues, he was unsure of his organization's responsibility to oversee characterization of other waste types generated under his purview. There is no organization plan from the Assistant Manager for Facility Operations that formalizes this responsibility (I-J-13).
- There are no procedures for surveillances conducted by Waste Programs Branch (I-J-14).

Assessment Weakness Number:

E/W-3

Assessment Weakness Title:

Oversight of RFP Sampling and Analysis Program

Performance Objective

Performance objective ENV-QA.2 "Audits/Appraisals/Surveillance," requires that a program be in place to provide verification of the effectiveness of the environmental protection activities and adherence to the quality assurance program.

DOE 5400.1, "General Environmental Protection Program," Chapter IV, Section 10, requires that audits and performance reporting be included in quality assurance programs governing environmental monitoring and surveillance programs. It further states that "a quality assurance program consistent with DOE 5700.6B (revised to DOE 5700.6C) shall be established covering each element of environmental monitoring and surveillance programs commensurate with its nature and complexity."

DOE 5700.6C, "Quality Assurance," requires that Lead Program Secretarial Officers "assess quality program adequacy and implementation." It further requires that DOE Field Office Managers "ensure the adequacy and implementation of contractors' quality assurance programs by performing independent assessments in accordance with Paragraph 9b(3)(b).

DOE 5700.6C, Paragraph 9b(3)(b), requires that "planned and periodic independent assessments shall be conducted to measure item quality and process effectiveness." It also requires that management at all levels periodically assess the integrated quality assurance program and its performance.

DOE 5700.6C also requires that management at all levels periodically assess the integrated quality assurance program and its performance.

Weakness

DOE and EG&G have not exercised adequate oversight of the RFP sampling and analysis program.

Discussion

As site owner, DOE has a responsibility to ensure that the site contractor, EG&G, has implemented and maintained an effective environmental monitoring and surveillance program. Because DOE shares the responsibility for environmental compliance and reporting, it is imperative that periodic, formal assessments be performed of RFP sampling and analysis activities. These assessments should be performed at a frequency adequate to detect program degradation or inaccuracy at an early stage.

In order to generate the data required to demonstrate environmental compliance, RFP must maintain an effective sampling and analysis program. In order to ensure the continued effectiveness of the sampling and analysis program, the site contractor, EG&G, is required to conduct periodic assessments of the program. These assessments must determine whether the sampling and analysis program conforms to the appropriate regulatory

requirements, and is implemented in an effective manner with adequate procedures and facilities. The sampling and analysis program must be monitored at a frequency that ensures that any degradation in performance is detected at the earliest possible moment. There are inadequate formal processes at EG&G to ensure that oversight assessments are performed.

The following deficiencies were observed during the Progress Assessment concerning the oversight of RFP sampling and analysis activities:

- Neither DOE-HQ PSOs (DP and EM) having responsibility for RFP have performed assessments of the RFP sampling and analysis program (I-K-26, 27, 28, and 45).
- Prior to October 1992, RFO, citing lack of direction and funding from DP, did not perform any assessments of RFP environmental activities. Currently, RFO has initiated a program for performing QA audits of RFP environmental activities; however, the audit schedule is not comprehensive and does not ensure that the assessment program will be effective (I-K-26, I-K-27, and I-H-32).
- The RFO Environmental Protection Division and Environmental Restoration Division do not have a program for performing formal assessments of the RFP sampling and analysis activities related to their environmental programs. As a result, no assessments have been performed (I-K-49 and I-K-51).
- Prior to January 1993, EG&G Standards, Audits & Assurance (SAA) performed no independent assessments of environmental activities at RFP. SA&A had been directed by the EG&G site manager not to assess environmental activities. Currently, SA&A has initiated a program for performing audits of RFP environmental activities, however these audits have not been scheduled in a manner that ensures that the assessment program will be effective (I-K-38, 39, 40, and 48).
- Because resources were allocated to Resumption in October 1992, EG&G Analytical Laboratories has not performed self-appraisals as required by their own departmental procedures (D-K-25). The self-appraisal procedures are not adequate to assure that all Analytical Laboratory operations are adequately properly assessed in a an established amount of time (I-K-43 and I-K-44).
- Since October 1992, EG&G Environmental Protection has not had a program to perform oversight assessments of the sampling activities performed by its onsite subcontractor. As a result, no current assessments have been performed (I-K-12 and I-K-13).

Assessment Strength Number:

E/S-1

Assessment Strength Title:

**Environmental Restoration Quality
Action Team**

Discussion

A Quality Action Team (QAT) has proven successful for resolving significant issues associated with the Interagency Agreement (IAG), and for identifying impediments that affect the efficient implementation of environmental restoration activities associated with the IAG. Evidence of the QAT's effectiveness is demonstrated in the streamlining of the contractor procurement process which, prior to QAT attention, had serious effects on the timeliness in which environmental restoration activities were getting done in the field (D-H-85). The QAT has also served to improve communications with the regulators; a serious problem up to nearly 9 months ago.

The QAT, comprised of management level personnel from DOE, EG&G, EPA, and State of Colorado Department of Health (CDH), initially came together in September 1992 to conduct the dispute resolution process for Operable Unit 2 (OU2). This management level of involvement served to demonstrate the seriousness and the importance of the issues being discussed.

Areas initially identified as having the greatest impact on ER activities included resources, priorities/goals, communications, regulation/policy, contracting, technical issues, organization/management, and process issues (D-H-85).

Issues raised for QAT attention have included the involvement of not only the principal entities of the IAG (DOE, EG&G, EPA and CDH), but also the input by outside experts in specialty areas (e.g., contract specialists, cost accountants, procurement specialists in the case of the first issue resolved)(I-H-45). Oftentimes, the comments made during public meetings on associated issues have had value in the QAT decision process.

Since its formation, the QAT has been meeting once a week. The QAT does not have a formal charter defining mission, function, and authorities; however, this has not served to hinder progress or implementation of decision actions. The QAT does have a formal set of 15 "Ground Rules," whereby standards of process are established, e.g., discussions are open, direct, specific, focused, timely, but held confidential by the QAT (D-H-87). This confidentiality enables all participants to let their "hair down," be frank and open; for the regulators, it has meant leaving their "regulatory" hat outside the door. Recommendations and decisions on how to proceed on certain activities are made, but only by consensus of the QAT (i.e., all parties are represented by at least one team member at the time a recommendation or decision is made). At the time a final decision is made to implement an improvement item, a joint memorandum is signed by all QAT members and sent to senior RFO, EG&G management (RFO Manager and EG&G General Manager, respectively), and senior EPA and CDH management. Though an action plan is not a requirement of the QAT, EG&G did prepare an action plan in response to the "procurement" issue that was resolved by the team in October 1992 (D-H-86; I-H-45).

To date, areas where the QAT has streamlined processes that had an effect on environmental restoration activities have included:

- Providing an informal mechanism for regularly and routinely involving the regulators in on-going and potential problems that the site identifies, thus eliminating downstream project difficulties that have in the past, resulted in many misunderstandings, misinterpretations of intentions or plans, and comments from the regulators (D-H-30 and D-H-31).
- Resolution on clarification of and streamlining of procurement processes (part of the "contracting" category). Changes to the Master Task Subcontract (MTS) process, a mechanism for contractor procurement, has streamlined the length of time it now takes to process a procurement, which has gotten contractor support into the field faster. The resolution process has involved input from DOE-HQ, RFO, EG&G, and outside procurement and financial specialists (I-H-45). Changes to the MTS has had direct affects on the ER Program by (1) mitigating the organizational conflict-of-interest problem; (2) obviating the need for repetitive contracting; and (3) appearing to streamline the earlier procurement process (D-H-85). A further outgrowth from this exercise was also the recognition that broader training and communications within DOE and EG&G is needed so that MTSS can be used to their fullest potential.

Another issues in the future to be discussed by the QAT includes evaluating the high costs associated with the Solar Ponds and how these can be reduced effectively (I-H-45).

Assessment Strength Number:

E/S-2

Assessment Strength Title:

**Sewage Treatment Plant Operations
Have Demonstrated a High Level of
Control**

Strength

EG&G has obtained a very high level of operational control at the Sewage Treatment Plant which reflects a strong conduct of operations and promotes excellence.

Discussion

In 1989, a chemical release involving chromic acid occurred which passed through Building 995 Sewage Treatment Plant system and reached an onsite retention pond. The Report of the Chromic Acid Incident Investigation at Rocky Flats (February 22, 1989) identified management, operational control, procedural, maintenance, and training needs associate with the Sewage Treatment Plant. As a result of this event, and other non-compliances with the National Pollutant Discharge Elimination System (NPDES) Permit the EPA required specific facility upgrades within a Federal Facilities Compliance Agreement in March 1991. In addition, the State of Colorado imposed more stringent water quality limits in the stream segment into which the plant discharges. Based on observations, interviews, and review of operational records it is apparent that the Sewage Treatment Plant is being operated at a very high level of proficiency and has demonstrated the ability to rapidly respond to contain unplanned releases.

The NPDES Permits sets specific parameter limits for pollutants to surface water. These limits are monitored to assure that they do not exceed specific ranges or averages, as defined by the discharge permit. A review of monthly Discharge Monitoring Reports from June 1991 through March 1993 (D-I-38) indicated only one exceedance. The report indicate a pH value of 4.1 with a minimum limit of 6.0. This one exceedance is not part of a pattern of low pH readings and does not appear significant. While production flows may have decreased in recent years, low flow loading rates on weekends present special operational problems associated with maintaining an effective biological treatment system. This level of performance for an activated sludge operation subject to variable hydraulic and waste loading typical of an industrial production complex is excellent. This level of compliance represents a substantial improvement when compared to permit violations in the 1980s which played a factor in the Federal Facilities Compliance Agreement (FFCA).

An indication of the control used at the Sewage Treatment Plant is demonstrated in the level of formal and informal communication, which exist between the operators and the analytical laboratory which provide the data for the Discharge Monitoring Reports. Samples are taken by an organization independent of the Sewage Treatment Plant from a locked sampling station for analysis by the laboratory. Sample analysis collected during the month is used to calculate 30 or 7-day averages for some parameter reporting requirements. If the laboratory identifies a single analysis that exceeds the average limit, the operator is verbally notified, and operational control points are immediately adjusted to improve plant performance. This level of communication and operational control exceeds performance typical of similar facilities.

Sewage Treatment Plant maintenance records evaluated for the period from January 1991 through May 1993 (D-I-39) document preventive maintenance work orders in addition to mechanical and instrumentation repair items. During the Progress Assessment, it was observed that the automatic pH meter at the influent structure to the plant was out of service. Samples were collected and monitored manually to evaluate incoming pH levels. The facility operator and Operations Manager were able to facilitate replacement of the failed meter through an approved outside vendor relationship to effect repairs within a week (D-I-40). The ability to utilize a quick turnaround procurement installation and calibration system to effect repairs to instrumentation represents a commitment to a high level of operational control for this type of a facility.

Documentation was reviewed related to an incident of July 2, 1991, where a Sewage Treatment Plant operator noted a yellow substance in the Sewage Treatment Plant influent. The material was immediately contained within the Building 990 diversion basin and samples were collected for analysis. The document indicates a high level of communication between the operator and the laboratory and compliance with procedures with respect to rapid laboratory turn around times (D-I-37). The results indicated higher pollutant levels in the material captured in the equalization basin upstream of the facility and no indication the spill reached the retention basin below the facility. The Sewage Treatment Plant foremen and the Operations Manager indicated that the laboratory defined the material as paint and the organization onsite that released the material to the sewer was identified. These actions reflect a high level of performance with specific site procedures to contain and control spills, and to expedite laboratory turn around times in the event of an unplanned release to the Sewage Treatment Plant.

In total, these examples indicate a high level of operational control. The demonstrated ability to implement emergency procedures is indicative of a mature conduct of operations program. EG&G management has taken measures to hire professionally certified operators and provide the necessary resources to ensure that preventive maintenance is performed to ensure a level of facility performance that is excellent.

Assessment Strength Number:

E/S-3

Assessment Strength Title:

**Solid Radioactive Waste Generator
Training and Qualification Program**

Strength

The solid radioactive waste generator training and qualification program has significantly improved radioactive waste characterization at the generator level.

Discussion

As a generator of both transuranic and low-level radioactive wastes, RFP is required to meet the waste acceptance criteria of both NTS and WIPP. NTS has rigorous requirements for waste characterization that are described in NVO-325, the NTS waste acceptance criteria document. In August 1990, NTS audited RFP for conformance with NVO-325. NTS concluded that there were ". . . significant conditions adverse to quality . . . at the point of waste generation which includes inadequate knowledge of . . . identification of waste material" (D-J-7). Based on the results of this audit, RFP was not allowed to ship low-level radioactive waste to NTS.

In response to the need for enhanced radioactive waste generator training, RFP established the Solid Radioactive Waste Generator Training and Qualification Program in 1991. This program features a rigorous program of classroom and job-specific training that results in the issuance of a qualification card after the trainee successfully completes an examination process. Approximately 2,000 radioactive waste generators have been trained. Requalification is required every 2 years. RFP personnel are not permitted to generate radioactive wastes unless they are qualified under this program. There are management systems that ensure waste generators have been qualified under this program including controls at the point of generation, and oversight by a training coordinator using a computerized training data base.

The training program has significantly improved waste characterization at RFP. In 1992, NTS authorized shipments of certain types of low-level radioactive waste generated in Building 559. In 1993, RFP will apply to NTS for authorization to ship additional low-level radioactive waste types, and increase the number of buildings included in the authorization. During the Progress Assessment, NTS conducted a preliminary audit of RFP waste characterization for these additional processes. NTS concluded that RFP had an exemplary program for characterizing radioactive wastes based on process knowledge at the point of generation (I-J-9 and I-J-12). Interviews with radioactive waste generators conducted by the Progress Assessment Team yielded similar conclusions (I-J-26).

The Solid Radioactive Waste Generator Training and Qualification Program is managed by EG&G's Radioactive Waste Programs organization. The program is formalized by a program plan and is subject to regular review. These reviews consider: (1) informal survey data; (2) interpretations of performance indicators such as the monthly summaries of non-conformance reports provided by the EG&G Assessment organization; (3) audit results from NTS and the Waste Isolation Pilot Plant, the designated site for disposal of DOE's transuranic

wastes; and (4) feedback from program users. The qualification program is currently undergoing a third revision.

Based on demonstrated improvements in radioactive waste characterization and the implementation of management systems to ensure that the program continues to evolve in response to performance indicators, the Solid Radioactive Waste Generator Training and Qualification Program represents a model system for implementation of a successful training program.

Assessment Strength Number:

E/S-4

Assessment Strength Title:

Sample Management Office

Strength

EG&G Environmental Restoration Management (ERM) has a well implemented program to ensure the accuracy, reliability, traceability, and timeliness of environmental analyses performed by offsite laboratories.

Discussion

EG&G Environmental Restoration Management is the organization responsible for planning, coordinating, and performing environmental restoration activities at RFP. Integral to the environmental restoration actions is the analysis of samples taken in the remediation project areas or operable units. The results of these analyses are used to characterize the operable units and to monitor remediation progress. It is imperative that these analyses be performed in a timely manner, using appropriate methods, under suitable conditions, by qualified laboratories. The data from these analyses are reported to regulators from the Federal, state, and local government, as well as the public. For this reason, and the fact that the data is used to make determinations in the remediation process, the data must be accurate, reliable, traceable, and, in some cases, legally admissible.

Historically, the timely analysis of environmental samples and the receipt of reliable, representative data was a problem for the operable unit project managers. With each operable unit manager being responsible for the sampling and analysis activities at his operable unit, competing demands placed a strain on the limited analytical resources available. The quality of the data was in question because turnaround times grew excessive, sample holding times were being exceeded, samples were lost, and chain of custody on samples was broken.

In 1992, the Sample Management Office (SMO) was formed. Its mission was to serve as the single point of contact ERM analysis. The SMO developed a program protocol (D-K-2) which included a detailed statement of work and analytical methods. The SMO utilizes an Approved Suppliers List of analytical laboratories. To be approved each laboratory must undergo initial qualification by audit and is subject to annual reaudit. All audits are performed in accordance with documented instructions. Corrective actions for deficiencies are verified prior to closure. In order to ensure the accuracy of analytical results, the protocol specifies the frequency, type, and intervals for quality control samples. The results of quality control samples are tracked. If a laboratory's performance falls below a specified level, corrective action is requested. Any laboratory that fails to adequately correct a deficiency is disqualified from the Approved Suppliers List.

The SMO, which serves as the single point of contact for the analytical customer, determines the most qualified laboratory for the analysis, arranges for shipment to the laboratory, maintains chain-of-custody, and tracks status. The SMO tracks the sample through final disposal. The SMO monitors to ensure that sample integrity is maintained and that holding times are not exceeded.

The SMO requires that all analytical data be supplied in electronic form as well as hardcopy. A copy of the analytical data is maintained by the SMO and is eventually archived. The SMO ensures that analytical data undergoes independent verification and validation by a SMO subcontractor.

As a result of the efforts of the SMO, the turnaround time for analytical data for radiochemical analysis has been reduced from 240 days to 70 days. For nonradiological analysis the turnaround has dropped from 140 days to 60 days. The operable unit managers at RFO and EG&G are pleased with the performance of the SMO. The results have been so successful that EG&G Waste Identification and Characterization Department in the Environment and Waste Management organization is initiating a similar organization (1 K-11, 31, 33, 36, 37, 42, and 51)

Appendix B-3

Assessment Details - Safety and Health Programs/Concerns, Weaknesses, and Strengths

Assessment Concern Number:

S/C-1

Assessment Concern Title:

Worker Safety and OSHA Programs

Performance Objective

Performance objectives PA-2.3, "Human Resource Planning," PA-2.4, "Oversight," PA-4.3, "Human Resource Management," and PA-4.4, "Oversight." These performance objectives establish criteria for measurable performance expectations and development of staffs.

DOE 4700.1, "Project Management System," addresses responsibility for assuring compliance with OS&H requirements.

DOE 5480.9, "Construction Safety and Health Program," requires that DOE perform onsite construction inspections.

DOE 5483.1A, "Occupational Safety and Health Program for DOE Contractor Employees at Government-Owned Contractor Operated Facilities," requires contractors to establish and implement safety and health programs that protect their employees.

Performance objectives TSA-PP.1 and TSA-OS.1 address effective implementation of the personnel protection and occupational safety program, and performance objectives TSA-PP.4, TSA-WS.2, and TSA-OS.4 address surveillance activities to measure safety and health performance and ensure the continued effectiveness of controls.

OSHA voluntary "Safety and Health Program Management Guidelines," provides guidelines for effective management of worker safety and health programs.

Concern

EG&G and RFO do not coordinate and effectively manage, define, and ensure uniform compliance with the requirements of the RFP sitewide occupational safety program.

Discussion

Both EG&G and RFO occupational safety and health (OS&H) organizations have developed comprehensive occupational safety and health plans and procedures for ensuring a safe and healthful work environment for RFP workers (D-L-12, 29, 30, 32, 33, 39). Both organizations are staffed by motivated, qualified, competent professionals.

It was evident during the assessment that numerous safety and health noncompliance issues relating to electrical safety, machine guarding, hazard communication labeling, emergency egress, storage of compressed gas cylinders, and housekeeping exist at RFP. The majority of these deficiencies would be considered by OSHA to represent serious safety and health exposure hazards for workers in these areas.

The RFP site-wide OS&H program is fragmented between no fewer than four EG&G support organizations charged with specific OS&H duties (I-L-6, 7, and 11). This in and of itself is not bad. The lack of a clearly defined, centralized

safety and health organization that has responsibility to coordinate and authority to mandate, vigorously enforce, and interpret occupational safety and health requirements appears to have contributed to the apparent program dysfunctions observed during this assessment.

Communication of specific, measurable safety and health expectations is critical to achieving a fully effective OS&H program. RFP senior management has clearly communicated its commitment to workplace safety and health across the site. Both RFO and EG&G have developed OS&H programs that establish and communicate respective safety and health expectations and concerns.

The following management system deficiencies have contributed to this concern:

- EG&G has not fully developed and implemented a formal plant-wide plan and scheduling system to coordinate occupational and construction safety inspections and oversight, that would ensure optimum utilization of limited resources oversight (I-L-6, 7, 12, and 21).
- With only two construction safety specialist, daily safety inspections of active construction projects by an EG&G construction safety specialist are not occurring. Additional manpower for this function has not been made available (I-L-7, 12, 15, and 21).
- There is currently no organization within EG&G with the responsibility and authority to coordinate and communicate occupational and construction safety expectations and ensure continuity of efforts between Occupational Safety, Construction Management, Health and Safety Area Administrators, and Environmental Restoration and Waste Management.
- EG&G has not implemented a program that ensures regular, systematic, and effective oversight of OS&H issues at RFP. The Line Control Safety and Health Program was developed in response to this issue.
- Occupational safety and health inspections, conducted by fully qualified OS&H professionals, have not been performed by EG&G, RFO or DP at all work locations at RFO (I-L-7). Numerous examples of safety and health noncompliance issues relating to electrical safety, machine guarding, hazard communication, emergency egress and housekeeping were noted in buildings subject to "Walkaround Wednesday" and other inspection programs.
- The person charged as the lead person for the RFO construction safety oversight program is in a career enhancement training program and as such is provided assistance by an onsite qualified construction safety support contractor (D-L-41; I-L-15, 19, and 20). The DP individual charged with OSHA oversight responsibilities is a fire protection engineer and does not currently have the expertise needed to perform OSHA type field audits. His training is limited to a 9-day OSHA training program which falls short of the necessary training needed to perform credible OS&H oversight (I-L-13).

- EG&G and RFO have not fully developed occupational safety and health management systems to measure employee occupational safety and health performance, and provide accountability (I-L-6 and I-L-7).
- Formal, specific, and measurable employee job performance objectives that require both EG&G and RFO occupational safety and health supervisory staff to perform and document on-the-job evaluations of their respective subordinates are not in place (I-L-6, 7, 19, and 20). However, EG&G's performance appraisal system spells out environmental compliance, safety/security, and conduct of operations as required performance elements for all employees.
- EG&G senior management indicated it supports the development of leadership and communication skills for senior and middle managers involved in OS&H activities. However, formalized professional development plans for these managers, which emphasize these attributes, have not been developed. EG&G has no policy that requires the formal development of individual employee career development plans for their safety and health professional staff (I-L-11).
- Safety performance objectives and goals are reflected in EG&G's employee performance evaluation documents. However, these objectives are generic and they do not provide for or identify specific and measurable performance goals tailored to the individuals job requirements.
- RFO individual performance standards that are intended to keep line management informed of the status of contractor programs and plans are considered to represent noncritical job performance elements (D-L-42).

Assessment Concern Number:

S/C-2

Assessment Concern Title:

EG&G Fire Protection Program

Performance Objective

Performance objectives PA-4.1.1 and PA-4.1.2 address management performance objectives and performance; ISA-FP.1, "Organization and Administration," addresses fire protection program management; and ISA-FP.7, "Program Implementation," establishes the requirements for a fire protection engineering program.

DOE 5480.7A, "Fire Protection," defines required elements of a fire protection program.

Concern

Elements of the EG&G fire protection program relating to accountability, planning, coordination, self-assessment, and corrective actions have not been fully developed and implemented on a sitewide basis.

Discussion

Successful management of the fire protection program requires that programs are in place to identify issues, that issues are reviewed and prioritized based upon hazard and the risk associated with deficiencies, requests for funding to resolve hardware and structural fire related deficiencies are made timely, that appropriate corrective actions are carried out, and most importantly, management takes a proactive approach to fire protection.

While having multiple organizations responsible for parts of the same program can result in a sound fire protection program, it requires the establishment of clear lines of authorities and responsibilities, and open lines of communication between the responsible parties. But the need to have at least one group which is responsible for ensuring that all pieces of the program fit together, that nothing significant is omitted, and which is positioned to raise issues to top management when appropriate, becomes all the more important.

However, EG&G management in many cases has not provided adequate resources, management guidance, or has not acted proactively in identifying potentially significant fire safety concerns. Examples which contributed to the findings of this concern are as follows:

- EG&G's building fire protection appraisal and survey process has not been proactive. Fire Protection appraisals conducted prior to this assessment do not fully meet the requirements of DOE 5480.7A.
- EG&G has started development of Fire Hazard Analysis (FHA) for nuclear facilities. While improvements are being made in the FHA development process, the level of rigor incorporated into the FHA's has yet to reach a level of acceptable maturity (I-M-8).
- EG&G management has not been proactive or held accountable in addressing significant deficiencies associated with the RFP fire

protection system. For instance, a consultant report identified a significant deficiency with the site's diesel driven fire pump controller and driver. This issue received low priority for correction by EG&G management until RFO directed that action be taken to resolve this issue.

In addition, emergency fire responses to alarms caused by starts of the diesel fire pump can result in delays to an actual fire emergency. EG&G management was aware of this issue and did not take proactive action for correction of this condition until directed to do so by RFO.

- During the Progress Assessment Team's review of the Engineering Operability Evaluation by EG&G of the Building 707 fire barrier system, attention was brought to information within the report which indicated that DP during the readiness review process had identified the lower four feet of the corridor walls throughout the facility as being covered with a combustible material (Masonite hardboard having a nominal thickness of one-quarter inch). The Progress Assessment Team believes that the indication by DP and EG&G of combustible material lining the corridor walls may be an issue which merits further review by DOE and EG&G.
- The 1990 Factory Mutual survey related to the potential in Building 776 for a \$10 million fire loss should fire involve remaining combustible roof covering in the south attic space. The report went on to indicate the potential for fire to spread unchecked throughout the entire area and that failure of both the upper and lower decks was possible due to exposed steel. The report also indicated that radioactive contamination from the lower roof could escape in the event of fire. To date, EG&G has not taken corrective actions to resolve this issue.
- Although Life Safety Code deficiencies have been identified by EG&G, DP, and RFO in a number of facilities at the RFP, the Progress Assessment Team found that EG&G management had not taken proactive corrective steps which include establishment of a fully effective program for life safety; immediate implementation of corrective measures to resolve all serious deficiencies identified during previous reviews; request for appropriate funding from DP for resolution of deficiencies requiring building structural fixes or modifications; expansion of the scope and depth of the original Life Safety Code surveys to include all buildings and resurvey RFP buildings to ensure that previous life safety surveys were effective; and establishment of a review program which ensures that new buildings including movable structures such as trailers meet minimum Life Safety Code requirements.
- Inadequate planning and management of fire protection resources have prevented Fire Protection Engineering from proactively accomplishing required tasks such as required fire protection appraisals as required by DOE 5480.7A (I-M-52).

Assessment Weakness Number:

S/W-1

Assessment Weakness Title:

**Industrial Hygiene Program
Implementation**

Performance Objective

Performance criteria PA-4.3.1.3 states "Optimum utilization of existing human resources is ensured through a process of assigning and reassigning these resources to the area of highest ES&H priority." Performance Objective TSA-IH.1 states "Site and facility organization and administration should ensure effective implementation and control of the industrial hygiene program." Performance objective TSA-IH.3 states "chemical, biological, physical, and/or other environmental stresses arising in the work place should be identified, evaluated, and controlled." Performance objective TSA-IH.4 addresses appropriate surveillance of activities to measure industrial hygiene performance and ensure the continued effectiveness of controls, and performance objective TSA-IH.5 addresses compliance with DOE-prescribed standards.

Weakness

The pace of development and implementation of the EG&G Industrial Hygiene Program has not demonstrated an appropriate level of commitment to worker health.

Discussion

An effective industrial hygiene program consists of policies and procedures that ensure the identification, evaluation, and control of occupational health hazards in the workplace. It requires evaluations by knowledgeable professionals and feedback systems, including periodic workplace monitoring to ensure continued effectiveness.

EG&G has most elements of such a program, but many are not effective sitewide. The pace of implementation has been extremely slow in many cases. For example:

- A procedure for Hazards Assessment inventory was issued in December 1992 (D-N-13). (An industrial hygiene procedure for hazard inventory was issued on May 29, 1992, but appears to be redundant to the plant wide procedure.) It requires that a sampling strategy be developed for each building. Although DOE requirements for both the health hazard inventory and routine exposure monitoring have been longstanding, health hazard inventories exist for only Buildings 707 and 559 are complete and awaiting RFO concurrence. Inventories for Buildings 771 and 443 are in progress. Because of the level of detail being included in the inventories, the site is not expected to be completely inventoried until after the year 2000.

- The 1989 Assessment identified that routine exposure monitoring was performed only for beryllium and asbestos, and that is still the case.
- Hazard Communications has been a priority in DOE for many years. A hazard communications program was put into place prior to the 1989 Assessment (D-N-1); however, hazard specific training has still not been completed sitewide (e.g., asbestos awareness) and labels on some secondary containers do not provide all the information required by 29 CFR 1910.1200 (e.g., target organ).
- Respiratory protection has been a long standing issue for resumption and has been subject to evaluation by RFO. However, negative pressure air-purifying respirators continue to be assigned for emergency egress and alarm response in unknown atmospheres contrary to 29 CFR 1910.134 and ANSI Z88.2 (I-N-23 and I-N-30; D-N-25). Storage of respirators assigned to individuals do not conform to site standards in Building 707.
- EG&G has had industrial hygiene procedures defining a hearing conservation program since September of 1989, however it is not yet implemented sitewide. The posting of high noise areas has recently been extended to the entire site. However, not all exposed employees have received baseline audiograms and noise dosimetry has not been completed. In addition, a June 1992 concern alleged multiple cases of occupational hearing loss from the earphone worn by radiation protection technologists (I-N-28). The job is still performed routinely without modifications and the concern has not been closed.

The reasons these conditions have persisted are thought to include some combination of the following issues: staffing, staff turnover, and other human resource issues within the industrial hygiene organization; planning deficiencies; lack of cooperation and common goals among site elements; and site priorities that did not allot sufficient importance to health and safety. Although measures have been taken in each of these areas they have yet to be fully reflected in an effective industrial hygiene program.

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Appendix C

Biographical Sketches of Team Members

NAME: John R. Patterson

AREA OF RESP: Team Leader

ASSOCIATION: U.S. Department of Energy, Savannah River

EXPERIENCE: 27 Years Managing Nuclear Programs

● Savannah River Operations Office

- Technical Advisor to the Manager for Transition: Develops strategies and plans for transition of the Savannah River Site from a single mission of materials production to a mixed mission of production, environmental restoration, and technology development and transfer in areas related to the principal missions.
- Deputy Director, Special Projects Office, Savannah River Reactor Restart. Prepared the Savannah River production reactors for a safe restart and for resolution of long-term safety and operational issues.

● Richland Operations Office

- Director, Safety and Environment Division. Responsible for the safety and environmental oversight of the Hanford operations and for emergency preparedness programs.
- Director, Nuclear Energy and Surplus Facilities. Managed the operations and experimental programs for the FFTF and directed the associated safety and engineering documentation programs.

● DOE Headquarters, Reactor Research and Development

- Directed design and development for advanced reactor instrumentation, controls and plant protection systems as well as development of associated standards.

EDUCATION: BSEE, University of New Mexico
MSEE, Purdue University
National War College

OTHER: Tiger Team Leader, Oak Ridge National Laboratory
Member, Portsmouth Gaseous Diffusion Plant and West Valley Tiger Teams
Chairman, Hanford Environmental Task Force
DOE Federal Engineer of the Year, 1985

NAME: Robert M. Compton

AREA OF RESP: Oversight/Directives and Formality of Operations

ASSOCIATION: Nuclear Power Consultants, Inc.

EXPERIENCE: 24 Years

● Private Consultant

- Participated in DOE Tiger Team Assessments of Savannah River, Hanford Site, Energy Technology Engineering Center, Morgantown Energy Technology Center, Idaho National Engineering Laboratory, Naval Petroleum Reserves-Casper, and Naval Petroleum Reserves of California.
- Participated in DOE Progress Assessments of the Fernald Environmental Management Project, Y-12 Plant, Hanford Site, and Lawrence Livermore National Laboratory.
- Conducted appraisals of DOE M&O contractor maintenance procedures at Savannah River and formality of operations at Pantex.
- Conducted appraisals of construction programs, Safety System Functional Inspections (SSFIs), Motor Operated Valve problems, regulatory issues, etc. for nuclear utilities.
- Participated in numerous individual and team assessments and problem resolution assignments at nuclear utilities for the U.S. Nuclear Regulatory Commission (USNRC) related to Safety System Quality Evaluations (SSQEs), SSFIs, Safety System Outage and Modification Inspections (SSOMIs), Construction Appraisal Team (CAT) inspections, instrumentation, in-service-testing of pumps and valves, compensatory measures, restart readiness reviews, "problem plant" corrective actions, safety allegations, etc.

● U.S. Nuclear Regulatory Commission

- Senior Engineer and Reactor Inspector in the areas of civil and mechanical construction, testing, and modification.

● Mare Island Naval Shipyard (Department of Defense).

- Nuclear Fluid Systems Engineer and Supervisory Nuclear Engineer for construction, repair, and refueling of navy nuclear vessels.

EDUCATION: B.S., Civil Engineering, California State University at Chico

OTHER: Member, American Nuclear Society
Member, American Society for Quality Control
Member, American Society of Civil Engineers
Member, American Consulting Engineers Council

NAME: George E. Detsis

AREA OF RESP: Team Coordinator

ASSOCIATION: U.S. Department of Energy, Office of Special Projects (EH-5)

EXPERIENCE: 15 Years

- U.S. Department of Energy, Washington, DC
 - Office of Special Projects. Team Leader for the Pantex Plant and Argonne National Laboratory Progress Assessments. Team member of the Lawrence Livermore National Laboratory Progress Assessment. Tiger Team Management Subteam Leader for the National Renewable Energy Laboratory and Assessment Coordinator for Lawrence Berkeley Laboratory (LBL), Energy Technology Engineering Center (ETEC), and Stanford Linear Accelerator Center (SLAC). Lead Corrective Action Plan workshop training sessions.
 - Environmental Compliance Officer for Defense Programs, Office of Military Application, Environmental Programs Division. Environmental program leader for budgeting, environmental permitting, National Environmental Policy Act (NEPA) compliance, and Tiger Team liaison for DOE Defense Program sites.
 - Assistant Team Leader for the Environmental Surveys. Planned activities in preparation for the onsite surveys, team management, report preparation, sampling and analysis, and Environmental Survey Prioritization of findings.
 - U.S. Department of the Interior, Bureau of Land Management, Portland, OR; Denver, CO; Riverside, CA
 - Policy Analyst and Special Assistant to the Oregon/Washington State Director. Planned, programmed, and budgeted forest resource allocations, and land use management.
 - Project Manager for multi-state energy-related EISs. Conducted public scoping meetings and directed interdisciplinary teams in preparing draft and final EISs.
 - Outdoor Recreation Planner. Responsible for recreation and wilderness programs in the California Desert Conservation Area.
 - U.S. Congress, Washington, DC
 - Legislative Assistant for Energy/Environmental to Congressman Lloyd Meeds.
- EDUCATION:** M.S., Forest Resource Management, University of Washington
B.S., Outdoor Recreation Management, University of Maryland

NAME: Walter Futrell

AREA OF RESP: Fire Protection Program

ASSOCIATION: Private Consultant

EXPERIENCE: 21 Years

- Private Consultant

- Provide fire protection assistance to Argonne National Laboratory and DOE's Office of Safety Appraisals.

- NUS Corporation

- Fire Protection Engineer. Provided technical assistance to DOE's Savannah River Office. Reviewed design documents for compliance with DOE Orders; reviewed SARs and OSRs; monitored operating contractor's performance; performed field surveys of facilities; and reported findings to DOE management.

- Argonne National Laboratory - West

- Fire Protection Engineer. Responsible for fire protection program at ANL-West facilities, including EBR-II (a LMBFR), hot fuel manufacturing facilities, test reactors, and support facilities. Performed fire protection evaluations of facilities; developed 5-year corrective action plan in response to TSA; reviewed SARs and OSRs; monitored fire system testing and maintenance program; and briefed management on program status.

- U.S. Department of State

- Fire Protection Officer. Performed fire protection evaluations of overseas embassies, consulates, and missions.

- Assistant Professor (Fire Protection Technology)

- Responsible for various teaching assignments and coordination responsibilities in fire protection technology.

- North Carolina Community College System

- Fire Training Coordinator, responsible for providing fire training to county and municipal fire departments in service area.

EDUCATION: M.A., Public Administration, Sangamon State University
B.T., Technical Education, Appalachian State University
A.A.S., Fire and Safety Engineering, Rowan Technical Institute

OTHER: Member, National Fire Protection Association

NAME: Gregory T. Haugan, Jr.

AREA OF RESP: Team Administrator

ASSOCIATION: META, Inc.

EXPERIENCE: 8 Years

- META, Inc., Arlington, VA

- Information Management Specialist. Participated in 16 Tiger Team Assessments and 5 Progress Assessments managing a team responsible for onsite administrative support, report production, and technical editing.

- UDI Contractors, Inc., Washington, DC

- Project Manager and Administrator. Supervised field operations and managed office administration for a construction management firm. Initiated the corporate safety program and monitored OSHA compliance.

- GLH Inc., Arlington, VA

- Program Analyst. Specialized in research, report writing, and project management software for an information resources management consulting firm.

EDUCATION: B.A., General Studies, University of Maryland
Graduate Studies, General Administration, University of Maryland

NAME: Andrea J. Heintzelman

AREA OF RESP: IAG Environmental Restoration Activities

ASSOCIATION: U.S. Department of Energy, Office of Environmental Audit

EXPERIENCE: 20 Years

● U.S. Department of Energy

- Team Leader and Environmental Protection Specialist in the Office of Environmental Audit.
- Management team specialist on the Mound Progress Assessment Team assessing the Corrective Action Program.
- Environmental Subteam Leader for the Strategic Petroleum Reserves Tiger Team Assessment, Fermi Laboratory Tiger Team Assessment, and Team Leader for Environmental Audits of the Weldon Spring Site Remedial Action Project and Western Area Power Administration Environmental Audits.
- Environmental Deputy Subteam Leader for Tiger Team Assessments at the Savannah River Site, Y-12 Plant, Kansas City Plant, Idaho National Engineering Laboratory, Los Alamos National Laboratory, Hanford Site.
- Assistant Program Manager for Prioritization of Environmental Survey findings for DOE-wide, major defense and non-defense production facilities.

● U.S. Federal Energy Regulatory Commission

- Project Coordinator and Environmental Compliance Specialist assessing cumulative environmental impacts on proposed and existing hydroelectric dams, and assessment of noncompliances on operating hydroelectric projects nationwide.

● Deleuw, Cather/Parsons

- Project Site Director and Site Resources Manager reviewing engineering construction design impacts and assessing environmental impacts on the upgrading of the Northeast Corridor (Amtrack corridor between Washington, DC, and Boston).

● James F. MacLaren, Ltd.

- Project Coordinator and Site Resources Manager assessing environmental impacts (i.e., flora, fauna, fisheries, geology, surface water, and archaeological) from the proposed construction of hexafluoride, thermal, coal-fired, and hydrogenerating nuclear facilities located throughout five provinces of Canada.

EDUCATION: M.A., Applied Anthropology, American University
B.A., Anthropology, Kansas State University

NAME: Brenda W. Holder

AREA OF RESP: Industrial Hygiene

ASSOCIATION: U.S. Department of Energy, Office of Health Physics and Industrial Hygiene

EXPERIENCE: 14 Years

- U.S. Department of Energy, Washington, DC
 - Industrial Hygienist and Program Manager for development and promulgation of DOE policy such as Respiratory Protection Standard, Emergency Response Planning Guides.
 - Office of Health. Industrial Hygienist and Deputy Team Leader for the EH Oversight Assessment of the Rocky Flats Plant, Building 707
 - Program Performance Assessment Division, Health Physicist. Developed program standards for establishing radiological and nonradiological consequence assessment for emergency response. Office of Health representative for the two NS/EH Oversight Assessments of the Operational Readiness Review for Rocky Flats Plant Building 559 in IH, Health Physics, and Occupational Medicine.
 - Pantex Plant, Mason and Hanger, Silas Mason, Inc.
 - Senior Industrial Hygienist and Health Physicist in Quality Assurance (QA). Developed plantwide Environmental, Safety, and Health (ES&H) Program requirements for the Non-Weapons QA Program. Performed Worker Safety and Health Program Audits.
 - Program Manager for ES&H Training Program, the Asbestos Program, and the Occupational Health Information System Program.
 - Tennessee Valley Authority (TVA)
 - Lead Industrial Hygienist in Chattanooga Field Office. Developed an IH program in TVA's Nuclear Plant work environment.
 - Engineering Support Section of the IH Branch. Served as technical consultant for engineering concerns and the Building Risk Management Program.
- EDUCATION:** M.S., Health Physics, Georgia Institute of Technology
B.S., Industrial Hygiene, University of North Alabama
B.S., Mathematics and Chemistry, University of North Alabama
- OTHER:** American Industrial Hygiene Association, American Conference of Governmental Industrial Hygienists, Health Physics Society, American Industrial Hygiene Association Emergency Response Planning Guides Committee.

NAME: Jack J. Janda

AREA OF RESP: Worker Safety and Health (OSHA) Compliance

ASSOCIATION: Comprehensive Environmental Health Services, Inc.

EXPERIENCE: 20 Years

● Comprehensive Environmental Health Services, Inc., Burlington, Iowa.

- President. Provides full service safety and health consultation specializing in OSHA compliance. Provides onsite OSHA type compliance inspections. Provides indepth general industry industrial hygiene and safety surveys as well as construction safety and health inspections. Has participated as a team member on numerous DOE Technical Safety Appraisals, Tiger Team Assessments, OS&H Technical Assistance Outreach Programs, and Progress Assessments. Provides technical expertise in third party litigation suits involving issues relating to occupational safety, industrial hygiene, construction safety and health, and OSHA compliance.

● USDOL - Occupational Safety and Health Administration, Chicago, IL.; Madison Wis.; Peoria, IL.; Des Moines, IA.; and Indianapolis, IN.

- Assistant Regional Administrator; Area Director; Supervisory Industrial Hygienist; Compliance Safety and Health Officer. Responsibilities included the establishment of regional enforcement goals, policies, and procedures for OSHAs' largest region. Provided interpretations of OSHA standards, policies, and procedures. Directed industrial hygiene and safety compliance activities. Managed agency programs, supervised industrial hygienists and safety specialists, and acted as team leader on major inspections. Performed field safety and industrial hygiene compliance surveys.

● Accident Prevention Laboratory, Institute of Agricultural Medicine, Iowa City, IA.

- Research Assistant. Performed accident investigations involving consumer products, flammable clothing and products, etc.

EDUCATION: M.S., Preventive Medicine and Environmental Health-emphasis on Industrial Hygiene, University of Iowa.
B.S., General Science, University of Iowa.

OTHER: Member, AIHA; ACGIH; ASSE; NFPA. Fully qualified by OSHA as a Safety and Health Compliance Officer and an Industrial Hygienist. Accredited USDOL/OSHA Instructor for Safety and Industrial Hygiene.

NAME: Marcus E. Jones

AREA OF RESP: Self-Assessment Program

ASSOCIATION: U.S. Department of Energy, Office of Special Projects (EH-5)

EXPERIENCE: 9 Years

● U.S. Department of Energy

- Manages strategic and program planning efforts as well as training activities for the Office of Special Projects.
- Served as Management Subteam Leader for the Tiger Team Assessment (TTA) of the Naval Petroleum and Oil Shale Reserves, as well as participating in subteam leadership for the TTAs of the Oak Ridge K-25 Site, and the Sandia National Laboratories, Albuquerque.
- Coordinated TTA for Los Alamos National Laboratory; and coordinated Savannah River Site Progress Assessment.
- Led effort to develop pilot process for ES&H Progress Assessments

● Environmental Strategies Corporation

- Project Manager for a wide range of efforts including groundwater and soil remedial projects, environmental management assessments, and development of compliance management programs for corporations.
- Developed protocols for environmental compliance and management assessments. Wrote environmental regulatory plans for numerous industrial facilities.

● Geo/Resource Consultants, Inc.

- Project Manager for regulatory assessments, sampling visits and drilling operations at RCRA/Superfund Sites.

● Safe State, OSHA (7)(c)(1) Program

- Managed industrial hygiene equipment laboratory. Responsible for QA, training, equipment maintenance.

EDUCATION: M.S.E., Environmental Engineering, University of Alabama
B.S., Biology, University of Alabama

NAME: William J. Kehew

AREA OF RESP: Corrective Action Program

ASSOCIATION: U.S. Department of Energy, Fernald Field Office, Office of Oversight and Assessment

EXPERIENCE: 31 Years

- U.S. Department of Energy
 - Deputy Assistant Manager, DOE-FN, Office of Oversight and Assessment
 - Quality Assurance Manager, Chicago Operations Office Special Assignments include the following: (1) DOE-Headquarters EM-343 developed QA Program for Waste Vitrification Project Offices; (2) established DOE QA Program at Rocky Flats Office; and (3) served as acting Director for QA, Office of Civilian Radioactive Waste Management RW-3.
 - Quality Assurance Manager, CH Repository Technology and Transportation Division
 - Quality Assurance Director, Idaho Operations Office
- Westinghouse, Nuclear Fuel Division, Senior QA Engineer
- General Atomic Corporation, Nuclear QA Auditor
- Honeywell Information Systems Lead Audit Engineer
- Martin Marietta Corporation, QA Construction Engineer

EDUCATION: M.B.A., National University, San Diego, California
 B.S., Quality Assurance, National University, San Diego, California
 A.S., QA and Reliability Management, San Diego Community College

OTHER: Past Vice Chairman, ASQC, San Diego, California
 Vice Chairman, ASME NQA Committee Working Group on Decommissioning
 Member, ASQC Committee for Matrix of Nuclear Quality Assurance Program Requirements
 DOE Liaison Member to the National Academy of Sciences, Committee on Inspection for Quality Control on Federal Projects
 Past Member, ASQC Energy Division Executive Committee
 ASQC Certified Quality Engineer
 Registered Professional Engineer, CA

NAME: Charles Lewis

AREA OF RESP: Surface Water Program Management

ASSOCIATION: U.S. Department of Energy, Office of Environmental Audit

EXPERIENCE: 16 Years

- U.S. Department of Energy, Office of Environmental Audit (EH-24)
 - Environmental Engineer. Principal responsibilities include leading multi-disciplinary teams of professionals in performing Environmental Assessments and Audits at DOE facilities.
- State of Maryland, Department of Environment
 - Experience includes 9 years with the State of Maryland, Department of the Environment as Program Administrator, Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) programs; Division Chief, CERCLA Pre-Remedial Division; Section Head, Hazardous Waste Enforcement Division; and Investigator with the Hazardous Waste Inspection Team.
- Private Environmental Consultant
 - Worked as a project manager, design engineer, and water/wastewater treatment plant operator for environmental consulting firms.

EDUCATION: B.T., Civil Engineering, Rochester Institute of Technology

OTHER: Certified Hazardous Materials Manager (CHMM)
DOE Certified Accident Investigator

NAME: Richard B. Lynch

AREA OF RESP: Technical Editor

ASSOCIATION: META, Inc.

EXPERIENCE: 6 Years

- META, Inc., Arlington, VA

- Technical Editor. Provided technical writing and editing support on 13 Tiger Team Assessments, 5 Progress Assessments, and 3 Environmental Audits. Also, oversees the preparation of the camera-ready copy of final assessment and audit reports for DOE's Office of Special Projects and Office of Environmental Audit.
- Writer/Editor. Provided technical writing and editing support to DOE's Office of New Production Reactors (NPR), including writing NPR's Correspondence Manual and a variety of technical articles for publication.

- Advanced Sciences, Inc., Arlington, VA

- Writer/Editor. Researched, wrote, and edited fact sheets and information briefs on energy conservation and renewable energy topics for a DOE-funded energy information service.
- Response Analyst/Media Liaison. Analyzed and researched inquiries on energy topics from the general public, U.S. Congress, and trade associations. Also, wrote information briefs, monthly news releases, and conducted media outreach activities.

EDUCATION: B.A., General Studies, Louisiana State University

NAME: James W. Melloni, Jr.
AREA OF RESP: Quality Assurance
ASSOCIATION: Arthur D. Little, Inc.
EXPERIENCE: 14 Years

● Arthur D. Little, Inc.

- Served as Quality Assurance Specialist for the Tiger Team Assessments of the Strategic Petroleum Reserves, Los Alamos National Laboratory, Sandia National Laboratory, Albuquerque, and Fermi National Accelerator Laboratory. Also, served as the Quality Assurance Specialist for the Environmental Audit of the West Valley Demonstration Project.
- Served as Quality Assurance Manager for a U.S. Department of Energy program through Westinghouse Savannah River Company. Responsible for implementing a manufacturing/quality program that received certification from the American Society of Mechanical Engineers.
- Served as Quality Assurance Manager for a major project for the U.S. Army which involved oversight of the design, fabrication, test, and delivery of several prototype air-monitoring laboratories and shelters. This project required the generation of the Quality Assurance Program Plan covering all phases of the project. The program encompassed both test and inspection.
- Served the U.S. Air Force Prototype Flight Cryocooler (PFC) program office as Quality Assurance Manager; revised the quality assurance manual to update and improve Arthur D. Little, Inc. quality practices, primarily in the area of quality systems; implemented a failure analysis and corrective action system; and initiated audits and reviews of all the quality and manufacturing operations.

EDUCATION: M.B.A., Business Administration, New Hampshire College
B.S., Biology, Boston College

NAME: Linda F. Munson

AREA OF RESP: Industrial Hygiene

ASSOCIATION: Evergreen Innovations, Inc.

EXPERIENCE: 20 Years

- Evergreen Innovations, Inc., Richland, WA
 - President, Consultant in industrial hygiene and health physics. Participant in more than 20 Technical Safety Appraisals and Tiger Teams. Technical Editor, EPRI Radwaste Desk Reference. Assisted Allied Signal, Kansas City Plant in preparation of a Safety Assessment Report. Consultant and expert witness for the Nuclear Regulatory Commission on the Cleanup of Three Mile Island, Unit 2.
- Battelle, Pacific Northwest Laboratory, Richland, WA
 - Associate Manager, Dosimetry Technology. Performed research and technical assistance in radiological protection, decontamination and decommissioning, emergency preparedness and Industrial Hygiene.
- UNC Nuclear Industries, Richland, WA
 - Manager, Industrial Safety. Responsible for the industrial hygiene, occupational safety and fire protection programs for the N-reactor and associated fuel fabrication facilities.
 - Environmental Engineer/Sr. Environmental Engineer. Performed environmental assessments and prepared National Environmental Policy Act documentation and license applications for non-reactor commercial nuclear facilities.

EDUCATION: M.S., Analytical Chemistry, Iowa State University
B.A., Chemistry, United States International University

NAME: Donald Neal

AREA OF RESP: Waste Characterization Program

ASSOCIATION: Arthur D. Little, Inc.

EXPERIENCE: 10 Years

● Arthur D. Little, Inc., Cambridge, MA

— Senior Consultant. Waste management specialist for the DOE Progress Assessment of Lawrence Livermore National Laboratory, Savannah River Site, and the Tiger Team Assessments of the Oak Ridge K-25 Site, Ames Laboratory, the Naval Petroleum and Oil Shale Reserve, and the National Institute for Petroleum and Energy Research.

— Provides technical guidance to commercial clients on hazardous waste recycling and disposal.

● CSI Resource Systems Inc., Boston, MA

— Senior Associate. Managed environmental permitting of waste management facilities including environmental impact assessments; air, water, and solid waste permits. Prepared solid and hazardous waste management plans for industry and municipalities and evaluated waste management facility compliance with environmental permits and regulations.

— Investigated methods for air pollution monitoring, air emissions control, and source testing, for independent engineering evaluations and other interested parties.

● ENSR Consulting and Engineering, Concord, MA

— Project Manager. Managed environmental assessments and permitting of industrial facilities including solid and hazardous waste, power generation, cogeneration, pulp and paper, and natural gas storage and transmission.

● GCA/Technology Division, Bedford, MA

— Project Manager for quality assurance of 1985 National Acid Precipitation Assessment Program (NAPAP) emissions inventory.

— Designed and implemented Continuous Emissions Monitoring System for air emission sources.

EDUCATION: B.S., Biology, University of Massachusetts
M.S., Biology, University of Massachusetts

OTHER: Member: National Solid Waste Management Association,
Society of Wetland Scientist, Milton Conservation Commission

NAME: Louis A. Rancitelli

AREA OF RESP: Organization; Planning, Budgeting, and Resource Allocation

ASSOCIATION: Private Consultant

EXPERIENCE: 26 Years

● Private Consultant, Columbus, Ohio

- Participated in the DOE ES&H Progress Assessment of the Hanford Site, the Nevada Test Site, and the Savannah River Site, supported the DOE Office of Special Projects' strategic and subordinate implementation planning initiative, and participated on a DOE-HQ Task Force to develop Corrective Action Performance Objectives and Criteria for Progress Assessments.

● Battelle, Columbus, Ohio

- Senior Technical Advisor. Participated in the Tiger Team Assessments of the Lawrence Livermore National Laboratory, the Paducah Gaseous Diffusion Plant, the Lawrence Berkeley Laboratory, the Energy Technology Engineering Center, the Sandia National Laboratories, the Idaho National Engineering Laboratory, the Pittsburgh Energy Technology Center, the Stanford Linear Accelerator Center, and the Naval Petroleum Reserves in California as a member of the Management Subteams.
- Participated on DOE-HQ Task Forces to develop ES&H Management Performance Objectives and Criteria for use in Tiger Team Management and Organization assessments. Provided strategic planning support to the DOE-HQ Office of Security Evaluations.
- Manager of Nuclear Technology. Managed the Battelle West Jefferson, Ohio Nuclear Facility; a hot cell facility, a decommissioned reactor, a plutonium facility undergoing decontamination and decommissioning, and a radio-analytical facility. Responsible for compliance with DOE, Nuclear Regulatory Commission (NRC) and other local, state, and Federal regulations related to nuclear facility operations including; nuclear materials storage, handling and transportation, waste characterization and disposal, criticality safety, health physics, worker safety, and environmental protection.
- Associate Director, Corporate Technical Development. Managed corporate-wide IR&D programs and conducted corporate-wide strategic and subordinate implementation planning.

EDUCATION: Ph.D., Nuclear Science and Engineering, Cornell University
B.S., Chemical Engineering, Drexel Institute of Technology
Senior Executive Program, The Wharton School, University of Pennsylvania
National and International Security Program, John F. Kennedy School of Government, Harvard University

NAME: Cris Wren Van Horn

AREA OF RESP: Human Resources Management

ASSOCIATION: U.S. Department of Energy, Savannah River Operations Office

EXPERIENCE: 10 Years

- U.S. Department of Energy, Savannah River Field Office, Contracts Division
 - Contracting Officer. Responsible for major prime contracts including support service contracts in support of the Defense Waste Processing Facility (DWPF), the Reactor Restart effort, and the Assistant Manager for Environmental Restoration and Waste Management.
- U.S. Department of the Navy, Naval Facilities Engineering Command
 - Contracting Officer. Responsible for all contracts related to the construction of Naval Station Ingleside, Gulf Homeport Project.
- U.S. Department of the Air Force, Air Force Logistics Center
 - Contracting Officer. Responsible for contracts in support of major weapon systems. This included electronics for fighter aircraft and major parts acquisitions for the C-130, C-141, and various other aircraft systems.

EDUCATION: M.A., International Trade with Specialization in East European Affairs, The Monterey Institute of International Studies

OTHER: Fulbright-Hays Grant Recipient. Researched bilateral trade issues between the United States and Romania.

NAME: Nicks Williams

AREA OF RESP: Environmental Compliance Agreements

ASSOCIATION: U.S. Department of Energy, Savannah River Site

EXPERIENCE: 15 Years

- U.S. Department of Energy, Office of Chief Counsel, Savannah River Site, Aiken, SC
 - Attorney-Advisor. Responsibilities include serving as a lead environmental counsel at SRS on litigation and administrative compliance matters arising out of the Clean Air Act, Clean Water Act, CERCLA, NEPA, RCRA and TSCA.
- U.S. Department of Energy, Office of General Counsel, Litigation Section, Washington, DC
 - Trial Attorney. Assigned to the Office of Special Litigation, my practice included serving as litigator on cases arising out of the environmental statutes as cited above.
- U.S. Senate and U.S. House of Representatives, Washington, DC
 - Served on several staffs.

EDUCATION: J.D., Cumberland School of Law, Samford University, Birmingham, Alabama
B.A., Vanderbilt University, Nashville, Tennessee

OTHER: Bar Admissions - Virginia; U.S. Court of Appeals, Fourth Circuit

Appendix D

Progress Assessment Scopes

**PROGRESS ASSESSMENT SCOPE
ROCKY FLATS PLANT**

Name:	William Kehew	Date:	5/17/93	Rev. #:	2
Telephone #:	513/648-3126	Fax #:	513/648-3007		
Discipline:	Management Systems				
Area of Responsibility:	Corrective Action Program				

IDENTIFICATION OF ISSUES:

Identification of Issues to Be Addressed:

- Issue 1: Adequacy of management systems or programs for tracking, trending, verification, validation, and closure of corrective actions.
- Issue 2: Effectiveness/adequacy of management roles and responsibilities regarding Corrective Action Plan (CAP) implementation.
- Issue 3: Adequacy of CAP evidence files for closure.

Related Tiger Team Findings:

Root Cause: The 1989 Assessment report did not contain a summary level description of root causes. Root causes were discussed only at the finding level in the report. Therefore, a summary of RFO root causes is not included here.

Related Tiger Team Action Plan Items:

All Tiger Team deficiencies.

Other Bases:

The DP, EM, and RFP strategic plans, self-assessment program plans, RFO site Corrective Action Plan, EG&G Corrective Action Plans. The 1989 Assessment report and the RFP Tiger Team Assessment Corrective Action Plan. EG&G Site-Wide Corrective Action Program, EG&G & RFO Audit and Surveillance Reports conducted during the past year. Documents, other correspondence, and interviews as appropriate.

Overlapping Issues:

While corrective action overlaps most all areas of this assessment, it has close ties with self-assessment, oversight, directives, and policies and procedures. Conclusions concerning the adequacy and effectiveness of the CAP Program (Reporting, Tracking, Trending, Verification and Validation) will be partially based on the results obtained by other Progress Assessment Team members during their assessment of specific action plan implementation processes. Previously agreed upon action plan implementation commitments will be reviewed. Formality of procedures and oversight responsibilities and authorities for the corrective action process and implementation will be assessed.

ASSESSMENT APPROACH:

Performance Objectives to be Evaluated:

Management Performance Objectives and Criteria:

1.0 PROGRAM-WIDE CORRECTION ACTION PROGRAM

The program-wide ES&H corrective action program is formally defined by a comprehensive program plan; has an organization in place to implement and manage the program; is guided and controlled by policy, directive and procedures; provides guidance and direction for all of the corrective action programs conducted by organizational levels under the PSO's cognizance; and integrates the results of such programs to produce improved ES&H performance on a program-wide basis.

2.0 FIELD OFFICE-WIDE CORRECTIVE ACTION PROGRAM

The Field Office-wide ES&H corrective action program is formally defined by a comprehensive program plan; has an organization in place to implement and manage the program; is guided and controlled by policies, directives, and procedures; provides guidance and direction for all of the corrective action programs conducted by organizational levels under the Field Office's cognizance; and integrated the results of such programs to produce improved ES&H performance on a Field Office-wide basis.

3.0 SITE CONTRACTOR CORRECTIVE ACTION PROGRAM

The site contractor ES&H corrective action program is based on an approved comprehensive program plan; has an organization in place to implement and manage the program; is guided and controlled by detailed formal procedures; captures and collects all ES&H deficiencies; expeditiously develops corrective action plans (including milestones and schedules); formally tracks and reports the status of corrective actions; ensures complete, documented and verified closure of action items; and embodies effective mechanisms for processing information for management decision-making.

Description and Rationale of Approach:

1. Documents will be reviewed (procedures, correspondence, etc.) related to programs established at DOE (EH, EM, and DP), RFO, and EG&G to determine management program mechanisms established to direct, assign responsibility for, and implement the corrective action process. Contractor reviews will focus on EG&G. Conclusions drawn as to the adequacy of EG&G will rely more heavily on data obtained from other Progress Assessment Team members. Cognizant personnel within all these organizations will be interviewed. Corrective action data concerning all the onsite organizations which has been gathered by other Progress Assessment Team members will be reviewed for verification and/or validation of preliminary conclusions.

2. Cognizant personnel responsible for various aspects of the corrective action process will be interviewed for adequacy of oversight and effective implementation and tracking of corrective actions.
3. A sampling of implemented corrective actions and/or closed items will be verified to determine adequacy and appropriateness of the corrective action process. Formality and effectiveness of the root cause analysis process will also be evaluated respective to the closure process.
4. Verification of closed corrective action items identified by other Progress Assessment Team members will be performed to provide a cross-section of adequacy of the corrective action process.

Planned Interviews:

Refer to Appendix F in this report.

ADDITIONAL DOCUMENTS NEEDED:

Refer to Appendix G in this report.

TO BE COMPLETED BY DOE FIELD OFFICE AND SITE CONTRACTOR				
DOE Counterpart	Name:	D. Sargent, RFO; M. Lopez, RFO		
	Telephone #:	303/966-6222	Fax #:	303/966-3715
Contractor Counterpart	Name:	J. G. Davis, EG&G; K. Stovall, EG&G; J. Gutgsell, EG&G		
	Telephone #:	303/966-7702	Fax #:	303/966-2623

**PROGRESS ASSESSMENT SCOPE
ROCKY FLATS PLANT**

Name:	Marcus E. Jones	Date: 5/17/93	Rev. #: 2
Telephone #:	202/586-2499	Fax #: 202/586-9821	
Discipline:	Management Systems		
Area of Responsibility:	Self-Assessment Program		

IDENTIFICATION OF ISSUES:

Identification of Issues to Be Addressed:

Issue 1: The self-assessment programs of the DOE (EM, DP, and RFP) and the RFP contractors will be examined to evaluate each program's compliance with Departmental guidance, status (progress towards full implementation) and effectiveness as a management tool. Self-assessment elements that will be examined include established policy for RFP and RFP contractors, program plans (e.g., organizational structures and charters, assessment frequency and scope, training, resource requirements), assessment processes (e.g., procedures, protocols), related management systems (e.g., corrective action, tracking, trending, root cause), and assessment products (e.g., status reports, corrective actions) to determine if the programs regularly evaluate and report the status and quality of all aspects of the ES&H performance, determine root causes for deficiencies, and ensure that corrective actions are taken.

Related Tiger Team Findings:

The 1989 Assessment was conducted before the July 1990 Self-Assessment guidance was issued, and focused primarily on environmental programs. The 1989 Assessment did not include self-assessment within its scope. The team did not identify any findings directly associated with self-assessment programs. However, many deficiencies identified by the 1989 Assessment including the team's general observation that the site lacked "a strategy to integrate the existing management and information systems . . .," (Executive Summary, p. ES-1) may have been the result of inadequate elements of what would presently be considered a fully effective self-assessment program.

Related Tiger Team Action Plan Items:

The corrective action plan identified the institution of new management initiatives to address the findings of the 1989 Assessment including the implementation of "rigorous auditing, quality assurance and quality control, and self-appraisal programs" (p. xvii). However, the action plan was completed prior to the July 1990 self-assessment guidance and does not address self-assessment in any of the specific action plans.

Other Bases:

DP and EM self-assessment guidance to RFP, RFP self-assessment policy, RFP self-assessment guidance to the RFP contractors, RFP contractors self-assessment policies, and any available DP-67 and IG reports on RFP.

Overlapping Issues:

While self-assessment overlaps all areas of this assessment, it has particularly close ties with Corrective Actions, Oversight, Directives, Policies and Procedures, Planning, and Training. The examination of the DOE and the RFP contractors will be coordinated with the Progress Assessment Team members examining these areas. In addition, input into the self-assessment review will be solicited from RFP Progress Assessment Team members who have primary responsibility for evaluating the management of ES&H functional area activities. Specifically, each Progress Assessment Team member will be asked to determine whether a self-assessment, or self evaluation has been performed within their scope area, and to make a judgement concerning the overall quality of the assessment or evaluation, and any corresponding followup activities that may have been conducted. Because of the particularly close relationship between corrective action and self-assessment, the examination of self-assessment and corrective action programs will be carefully coordinated.

ASSESSMENT APPROACH:

Performance Objectives to be Evaluated:

The Department policy relating to self-assessment including the January 26, 1990, mandate and July 31, 1990 ES&H Self-Assessment Guidance; the Draft Self-Assessment Document dated March 1992; DOE 5482.1B, "ES&H Appraisal Program;" DOE 1000.3B, "Internal Control Systems Manual;" DOE 4330.4A, "Maintenance Management Program;" DOE 5480.19, "Conduct of Operations Requirements for DOE Facilities;" DOE 5700.6C, "Quality Assurance;" the February 1993, Defense Programs Self-Assessment Guidance Document; and the following specific performance objectives in the August 15, 1991 ES&H Management Performance Objectives and Criteria for Tiger Team Assessments: 1.5 Program-Wide Self-Assessment Program (DOE-HQ), 2.5 Field Office-Wide Self-Assessment Program (RFP), and 4.5 Sitewide Self-Assessment Program (RFP contractors).

Description and Rationale of Approach:

The Assessment of Environmental Conditions at the Rocky Flats Plant, the first of 35 Tiger Team Assessments, was conducted before the promulgation of the Department's January 1990 policy that self-assessment should be adopted as a management tool to identify deficiencies and improve performance Department-wide. Thus the 1989 Assessment did not focus specifically on the evaluation of self assessment programs. This Progress Assessment will be the first examination of the RFP and RFP contractors self-assessment programs by EH.

The self-assessment programs of the DOE (DP, EM, and RFP) and the RFP contractors will be examined to evaluate each program's compliance with Department policy, status (progress towards full implementation) and effectiveness. Self assessment elements that will be examined include program plans, assessment processes, related management systems, and assessment

products. The evaluation of RFP self-assessment programs will be accomplished by reviewing related documents and interviewing DOE and RFP contractor staff involved in their respective self-assessment programs.

The approach of this progress assessment will be to examine the self-assessment programs of DOE-HQ, RFO and the RFP contractors by taking vertical cuts down through these organizations. Primary emphasis will be on the effectiveness of DOE's self-assessment program and RFP ability to provide guidance to and hold its contractors accountable for implementing their own self-assessment programs. The self-assessment programs of the RFP contractors will be examined to evaluate the status of their programs. In addition to the vertical cuts through these organizations, a horizontal slice across these organizations will be taken to examine the degree to which various self-assessment programs are coordinated and integrated by RFP to provide a site-wide picture of ES&H performance at RFP.

Planned Interviews:

Refer to Appendix F in this report.

ADDITIONAL DOCUMENTS NEEDED:

Refer to Appendix G in this report.

TO BE COMPLETED BY DOE FIELD OFFICE AND SITE CONTRACTOR				
DOE Counterpart	Name:	Annette Barnard, RFO		
	Telephone #:	303/966-5916	Fax #:	303/966-3715
Contractor Counterpart	Name:	William S. Glover, EG&G		
	Telephone #:	303/966-3084	Fax #:	303/966-8964

**PROGRESS ASSESSMENT SCOPE
ROCKY FLATS PLANT**

Name:	Robert Compton	Date:	5/17/93	Rev. #:	2
Telephone #:	916/894-8788	Fax #:	916/899-9525		
Discipline:	Management Systems				
Area of Responsibility:	Oversight				

IDENTIFICATION OF ISSUES:

Identification of Issues to Be Addressed:

- Issue 1: Are management systems in place and functioning at RFP that provide effective oversight of activities that involve or affect ES&H? Are these systems documented, communicated and understood? Do all responsible parties clearly understand their respective roles, responsibilities and authorities? Are the appropriate systems in existence and functioning for all organizations, line and independent; EG&G, RFO, DP, and EM? How are/will these systems being maintained/adapted during the transition from DP to EM?
- Issue 2: The elements of oversight that may be addressed will include assessments, appraisals, audits, management walkthroughs, readiness reviews, surveillances, safety document reviews, corrective action reviews, triennial appraisals, oversight plans, facility (operations) managers, shift superintendents, and environmental, safety and health committees and councils.
- Issue 3: Are individuals and organizations at all levels in DOE and EG&G being held accountable by successive levels or management for achieving ES&H compliance and the pursuit of ES&H excellence?

Related Tiger Team Findings:

Oversight was not a specific element in the 1989 Assessment, making the establishment of a clear baseline for measuring progress very difficult. 1989 Assessment findings QA/AF-1, QA/AF-2, RAD/AF-3, RAD/AF-4, and RAD/AF-5 all indicate significant oversight problems related to the QA/QC program. In addition, it is clear from reading the 1989 Assessment report and the subsequent Secretarial briefing that inadequate oversight and a lack of management systems was a common element in many of the technical deficiencies identified by the 1989 Assessment at RFP.

Related Tiger Team Action Plan Items:

The Corrective Action Plan executive summary and section 3.4 state that a rigorous auditing, quality assurance and quality control, and self-appraisal programs have been implemented. This assessment will establish whether this is now true and how effectively these oversight activities have been.

Other Bases:

None.

Overlapping Issues:

Oversight elements include some aspects of self-assessment and corrective action systems and will require interfacing with these specific areas of assessment.

I will need input from other Progress Assessment Team members related to evidence of an effective oversight systems in various assessment areas; is management visible in the field, aware of and active in assessing activities at the working level.

ASSESSMENT APPROACH:**Performance Objectives to be Evaluated:**

Management POCs 1.4, 2.4.2, 2.4.3, 4.4.2, and 4.4.3.

Description and Rationale of Approach:

Determine the existence, completeness, and effectiveness of management oversight systems by the review of documents, interviews with personnel, and observation of work activities. Documentation reviewed will include policies, procedures, oversight plans, correspondence, meeting minutes, committee charters, appraisal/assessment/surveillance reports, and associated actions. Interviews will include various levels in a cross section of organizations with oversight responsibilities and will address overall senior management policy and philosophy, as well as specific implementation and performance. Oversight organizations and activities for which these reviews may be directed include facility representatives, building managers, oversight committees and councils, safety and quality representatives, the QA and ES&H organizations, line management, and senior management.

Input from other Progress Assessment Team members will be integrated with personal observations to reach overall conclusions.

Planned Interviews:

Refer to Appendix F in this report.

ADDITIONAL DOCUMENTS NEEDED:

Refer to Appendix G in this report.

TO BE COMPLETED BY DOE FIELD OFFICE AND SITE CONTRACTOR				
DOE Counterpart	Name:	Roxanne Danz		
	Telephone #:	303/966-3135	Fax #:	303/966-3276
Contractor Counterpart	Name:	E. R. Swanson		
	Telephone #:	303/966-3082	Fax #:	303/966-3454

**PROGRESS ASSESSMENT SCOPE
ROCKY FLATS PLANT**

Name:	Louis A. Rancitelli	Date: 5/17/93	Rev. #: 2
Telephone #:	614/451-8983	Fax #: 614/451-8983	
Discipline:	Management Systems		
Area of Responsibility:	Organization		

IDENTIFICATION OF ISSUES:

The organizational management systems of RFO and the RFP contractors will be examined to determine if they have been enhanced to correct the deficiencies identified during the Tiger Team Assessment and if they create a climate for continuous ES&H improvement. Important assessment issues also include the initial organizational realignments in response to the 1989 Assessment of Environmental Conditions at the Rocky Flats Plant (RFP), subsequent changes in organizational alignments to further strengthen and enhance ES&H performance, and the management rationale and decision process for these changes.

Identification of Issues to Be Addressed:

Issue 1: The 1989 Assessment of Environmental Conditions at the Rocky Flats Plant (RFP) was the first of 35 Tiger Team Assessments (TTAs). While subsequent Tiger Team Assessments examined a broad array of ES&H functional activities and programs, the 1989 Assessment was an environmental compliance assessment that focused exclusively on environmental programs. ES&H management systems were examined as they related to specific environmental compliance issues. Thus, organizational deficiencies and weaknesses were identified and recommended improvements were provided as they related to specific environmental activities and programs. ES&H management systems that profoundly influence ES&H performance such as planning, organization, and human resource management were not specifically examined. Thus, this Progress Assessment will not only examine the progress in correcting the organizational deficiencies identified by the Tiger Team Assessment, but will also examine the effectiveness of the RFP organization management systems in establishing and sustaining an environment of continuous performance improvement.

Issue 2: The ES&H roles, responsibilities, and authorities of the RFP organizations will be examined to determine if they are clearly defined, formally documented, communicated and understood. Specifically, roles, responsibilities, and authorities will be assessed to determine if they are clearly assigned to the line organization as evidenced by mission and function statements, goals and objectives, and individual job descriptions; define the interface and functional relationships between the various line organizations, and between the line organizations and the ES&H oversight organizations; provide staff with ES&H independent oversight responsibilities with sufficient independence and authority to conduct their activities and to elevate unresolved issues to appropriate management levels; and place decision

authorities, including the authority to shutdown work, stop work, and restart work at the appropriate level, and clearly define, formally document, communicate and ensure it is understood by all involved parties.

Related Tiger Team Findings:

The report entitled "1989 Assessment of Environmental Conditions at the Rocky Flats Plant" did not specifically identify probable Root Causes. Rather, in the report, the Special Assignment Environmental Team provided nine observations that it felt contributed significantly to the RFP deficiencies. Several of the Team's observations specifically addressed organization deficiencies: "Implementation of the environmental programs lacks coordination and is hindered by poor communication. The lines of authority and responsibility are fragmented and not clearly defined."; and "Effective implementation of the site remediation program has been adversely impacted by poor communications, coordination, planning and scheduling." This latter observation is derived from a Finding related to waste management (WM/BMP-1).

Related Tiger Team Action Plan Items:

While the 1989 Assessment report did not identify probable root causes, the Corrective Action Plan identified three major factors contributing to the audit findings and BMPs in the assessment report as root causes. One major factor related directly to RFP organization deficiencies: "Lack of a single central environmental organization (i.e., the Environmental Management group reported to the Health, Safety and Environment directorate while the Environmental Restoration group (RCRA/CLA Programs) reported to the Plutonium Recovery organization)."

Other Bases:

The DOE (DP, EM, and RFO) and the RFP contractors' organization mission and function statements; individual position descriptions and performance appraisals; Strategic Plans, and Annual and Multi-Year Program Plans; and Transition Plans. The 1989 Assessment report and the related RFP Corrective Action Plan. RFO subordinate ES&H implementation plans such as ES&H program plans and ES&H oversight plans. The RFO contractors' strategic plans and subordinate ES&H implementation plans such as those noted above and contractor ES&H committee charters. DOE-IG and DNFSB reports of RFP assessments conducted over the past year; and recent DP-9 and DP-67 RFP Assessment reports.

Overlapping Issues:

Since the organizational structure and its associated organizational management systems are centrally important to effective ES&H performance, and since all aspects of RFP ES&H activities and programs involve organizational issues, this assessment area will be closely coordinated with the all other areas of this Progress Assessment. For example, the review of RFP organization and its related management systems will be coordinated with RFP Progress Assessment Team members who have primary responsibility for evaluating areas such as corrective action management, self-assessment, ES&H program management, and ES&H functional area oversight activities. Specifically, Progress Assessment Team members examining these related areas

should determine if individual and organizational ES&H roles, responsibilities, and authorities of the RFP organizations, including the interface and functional relationships between the various line organizations, and between the line organizations and the ES&H oversight organizations are clearly defined, formally documented, communicated and understood; and if staff with ES&H independent oversight responsibilities are provided with sufficient independence and authority to conduct their activities and to elevate unresolved issues to appropriate management levels.

ASSESSMENT APPROACH:

Performance Objectives to be Evaluated:

Specific performance objectives in the August 1992, ES&H Management Performance Objectives and Criteria for Progress Assessments - Draft which will be evaluated include: 1.2 Organization (DP and EM), 2.2 Organization (RFO), and 4.2 Organization (RFP Contractors).

Description and Rationale of Approach:

The approach of this assessment will be to examine the organization management systems of RFO and the RFP contractors by reviewing mission and function statements, policies, goals and objectives, ES&H committee charters, and individual position description and performance appraisal management systems. Also, vertical cuts will be taken down through these organizations to examine the degree with which organizational and individual ES&H roles, responsibilities, and authorities are communicated and understood. Primary emphasis will be on the DOE's and its contractor's effectiveness in defining, documenting, and communicating their ES&H roles, responsibilities, and authorities. In addition to the vertical cuts through these organizations, a horizontal slice across these organizations will be taken to examine the degree to which the interface and functional relationships between and among the various line organizations, and between the line organizations and the ES&H oversight organizations are formally defined, communicated, and understood by all affected parties. Specifically, vertical cuts through RFO and EG&G will focus on their respective Facility Operation and Management Divisions, ES&H oversight organizations, and ES&H performance assurance organizations.

Planned Interviews:

Refer to Appendix F in this report.

ADDITIONAL DOCUMENTS NEEDED:

Refer to Appendix G in this report.

TO BE COMPLETED BY DOE FIELD OFFICE AND SITE CONTRACTOR				
DOE Counterpart	Name:	T. Anderson, RFO; G. Duffy, RFO; M. Hargreaves, RFO		
	Telephone #:	303/966-4031	Fax #:	303/966-4019
Contractor Counterpart	Name:	G. E. Francis, EG&G		
	Telephone #:	303/966-7189	Fax #:	303/966-4057

**PROGRESS ASSESSMENT SCOPE
ROCKY FLATS PLANT**

Name:	Louis A. Rancitelli	Date: 5/17/93	Rev. #: 2
Telephone #:	614/451-8983	Fax #: 614/451-8983	
Discipline:	Management Systems		
Area of Responsibility:	Planning, Budgeting, and Resource Allocation		

IDENTIFICATION OF ISSUES:

The 1989 Assessment at the Rocky Flats Plant was the first of 35 Tiger Team Assessments (TTAs). While subsequent Tiger Team Assessments examined many aspects of ES&H management performance and established comprehensive compliance baselines, the RFP TTA was an environmental compliance assessment that focused exclusively on environmental programs. ES&H management systems were examined only as they related to specific environmental compliance. For example, planning, budgeting, and resource allocation deficiencies were identified and recommended improvements were provided as they related to weaknesses in specific environmental activities such as waste management. ES&H management systems that profoundly influence ES&H performance (i.e., planning, oversight, organizational structure, human resource management), as they relate to the full array of ES&H activities, did not receive a thorough examination. Thus, this Progress Assessment will not only examine the progress in correcting the planning, budgeting and resource allocation deficiencies identified during the 1989 Assessment, but will also examine the effectiveness of management systems in creating a climate of continuous improvement and for ensuring that such a climate will persist and prosper.

Identification of Issues to Be Addressed:

Issue 1: The planning, budgeting, and resource allocation processes of DOE-HQ, RFO, and the Rocky Flats Plant contractors will be examined to determine the progress made in correcting the systemic planning deficiencies identified during the 1989 Assessment. Specific issues include each organization's strategic and subordinate implementation planning process, the process by which ES&H and programmatic activities are prioritized and integrated, the processes for allocating resources to programmatic and ES&H activities, and the change control systems employed to ensure that important ES&H issues receive timely management attention. RFO plans to manage its own activities, as well as those of its contractors, will receive emphasis in this assessment.

Related Tiger Team Findings:

The 1989 Assessment did not specifically identify probable root causes. Rather, in the report, the Special Assignment Environmental Team provided nine observations that it felt contributed significantly to the RFP deficiencies. The Team's observations related to planning, budgeting, and resource allocation included: "Effective implementation of the site remediation program has been adversely impacted by poor communications, coordination, planning and scheduling."; "Implementation of an effective waste management program has been severely hindered . . . a lack of options for treatment and

final disposition of waste."; and "A comprehensive strategy needs to be developed and implemented for performing activities required by the National Environmental Policy Act." In addition, a number of specific findings addressed deficiencies in the RFP planning process. Examples included: **Air/AF-4** "Develop and implement a program to conduct a comprehensive survey of facilities to compile the information necessary to complete the required APENs (Air Pollution Emission Notices)."; **GW/AF-1** ". . . current investigation plans do not appear to include provisions for. . . ."; **Waste Minimization Program** "RFP has not established a system for allocating the costs of handling waste. . . . and . . . implement the formal policy by establishing goals for all waste streams. . . ."; **WM/BMP-11** "There is no approved management plan at the Rocky Flats Plant (RFP) to reduce the large backlog of over 4,600 drums of residue on-site."; **IWS/AF-1** "The Rocky Flats Plant (RFP) has not finalized or implemented a Community Relations Plan for its Remedial/Corrective Action Program." **SW/AF-6** "The inadequate use of the priority system . . . results in inefficient operations."; **WM/BMP-1** "Implementation of the environmental programs at the Rocky Flats Plant (RFP) lacks coordination, and is hindered by poor communication."; **WM/BMP-10** "Management Assessments that serve as the cornerstone for comprehensive long-range planning have not been performed."; and **NEPA/BMP-3** "It is critical that NEPA determinations for all CERCLA remedial action projects be made in a timely manner to facilitate effective integration of NEPA documentation requirements into the CERCLA process."

Related Tiger Team Action Plan Items:

While the 1989 Assessment report did not identify probable root causes, the RFP Assessment Action Plan identified three major factors contributing to the audit findings and BMPs in the assessment report as root causes. Two major factors related directly to planning, budgeting, and resource allocation deficiencies at RFP: "Lack of funding to implement proposed changes to DOE orders and other environmental regulations in a timely manner." and "Lack of an overall environmental management plan integrated into the plant overall management plan." Also, in addition to specifically addressing each 1989 Assessment finding, the Action Plan detailed the following specific corrective actions: "The planning process for waste and environmental programs has been formalized through the preparation of five-year planning documents. These plans are to be updated annually." and "EG&G has also initiated a master planning process with an objective to transform Rocky Flats into a model of operational excellence in three years. Success will require achieving substantial improvements in five areas: (1) management, (2) disciplined, formality of operations, (3) procedures and documentation, (4) focused training, and (5) facility improvement."

Other Bases:

The DP, EM and RFO Strategic Plans, Annual and Multi-Year Program Plans, Safety and Health Five Year Plans, Site Development Plans, Transition Plans, and Self-Assessment Program Plans. The 1989 Assessment and Corrective Action Plan. RFO subordinate ES&H implementation plans such as ES&H program plans, ES&H oversight plans, and human resource management plans. The RFO contractors' strategic plans and subordinate ES&H implementation plans such as those noted above. DOE-IG and DNFSB reports of RFP assessments conducted over the past year; and recent DP-9 and DP-67 RFP assessment reports.

Overlapping Issues:

The review of subordinate implementation planning, budgeting and resource allocation for activities such as corrective action management, human resource management, self-assessment, ES&H programs, and oversight of ES&H functional area activities will be coordinated with RFP Progress Assessment Team members who have primary responsibility for evaluating these areas.

ASSESSMENT APPROACH:

Performance Objectives to be Evaluated:

Department policy with respect to planning such as SEN-25A-91 and EP-60 Strategic Planning guidance. Specific performance objectives in the August 15, 1991 Management Performance Objectives and Criteria which will be evaluated include; 1.1 Planning (DOE-HQ), 1.3.1 Human Resource Planning (DOE-HQ), 1.5.1 Program-Wide Self-Assessment Program plans (PSO), 2.1 Planning (RFO), 2.3.1 Human Resource Planning (RFO), 2.5 Field Office-wide Self-Assessment Program Planning (RFO), 3.0 Corporate Parent (Corporate-wide strategic planning), 4.1 Planning (RFP Contractors), 4.3.1 Human Resource Planning (RFP Contractors), and 4.5 Site-wide Self-Assessment Program Plans (RFP Contractors).

Description and Rationale of Approach:

The 1989 Assessment was conducted before the Department's emphasis on Department-wide strategic and subordinate implementation planning had been completely formulated, fully defined, communicated and implemented. As a result, the RFP Tiger Team assessment did not place the emphasis on the planning processes throughout DOE and its contractors that it later received. For example, while the 1989 Assessment opined that DOE-HQ may not have provided sufficient resources to the RFP, it did not specifically examine the role of DOE-HQ in the planning process. However, while planning did not receive intense examination, the RFP Environmental Compliance Assessment report is replete with deficiencies that can be related directly to the lack of a comprehensive sitewide planning, budgeting and resource allocation process. Because of the limited attention planning received during the 1989 Assessment, this Progress Assessment will be the first comprehensive evaluation of the RFP ES&H management systems related to planning.

The approach of this assessment will be to examine the planning, budgeting and resource allocation process of DOE-HQ, RFO and the RFP contractors by taking vertical cuts down through these organizations. Primary emphasis will be on DOE's effectiveness in formally articulating its vision of the present and future RFP mission, communicating its vision to its contractors, and RFO's ability to hold its contractors accountable for defining and executing their missions in a planned and disciplined fashion. The strategic and subordinate implementation planning process of the contractors will be examined to evaluate their planning processes and to evaluate the effectiveness of DOE's planning, budgeting, and resource allocation process. In addition to the vertical cuts through these organizations, a horizontal slice across these organizations will be taken to examine the degree to which various interrelated subordinate implementation planning processes are coordinated and integrated on a sitewide basis. Specifically, vertical cuts through RFO and EG&G will focus on their respective Facility Management and Operations

Division, ES&H oversight organizations, and the ES&H performance assurance organizations. The EG&G planning process as it relates to these vertical cuts will be assessed.

Planned Interviews:

Refer to Appendix F in this report.

ADDITIONAL DOCUMENTS NEEDED:

Refer to Appendix G in this report.

TO BE COMPLETED BY DOE FIELD OFFICE AND SITE CONTRACTOR				
DOE Counterpart	Name:	T. Anderson, RFO; G. Duffy, RFO M. Hargreaves, RFO		
	Telephone #:	303/966-4031	Fax #:	303/966-4019
Contractor Counterpart	Name:	G. E. Francis, EG&G		
	Telephone #:	303/966-7189	Fax #:	303/966-4057

**PROGRESS ASSESSMENT SCOPE
ROCKY FLATS PLANT**

Name:	Robert Compton	Date: 5/17/93	Rev. #: 2
Telephone #:	916/894-8788	Fax #: 916/899-9525	
Discipline:	Management Systems		
Area of Responsibility:	Directives, Policies, and Procedures		

IDENTIFICATION OF ISSUES:

Identification of Issues to Be Addressed:

Issue 1: The adequacy and implementation of directives and policy and procedures systems for EG&G and DOE (RFO, EM, DP).

This issue will be addressed from three aspects (1) the improvement that has occurred since the 1989 Assessment; (2) whether appropriate systems are in place, and (3) whether current conditions foster continuous improvement in these areas.

Directives (e.g., laws, regulations, DOE Orders, SENs, and Secretarial memoranda, such as those related to self-assessment) are the primary instruments for DOE to communicate ES&H requirements throughout the DOE complex. Formal (written), coordinated, consistent management systems are needed at all levels in the DOE to ensure that these directives are implemented in a timely and proper manner. Formal directives systems at DOE Headquarters Program Offices, Field Offices/Site Offices, and DOE contractors will ensure that all directives are disseminated in a timely manner to the appropriate organizations or personnel, that PSO/FO/AO expectations are communicated down line, and that a documented process exists to track and ensure the adequacy of implementation. The procedures in these systems must clearly detail responsibilities, the process to follow, finite timeframes for issuance of directives and responses, review and approval of implementation plans and schedules, formal tracking/statusing mechanisms, and provide for timely and thorough assessment of implementation.

A solid framework of clear, up-to-date, written directions detailing administrative, operational, and oversight activities are necessary to implement and maintain effective ESH&QA programs. This framework consists of tiers of documents starting with requirements and directives, which are translated into site-specific policies, plans, and procedures and facility or activity specific instructions. Coupled with this framework of procedures must be a clearly communicated and implemented management system detailing when and what kind of procedures are required; how procedures are developed, revised, and controlled; and a firm policy of procedure adherence.

Related Tiger Team Findings:

Although there were no 1989 Assessment findings directly addressing the "directives system," numerous findings were related to elements of a directives management system, such as inadequate communication of ES&H requirements and noncompliance with DOE directives. Numerous Tiger Team findings related to the lack of or inadequate procedures in many areas at the

RFP including QA/AF-1, QA/BMP-2, WM/AF-7, TCM/AF-4, RAD/AF-3, RAD/AF-4, RAD/AF-5, GW/BMP-3, and SW/AF-4.

Related Tiger Team Action Plan Items:

The 1989 Assessment Action Plan describes the following actions that EG&G and RFO had taken or were taking that related to these assessment areas: (1) A policy of verbatim procedure compliance has been initiated and is strictly enforced; and (2) a master planning process has been initiated that will transform RFP into a model of operational excellence with success being achieved by substantial improvement in the areas of disciplined, formality of operations and procedures and documentation, among others.

The Progress Assessment Team will attempt to determine the level of success FRP has had in achieving these goals.

Other Bases:

N/A

Overlapping Issues:

I will need input from other Progress Assessment Team members related to evidence of an effective policy for timely distribution of DOE directives and the clear communication of associated guidance, direction, and expectations. Do supervisors and workers understand EG&G and DOE policies and directives related to ES&H, and demonstrate that understanding? Are management guidance, direction, and expectations regarding DOE Orders and Notices being clearly communicated down to the working level in a timely manner?

I will also need input from other Team members related to evidence of an effective policy for procedure adherence and use, including document control system, i.e., are procedures being used (onsite and open where appropriate, are they being followed verbatim, are they up-to-date (controlled) and technically adequate, etc? Do supervisors and workers understand EG&G and DOE policies and directives related to ES&H, and demonstrate that understanding? Are DOE (EM, DP, and RFO) ES&H-related activities conducted in a proceduralized, formal, and documented manner?

ASSESSMENT APPROACH:

Performance Objectives to be Evaluated:

Management POCs 1.4, 2.4.1, 2.4.2, 4.4.1, and 4.4.2

Description and Rationale of Approach:

Review of documents, interviews with personnel, and observation of activities to:

- Assess the existence and adequacy of formal procedures and systems for developing, disseminating, providing guidance and direction for, and implementing DOE directives (such as Orders, SENS, guidance documents) at EM, DP, RFO, and EG&G. Test personnel

knowledge of and actual implementation of these processes for selected directive documents.

- Assess the existence and adequacy of formal policies and procedures that detail the need for formality in the implementation of ES&H policies and programs; the processes for development, issue, revision and control of procedures; and clear policies related to procedure use and adherence. Test personnel knowledge of and actual implementation of these processes for EM, DP, RFO, and EG&G.

Planned Interviews:

Refer to Appendix F in this report.

ADDITIONAL DOCUMENTS NEEDED:

Refer to Appendix G in this report.

TO BE COMPLETED BY DOE FIELD OFFICE AND SITE CONTRACTOR				
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**PROGRESS ASSESSMENT SCOPE
ROCKY FLATS PLANT**

Name:	Cris Van Horn	Date:	5/17/93	Rev. #:	2
Telephone #:	803/725-8123	Fax #:	803/725-8573		
Discipline:	Management Systems				
Area of Responsibility:	Staffing and Training				

IDENTIFICATION OF ISSUES:

At the time of the 1989 Assessment was a U.S. Department of Energy area office operating under the Albuquerque Operations Office operating procedures. Consequently, Rocky Flats grew from an area office with a minimal amount of DOE and contractor staff to a field/operations office in 1990, reporting directly to DOE Headquarters. At the same time, EG&G became the Rocky Flats Office's (RFO's) management and operating contractor. While transitioning from an area office to a field office, RFO has also had to simultaneously focus on Environment, Safety & Health (ES&H). This has been in the face of an FBI investigation which resulted in the shutdown of production at RFO and an assessment of environmental conditions of RFP which resulted in significant environmental compliance findings.

The purpose of this programmatic assessment in the area of human resource management is to determine whether or not RFO and EG&G have developed human resource plans and evaluate whether or not these plans have been implemented in a consistent manner and whether there is evidence of improvement in human performance, traceable to these programs.

Identification of Issues to Be Addressed:

- Issue 1: Have RFO and EG&G effectively utilized available human resources to accomplish mission objectives as defined in the Strategic Plan for the Rocky Flats Plant?
- Issue 2: Are RFO and EG&G management able to redirect human resources to problem areas while simultaneously continuing to accomplish performance of routine mission objectives?
- Issue 3: Are RFO and EG&G personnel trained in accordance with training program and implementation plans to ensure compliance with ES&H requirements commensurate with mission objectives?

Related Tiger Team Findings:

The 1989 Assessment was a comprehensive environmental compliance assessment and did not specifically address the area of Human Resource Management.

Related Tiger Team Action Plan Items:

Despite the fact that the 1989 Assessment did not specifically address human resource management, deficiencies in the areas of training were mentioned throughout the report. Examples include the following:

SW/AF-4	Technical training on revised procedures
SW/AF-6	Training of workers on new work control procedures
GW/BMP-3	The sampling team, and their alternates, should be provided with formal training
WM/AF-1	Training of generators should be improved
RAD/AF-3	Provide all personnel with QA/QC training.

Other Bases:

The DP, EM and RFO Strategic Plans, Human Resource Management Plans. RFO training needs identification and training program plans. EG&G strategic plans and human resource management implementation plans. EG&G training needs identification and training program plans. DNFSB reports and recommendations (e.g., DNFSB 92-7) related to RFP ES&H training.

Overlapping Issues:

Human resource management plans play a vital role in the implementation of strategic plans. For this reason, the assessment of human resource management will be closely coordinated with the assessment of planning, budgeting, and resource allocation. Additionally, the review of human resource management as related to activities such as corrective action management, self-assessment, ES&H programs, and oversight of ES&H functional area activities will be coordinated with Progress Assessment Team members who have primary responsibility for evaluating these areas. Specifically, Team members examining the areas of environmental restoration, surface water management, waste characterization, quality assurance, worker safety and OSHA, fire protection, and industrial hygiene should determine if plans exist to identify staffing needs and to ensure that sufficient qualified staff exist to carry out the duties of their assigned disciplines. Also, since a pervasive deficiency identified by the 1989 Assessment was the lack of training to procedures, this issue should be addressed by Team members examining the specific ES&H programs mentioned above. This review should assess the adequacy of formal training systems to ensure that management, oversight and operations staff within a given line organization have established plans to identify training deemed necessary, provide or make such training available, and then verify implementation of the training.

ASSESSMENT APPROACH:

Performance Objectives to be Evaluated:

ES&H Management Performance Objectives and Criteria for Progress Assessments (April 1992)

- 1.3 Human Resource Management (DOE-HQ)
- 2.3 Human Resource Management (RFO)
- 4.3 Human Resource Management (RFP contractors).

Description and Rationale of Approach:

The approach of this assessment will be to examine the human resource management programs of RFO and the RFO contractors by taking horizontal and vertical cuts through these organizations. Primary emphasis will be on the RFO's and EG&G's effectiveness in defining their staffing needs and ensuring that these needs are satisfied. This will be accomplished by reviewing applicable strategic and human resource plans developed and utilized by RFO and EG&G. In addition to these reviews, interviews will be conducted with personnel from both RFO and EG&G. Representatives selected for interviews will be chosen from top level management, mid level management and the working level.

Planned Interviews:

Refer to Appendix F in this report.

ADDITIONAL DOCUMENTS NEEDED:

Refer to Appendix G in this report.

TO BE COMPLETED BY DOE FIELD OFFICE AND SITE CONTRACTOR				
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**PROGRESS ASSESSMENT SCOPE
ROCKY FLATS PLANT**

Name:	John Patterson	Date:	5/17/93	Rev. #:	2
Telephone #:	803/725-3821	Fax #:	803/725-7565		
Discipline:	Management Systems				
Area of Responsibility:	Engineering Design Basis and Configuration Management				

IDENTIFICATION OF ISSUES:

Identification of Issues to Be Addressed:

Engineered barriers are fundamental to a comprehensive environment, safety, and health program. A system of design controls and configuration management is necessary to maintain the integrity of those engineered barriers. EG&G has stated that their ability to prepare acceptable procedures was originally impeded by absence of design basis and configuration documentation except for process line systems.

Issue 1: This activity will examine the engineering processes installed by EG&G to correct this situation, the effectiveness of those processes, and the uniformity of application across key environment, safety, and health engineered barriers at Rocky Flats. This is a focused assessment dealing with the precision and timeliness of design process and change control.

Related Tiger Team Findings:

N/A.

Related Tiger Team Action Plan Items:

N/A.

Other Bases:

While the 1989 Assessment did not include in its scope the assessment of engineering and configuration management, the DOE Special Assignment Group for Rocky Flats Plant Operations and Practices which followed did examine this area and concluded that upgrade in "safety envelope definition, adequate technical engineering base, and work authorization and control" was needed.

Overlapping Issues:

By observing the compliance of specific engineering changes with the requirements of the procedures, insight as to adequacy of training will be derived. The comparison of design changes in process safety areas and environmental areas will provide information on the adequacy of engineering controls applied to environmental issues. Information should be derived that will provide insights into the adequacy of organization, policy, and procedures applied to the engineering process as well.

ASSESSMENT APPROACH:

A review of engineering policies, manuals, and procedures will be conducted to identify whether the required elements of an engineering process are in place. Configuration change control processes will be reviewed to determine whether they guide the individual through the process, whether they require all associated control documents to be submitted with the design change (procedures, OSRs, inspection plans, etc.), and whether they are uniformly accessible to those who effect design changes. Several facility design change packages will be reviewed for timeliness and completeness of implementation. Design basis documentation for environmental systems will be examined to determine whether they have been upgraded to levels comparable to safety documentation.

Performance Objectives to be Evaluated:

PA-2.4.2.2, a formal configuration management system ensures that the ES&H compliance impacts or any proposed change to site operations are systematically evaluated and formally approved before implementation.

TS.3, Facility Modifications, Technical support services, required by each facility on the site to execute modifications, should be carried out in accordance with sound engineering principles that should assure proper design, review, control, implementation, and documentation in a timely manner.

Description and Rationale of Approach:

The approach will provide insight into the engineering process; whether the elements of disciplined engineering approach are in place, whether they are implemented, and whether they are sufficiently straightforward to be successfully utilized by site personnel. The review of environmental systems will determine if there has been a dichotomy between safety and environmental implementation.

Planned Interviews:

Refer to Appendix F in this report.

ADDITIONAL DOCUMENTS NEEDED:

Refer to Appendix G in this report.

TO BE COMPLETED BY DOE FIELD OFFICE AND SITE CONTRACTOR				
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**PROGRESS ASSESSMENT SCOPE
ROCKY FLATS PLANT**

Name:	Nicks Williams	Date:	5/17/93	Rev.	2
Telephone #:	803/725-2497	Fax#:	803/725-7544		
Discipline:	Environment				
Area of Responsibility:	Environmental Compliance Agreements				

IDENTIFICATION OF ISSUES:

RFO and EG&G are parties to environmental compliance agreements and orders (hereafter "agreements") that specify activities and establish deadlines for bringing the Rocky Flats Plant into compliance with current environmental requirements. These agreements include FFCA's on Land Disposal Restrictions issues (RCRA) and NPDES issues (Clean Water Act), and compliance orders on mixed residue issues (RCRA) and NESHA issues (Clean Air Act). This assessment will focus on the effectiveness of RFO and EG&G management in implementing these agreements¹.

Identification of Issues to Be Addressed:

- Issue 1: Whether the roles and responsibilities for implementing the agreements are sufficiently clear in identifying ownership.
- Issue 2: Whether management tools for implementing the agreements are effective.
- Issue 3: Whether communications among the parties to the agreements regarding potential delays in implementation are formalized and timely.

Related Tiger Team Findings:

No Tiger Team Finding has been identified that was directly on point with the scope of this particular assessment. Some environmental compliance issues that were identified by the 1989 Assessment are believed to have been addressed in various environmental compliance agreements of which RFO and/or its contractors are parties. In addition, the 1989 Assessment identified issues that could adversely impact management's performance in ensuring that compliance deadlines are met, including that environmental programs lacked coordination and were hindered by poor communication, and that lines of authority and responsibility were not clearly defined.

Related Tiger Team Action Plan Items:

As previously indicated, some environmental compliance issues that were identified by the 1989 Assessment (and related action plan items) are believed to have been addressed in various environmental compliance agreements of which

¹ The Inter-Agency Agreement (IAG) on RCRA/CERCLA issues is the principal focus of another member of the Progress Assessment Team and, therefore, is not included within the scope of this assessment.

DOE-RFP and/or its contractors are parties. In addition, the action plan did identify certain root causes that may be considered in the conduct of this assessment: the lack of funding to implement proposed changes to DOE Orders and environmental regulations in a timely manner, and the lack of an overall environmental management plan integrated into the plant overall management plan.

Other Bases:

Related DP, EM, EH and RFP environmental compliance plans, and others to be determined.

Overlapping Issues:

The assessment of management's effectiveness in meeting in implementing environmental compliance agreements will be closely coordinated with the assessment of management systems and restoration activities for the Inter-Agency Agreement (IAG), and likely will overlap with other areas being assessed including planning; resources; training; budgeting; waste management; self-assessment; and, the corrective action program.

ASSESSMENT APPROACH:

Performance Objectives to be Evaluated:

ES&H Management Performance Objectives and Criteria for Progress Assessments (December 1992), Performance Objective 4.6.2, states that management cooperates fully and openly with regulatory agencies to facilitate compliance with ES&H laws and regulations.

Description and Rationale of Approach:

This assessment will be conducted by interviewing cognizant personnel at DOE-HQ, RFO and EG&G, and by reviewing documents that will include the subject environmental compliance agreements; related management implementation plans and other management tools, including tracking systems, utilized in implementing environmental compliance agreements; and all correspondence, both internal and external, related to issues concerning missed compliance deadlines.

This assessment will examine the effectiveness of RFO and EG&G management in ensuring compliance commitments are met by taking a horizontal slice across these organizations to identify the extent of coordination and communications involved in implementing environmental compliance agreements. Vertical cuts will be taken on specific milestones to determine the extent to which roles and responsibilities are understood, and to identify common issues of both successes and concerns.

Planned Interviews:

Refer to Appendix F in this report.

ADDITIONAL DOCUMENTS NEEDED:

Refer to Appendix G in this report.

TO BE COMPLETED BY DOE FIELD OFFICE AND SITE CONTRACTOR

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**PROGRESS ASSESSMENT SCOPE
ROCKY FLATS PLANT**

Name:	Andrea J. Heintzelman	Date: 5/17/93	Rev. #: 2
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Discipline:	Environment		
Area of Responsibility:	IAG Environmental Restoration Program		

IDENTIFICATION OF ISSUES:

Issue 1: Evaluate the adequacy of management processes and systems (e.g., planning, policies, procedures, roles, responsibilities, resources, budgeting processes, communications, corrective action, lessons learned, feedback mechanisms, training) developed and implemented for management of environmental restoration activities associated with the 1991 Interagency Agreement (IAG). These management systems will be assessed both horizontally through line organization responsibilities and vertically across site and DOE-HQ programs, i.e., DP and EM. Also, the ability for these established management systems to maintain compliance with the requirements established by the IAG, CERCLA, RCRA, and DOE 5400.4 will be evaluated.

Issue 2: Evaluate management systems for identifying and incorporating omitted Solid Waste Management Units (SWMUs) and Individual Hazardous Substance Sites (IHSS) into the IAG environmental restoration program, a deficiency identified in the 1989 Assessment. This will be particularly relevant in light of potentially new SWMUs and IHSSs being identified with the transfer of DP facilities to EM and added to the existing IAG or a potentially renegotiated IAG.

Related Assessment Findings:

- IWS/AF-1: Lack of a Finalized and Implemented Community Relations Plan for the Rocky Flats Remedial Corrective Action Program.
- IWS/AF-3: Lack of an Administrative Record for the Environmental Restoration Program.
- IWS/AF-4: Inadequate Remedial Investigation/Feasibility Study Work Plan - Low Priority Sites.
- IWS/AF-5: Omission of SWMUs from the Environmental Restoration Program.
- IWS/AF-6: Inadequate Remedial Investigation/Feasibility Study - 881 Hillside.
- IWS/BMP-2: Inadequate Time for Preparation and Review Cycle for Environmental Restoration Documents.
- WM/BMP-1: Management Approach to Environmental Programs.

Related Assessment Action Plan Items:

Issue 1: The RFP Corrective Action Plan (July 20, 1990), gives the following "Responses," corresponding to Issue 1:

- Responsibilities for quality assurance of required IAG documents is assigned to the ER QA/QC program;
- Significant staffing increases since the 1989 Assessment for RCRA/CERCLA program functions have occurred which alleviate many previous environmental restoration management problems;
- Formal training procedures are established under the Quality Assurance Program within Environmental Restoration;
- ER&WM 5-Year Plan ensures adequate funding is available to support the highest priority cleanup and waste operation actions;
- A Community Relations Plan establishes the bases for keeping the public abreast and involved in response action projects at RFP.
- Time and resource allocations for review of Environmental Restoration documents by DOE, EG&G, and regulators is defined in the 1991 IAG schedules. DOE is in process of negotiating with regulators an additional 10 working days (above and beyond the presently stipulated 21 working days for reviewing the draft document and 21 working days to incorporate comments and finalize the documents) for final review and comment prior to submitting deliverables to the regulatory agencies. The regulatory agencies, EPA and CDH have been allocated 41 working days for their review period. Such review periods provide realistic schedules for reviewing RI/FS work plans and reports and ensures production of highest quality documents.

Issue 2: The RFP Corrective Action Plan (July 20, 1990), in response to corresponding Issue 2, states that all SWMUs/IHSSs will include:

- thorough investigations;
- evaluation of extent of contamination and risk;
- appropriate remedial response actions; and
- have activities performed in accordance with applicable laws, regulations and regulatory guidance.

The Rocky Flats Interagency Agreement (January 22, 1991) contains a management system for addressing any newly-discovered areas of contamination.

Other Bases:

Notice of Violation (NOV), March 16, 1993, by Colorado Department of Health (CDH) and the U.S. Environmental Protection Agency (EPA) for RFP's failure to submit a draft Operable Unit 2 Phase II Remedial Facility Investigation/

Remedial Investigation (RFI/RI) Report by March 12, 1993, in accordance with the terms of the Tri-party Interagency Agreement (IAG).

January 22, 1991 Rocky Flats IAG establishes environmental restoration milestones and schedules that DOE, CDH and EPA have agreed are realistic for implementation and completion.

Transition of DP facilities to EM will require potential incorporation of new SWMUs and IHSSs into environmental restoration program. How will this transition of additional sites affect the existing or potential renegotiated IAG?

Overlapping Issues:

Conclusions as to the formality, planning effectiveness, coordination, and adequacy of communication systems will be partially based on the observations made by other Progress Assessment Team members. These overlapping areas include:

Planning and Environmental Compliance Integration: This review will approach environmental restoration planning activities from an overall "program planning" perspective. RFP is presently in the process of transferring Defense Program (DP) management responsibilities to Environmental Restoration and Waste Management (EM). On January 11, 1993, a Memorandum of Agreement (MOA) between the Assistant Secretary for EM and the Assistant Secretary for DP was signed initiating the transfer process. This assessment will attempt to evaluate: (1) the management processes and systems for integration of potentially new SWMUs and IHSSs into the environmental restoration program that are associated with transferred DP facilities; and (2) adequacy of project-specific planning and management systems for environmental restoration activities associated with meeting milestone schedules in the January 22, 1991, Tri-party IAG (Interface with Nicks Williams on Environmental Compliance Integration and Lou Rancitelli on Planning will be required on these issues).

Oversight, Directives, Policies, Procedures: In the area of "Oversight, Directives, Policies, and Procedures," this review will specifically assess: (1) DOE and internal oversight to ensure that DOE environmental restoration activity goals, objectives, and concerns are appropriately addressed; (2) adequacy of established environmental restoration policies; and (3) the extent to which effective implementing procedures have been established for environmental restoration activities (Interface with Bob Compton on Oversight, Directives, Policies, and Procedures will be required on these issues).

Resources: In the area of "resources," this assessment will focus on staff resources within RFO and EG&G. Specifically, this review will assess the adequacy of staff resources within the line, oversight and coordination offices to ensure effective management, oversight, and implementation of the environmental restoration program associated with the IAG (Interface with Chris Van Horn on Human Resource Management will be required on this issue).

Training: In the area of "training," this assessment will focus on training of staff within DOE-RF and EG&G. Specifically, this review will assess the adequacy of formal training systems to ensure that management, oversight, coordination, and operations staff within the line organization have established plans to identify necessary training, as well as receive necessary

training to support site environmental restoration activities (Interface with Chris Van Horn on Training will be required on this issue).

Budgeting: In the area of "budgeting", this assessment will consider what part allocated resources may or may not have contributed to DOE's ability to maintain compliance with the milestones stipulated in the IAG (Interface with Lou Rancitelli on Budgeting will be required on this issue).

Self-Assessment: In the area of "Self-Assessment," this review will specifically assess the adequacy of self-evaluation within DOE line organizations and the Tri-party Agreement coordination office responsible for implementing and coordinating the environmental restoration activities under the IAG (Interface with Marc Jones on Self-Assessment will be required on this issue).

Corrective Action Program: This review will specifically assess the adequacy of RFP's 1989 Corrective Action Plan responses to a select number of environmental restoration findings identified. The assessment will also review the lessons learned program with respect to corrective actions taken on previously missed IAG milestones, implementation of future milestones, and management systems that have worked well in other Agreement/Consent Order programs (Interface with William "Bud" Kehew on Corrective Action Program will be required on this issue).

Environmental QA: This review will specifically assess the DOE and EG&G quality assurance programs developed to ensure that data generated from sampling activities associated with environmental restoration activities, as well as quality of documents submitted to the regulators for their review is of the appropriate quality (Interface with Jim Mellon on Environmental Quality Assurance will be required on this issue).

ASSESSMENT APPROACH:

Performance Objectives to be Evaluated:

1. ES&H Management Performance Objectives and Criteria for Progress Assessments (April 1992)
 - 1.1 Planning (DOE-HQ)
 - 2.1 Planning (RFO)
 - 2.2 Organization (RFO)
 - 2.4.2 Assessment and Review (RFO)
 - 2.4.3 ES&H Management Information System (RFO)
 - 2.6.1 Outreach and Media (RFO)
 - 2.6.2 Regulatory (RFO)
 - 4.1 Planning (EG&G)
 - 4.2 Organization (EG&G)
 - 4.3.2 Staff Development, Training and Certification (EG&G)
 - 4.4.2 Assessment and Review (EG&G)
 - 4.4.3 ES&H Management Information System (EG&G)
 - 4.6.2 Regulatory (EG&G)

The above ES&H Management Performance Objectives and Criteria (POCs) will be supplemented by the following specific Environmental POCs, when and where appropriate:

2. Performance Objectives and Criteria for Conducting DOE Environmental Audits (DOE/EH-0229)
 - IWS.1 "Inactive Site Program Planning"
 - IWS.3 "Site Discovery and Evaluation"
 - IWS.4 "Response Investigation"
 - IWS.5 "Risk Assessment"
 - IWS.8 "Administrative Record/Community Relations"
3. Protocols for Conducting Line Program Environmental Management Audits (February 1992)
 - EM.1 "Organizational Structure"
 - EM.2 "Culture and Attitude"
 - EM.3 "Environmental Protection Programs"
 - EM.4 "Formality of Environmental Programs"
 - EM.5 "Internal and External Communication"
 - EM.6 "Staff Resources, Training and Development"
 - EM.7 "Program Evaluation and Corrective Action"
 - EM.8 "Environmental Planning and Risk Management"

Description of Rationale and Approach:

1. A horizontal assessment of DOE-HQ, RFO, and EG&G Rocky Flats will be made through a process of document reviews and interviews, which will determine the adequacy of management systems to direct, assign responsibility for, and implement the IAG milestones. Documents to be reviewed include internal and external communications, correspondence, management plans, agreements, and the like.
2. Cognizant personnel responsible for various aspects of the restoration activities associated with the IAG process will be interviewed for adequacy of planning, oversight, effective implementation, coordination and tracking of restoration activities and IAG milestones. Contractor reviews will focus on EG&G Rocky Flats.
3. One or more IAG milestones pending and one or more milestones missed will be assessed to identify strengths and weaknesses in the management processes and management systems for maintaining compliance with terms of the IAG.
4. Conclusions drawn as to the adequacy and effectiveness of the IAG management process and management systems will consider data obtained from other Team members. Close, daily interface with team members assessing relevant overlapping areas will be maintained to ensure consistency of information, facts, and quality of information.
5. A balanced approach to the entire assessment will be sought through the identification of management systems within RFO and/or EG&G that demonstrate exceptional performance or achievement of excellence. This may be a noteworthy practice, activity, or program that clearly exceeds the acceptable level of performance and that warrants documentation

supported by findings of fact. The strength may have general application to other DOE programs or operations.

Planned Interviews:

Refer to Appendix F in this report.

ADDITIONAL DOCUMENTS NEEDED:

Refer to Appendix G in this report.

TO BE COMPLETED BY DOE FIELD OFFICE AND SITE CONTRACTOR			
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**PROGRESS ASSESSMENT SCOPE
ROCKY FLATS PLANT**

Name:	Charles Lewis	Date: 5/17/93	Rev. #: 3
Telephone #:	202/586-0466	Fax #: 202/586-5200	
Discipline:	Environment		
Area of Responsibility:	Surface Water Program Management		

IDENTIFICATION OF ISSUES:

Identification of Issues to Be Addressed:

Issue 1: Evaluation of formal RFO and EG&G management systems and program interfaces in place to prevent, control and report unplanned releases to surface waters. Review programs plans and procedures in place to prevent, control and report unplanned releases to the sanitary wastewater collection system, as required by compliance agreement.

Issue 2: Evaluate EH, EM, RFO and EG&G management systems and program interfaces, in place or planned, to implement the draft Surface Water Management Program. Review program interfaces related to onsite wastewater treatment systems, storm water discharges, remedial actions and offsite improvements which were agreed upon by DOE and local cities.

Related Tiger Team Findings:

Issue 1:

- SW/BMP-1: Deficiencies in Draft Best Management Practice/Spill Prevention Containment and Control Plan
- SW/BMP-3: Inadequate Protocols for Timely Identification of Pollutant Releases to Sewage Treatment Plant
- IWS/BMP-1: Lack of a Unified Spill Reporting and Notification Procedure

Issue 2: Review of these findings as a whole with respect to sitewide management of surface water discharges.

- SW/AF-3: Unpermitted Discharges from East and West Gate Guard Posts
- SW/AF-7: Deficiencies at the Spray Irrigation Site
- SW/BMP-2: Lack of Flow Measurement at C-1 Pond
- SW/BMP-4: Cooling Tower Blowdown at Building 774
- SW/BMP-6: Laundry Operations

Related Tiger Team Action Plan Items:

Issue 1:

- SW/AF-2: STP operator certification and training
- SW/BMP-1: BMP/SPCC Plan revision, review and approval status
- SW/BMP-3: Protocol development to analysis and confirm source of releases to STP

- IWS/BMP-1: Unplanned Event Information and Reporting System and ongoing oversight by multi-agency task group
- Issue 2: Review corrective actions as a whole to address sitewide surface water protection program.
- SW/AF-1: Plans to negotiate a clear, concise protocol on data reporting the NPDES renewal.
- SW/BMP-2: Review how discharge flow data is used and how determination not to report information under NPDES permit was made.
- SW/BMP-4: Review planned survey of cooling towers' blowdown discharges, and status of connections to STP.
- SW/BMP-6: Determine if procurement of laundry equipment took into account water usage rates. Review reference to stated policy prohibiting laundry discharge to Sanitary Waste Stream.

Other Bases:

- Issue 1: Rocky Flats Occurrence Report #2097 Acid Release of 12/21/92.
- Federal Facility Compliance Agreement (NPDES, FFCA); March 25, 1991. Issues arising from the chromic acid spill at RFP in March 1989. Specifically, the Drainage Evaluation Study, the Tank Management Plan and the STP Compliance Plan.
- Issue 2: Report To Congress, Rocky Flats Transition Plan, July 1992 page 30, 10.4 Surface-water management. "The Department is committed to providing an environmentally sound, technically correct, and publicly acceptable long-term program for surface-water management and to this end has developed a Surface-Water Management Plan. The implementation of this plan will both reduce the volume of water and pollutants and provide increased protection for adjacent cities and downstream water users."
- Local Communities Water Diversion Project; October 23, 1990. The goal of the program is to isolate RFP effluent and runoff, so as to ensure that water from RFP does not enter the Broomfield or Westminster drinking water supplies.
- Draft "Rocky Flats Surface Water Management Plan, January 1992" or most current revision.

Overlapping Issues:

Corrective Action: Verification and validation process reflected in site "evidence files" will be evaluated for: IWS/BMP-01, SW/BMP-03, SW/BMP-01.

Self-Assessment: Determine if information generated through Occurrence Report investigation related to 12/92 acid spill was factored into a lessons learned program. Evaluate program or building specific EG&G "self-evaluation" records.

Oversight, Directives, Policies and Procedure: Assessment will look at both RFO and contractor oversight roles and responsibilities related to responding to unplanned releases. Evaluation from operational level to program management level related to policies, directives and procedures with respect to formal release response programs, plans and procedures related to releases to the sanitary wastewater collection program.

Human Resources: Review STP operator certification program.

Organization: Management systems and program interfaces related to draft sitewide Surface Water Management Plan. Roles and responsibilities for surface water management within RFO and EG&G programs. Review RFO management system related to grant funding local communities offsite improvements.

Environmental IAG: Interface between IAG negotiations and the draft Surface Water Management Plan regarding surface water pond regulatory program management.

Environmental QA: Review of sampling and analysis QA requirements for expedited response to unplanned release to STP, i.e., sampling, sample transportation, laboratory reporting procedures.

Environmental Compliance Integration: Review status of FFCA related to NPDES issues.

Environmental Waste Characterization: Review of waste characterization procedures for unplanned releases to STP.

ASSESSMENT APPROACH:

Performance Objectives to be Evaluated:

1. Performance Objectives and Criteria for Conducting DOE Environmental Audits (DOE/EH-0229)
 - SW.1 Discharge Permits
 - SW.2 Compliance with Applicable Permit Requirements
 - SW.3 Surface Water and Drinking Water Protection Programs
 - SW.4 Monitoring, Sampling, and Analysis Programs
 - SW.5 Special Certification Requirements for Water-Related Operations
 - SW.6 Wastewater Treatment Plant Design, Operation, and Maintenance
2. Environment, Safety and Health Management Performance Objectives and Criteria for Progress Assessments (Draft, April 1992)

Description and Rationale of Approach:

Issue 1: The assessment approach will include interviews, site inspections and review of documentation related to programs involved in prevention and response to unplanned releases. The assessment will review formal site programs and procedures, environmental program interfaces, staff training to the program and procedures, and regulatory compliance. The ability of the site to document past performance at the contractor operation and first line supervisor level, and at the Field Office occurrence reporting/field verification level will be evaluated. The assessment will include review of documents and performance criteria used to closeout specific corrective

actions plan items related to the related to actual or near miss release events.

Issue 2: An evaluation of the management systems intended to implement the draft sitewide Surface Water Management Plan will be conducted through document review and interviews of program managers. The review of Issue B will focus on evaluation of programmatic roles and responsibilities sitewide and plans for long term surface water program management. The review will not include a technical evaluations of specific engineering plans proposed under the Surface Water Management Plan.

Planned Interviews:

Refer to Appendix F in this report.

ADDITIONAL DOCUMENTS NEEDED:

Refer to Appendix G in this report.

TO BE COMPLETED BY DOE FIELD OFFICE AND SITE CONTRACTOR				
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**PROGRESS ASSESSMENT SCOPE
ROCKY FLATS PLANT**

Name:	Donald Neal	Date: 5/17/93	Rev. #: 2
Telephone #:	617/498-5374	Fax #: 617/498-7198	
Discipline:	Environmental		
Area of Responsibility:	Waste Characterization Program		

IDENTIFICATION OF ISSUES:

Identification of Issues to Be Addressed:

A key issue raised by the 1989 Assessment of the Rocky Flats Plant was inadequate waste characterization. The major issues at that time involved deficiencies in waste generator training, inadequacies in the Waste Characterization Study required by the June 1986 Compliance Agreement, and inaccurate characterization of radionuclides and hazardous constituents. Three aspects of the waste characterization system at RFP will be investigated:

- Issue 1:** **Waste Characterization Program** - Waste characterization at RFP will be examined to ascertain the effectiveness of programs to comply with Federal, state, and local requirements. In particular, progress since the Tiger Team Assessment will be assessed in the areas of sampling and analysis, plutonium residue characterization, radionuclide determinations, interpretation of analytical results, and overall program integration and coordination. Other pertinent issues include verification of generator characterizations by Waste Operations, implementation of waste acceptance criteria for the Nevada Test Site and the Waste Isolation Pilot Project, quality assurance, and integration with the waste minimization plan.
- Issue 2:** **Waste Characterization Program Oversight** - Both DOE and EG&G have a responsibility to oversee all aspects of waste characterization at RFP. Some of the deficiencies in waste characterization identified by the 1989 Assessment were partially attributed to inadequate oversight. Specific issues to be addressed include: oversight plans; formality of operations with respect to oversight; qualifications of oversight personnel; and focus of oversight activities (i.e., compliance-oriented vs. programmatic).
- Issue 3:** **Waste Characterization Training** - The 1989 Assessment recommended that additional waste characterization training be provided because the existing system of unit-specific training programs was not fully effective. Pertinent issues include consistency of waste generator training, mechanisms to modify courses based on operating experiences, systems for tracking and determining which personnel require training, and appropriate job descriptions for personnel involved with operation 90-day hazardous waste accumulation areas.

Related Tiger Team Findings:

WM/AF-1, WM/AF-2, WM/AF-3, WM/AF-5, WM/AF-6, WM/AF-8, WM/AF-9, WM/AF-10, WM/BMP-1, WM/BMP-2, WM/BMP-4, WM/BMP-7, RAD/AF-2, RAD/AF-3.

Related Tiger Team Action Plan Items:

WM/AF-1, WM/AF-2, WM/AF-3, WM/AF-5, WM/AF-6, WM/AF-8, WM/AF-9, WM/AF-10, WM/BMP-1, WM/BMP-2, WM/BMP-4, WM/BMP-7, RAD/AF-2, RAD/AF-3.

Other Bases:

Compliance agreements and permits.

Overlapping Issues:

Overlapping issues occur primarily with the core management areas of oversight, self-assessment, corrective action plan implementation, training (human resources), planning, and procedures (directive systems). The management specialists responsible for these areas will provide specific informational requirements. In addition, several of the waste characterization issues relate to environmental quality assurance. The waste management and environmental quality assurance disciplines will be coordinated such that overlap does not occur.

ASSESSMENT APPROACH:

Performance Objectives to be Evaluated:

Performance objectives and criteria pertain to waste characterization, waste management training, environmental quality assurance, and conduct of operations. The basic performance objectives include relevant Federal and state regulations as well as DOE Orders: 40 CFR 260, 261, 262, 264, 265, and 268; Colorado Hazardous Waste Management Regulations (CHWMR); and DOE Orders 5400.1, 5820.2A, 5400.3, 5480.19, and 5700.6C. Additional performance objectives are various Waste Acceptance Criteria from commercial treatment, storage and disposal facilities that accept waste from RFP, including NTS and WIPP. Finally, the performance criteria from Appendix D of the DOE Progress Assessment Manual will be used to assess programmatic aspects. Relevant criteria include: WM.1, Characterization/Certification; WM.3, Accumulation, Transfer, and Storage; WM.4, Treatment/Recycling; and WM.5, Disposal.

Description and Rationale of Approach:

The assessment of waste management issues involves a "vertical" examination of management systems within DOE and EG&G that enable compliance with the performance objectives and criteria. The basic methodology consists of: understanding management systems, interviewing responsible line management personnel, inspecting facilities, reviewing appropriate plans, procedures and analyses, and observing aspects of program implementation.

1. **Waste Characterization Program** - The existing waste characterization programs and plans at RFP will be reviewed. Coordination between the various line organizations that generate waste and the Environmental and Waste Management (EWM) organization will be determined. Coordination

between the organizations within EWM (Analytical Labs, Waste Operations, Waste Programs) will be examined to determine if the waste characterization program is effectively integrated. Within the EWM, mechanisms for ensuring compliance with waste acceptance criteria from commercial TSDFs, DOE facilities (Nevada Test Site, WIPP), and RFP storage facilities will be assessed. Inspections of satellite and 90-day waste accumulation areas, and interviews with personnel responsible for waste characterization, tracking, sampling, and analysis will be performed.

2. **Waste Characterization Program Oversight** - Formal plans and procedures used to oversee waste characterization at RFP will be assessed for consistency with DOE 5480.19, and 5700.6C. Qualifications and training of personnel responsible for oversight program implementation will be evaluated. The line organizations responsible for waste management oversight at RFO and EG&G will be interviewed to identify any communication or responsibility gaps that could result in inadequate oversight. Consistency in oversight as well as documentation of oversight findings and corrective action implementation will be assessed. Finally, lines of communication between RFO and EG&G with regard to waste characterization, waste acceptance criteria, and waste generation reporting will be critically evaluated.
3. **Training** - The system for training waste generators and waste management personnel will be examined to determine if compliance with Federal, state, and DOE requirements can be reasonably ensured. Included in the review will be tracking, course revision procedures, and the process by which personnel are assigned to training. The effectiveness of training will be determined through interviews with waste generators. Training of EWM personnel involved with waste characterization will also be assessed. The closeout of training-related Tiger Team findings will be reviewed.

Planned Interviews:

Refer to Appendix F in this report.

ADDITIONAL DOCUMENTS NEEDED:

Refer to Appendix G in this report.

TO BE COMPLETED BY DOE FIELD OFFICE AND SITE CONTRACTOR				
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**PROGRESS ASSESSMENT SCOPE
ROCKY FLATS PLANT**

Name:	James W. Melloni	Date:	5/17/93	Rev. #:	2
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Discipline:	Environment				
Area of Responsibility:	Environmental Quality Assurance				

IDENTIFICATION OF ISSUES:

Identification of Issues to Be Addressed:

- Issue 1: The level of implementation and adequacy of environmental quality assurance program as it is applied to environmental monitoring and surveillance, particularly the onsite sampling and analysis activities, and the degree to which environmental quality assurance is institutionalized at the Rocky Flats Plant.
- Issue 2: The adequacy of the environmental quality assurance program to ensure the validity, reliability, traceability, and defensibility of data received from offsite analytical laboratories.
- Issue 3: The amount of improvement that has been made in the environmental quality assurance program at Rocky Flats Plant since the 1989 Assessment.
- Issue 4: The adequacy of management's systems at EG&G, RFO, and DOE-HQ to ensure the continued effectiveness of the environmental quality assurance program as it is applied to environmental monitoring and surveillance at RFP.

Related Tiger Team Findings:

WM/BMP-1, RAD/AF-2, RAD/AF-3, RAD/AF-4, RAD/AF-5, QA/AF-1, QA/AF-2, QA/BMP-1, QA/BMP-2, SW/AF-4.

Related Tiger Team Action Plan Items:

WM/BMP-1, RAD/AF-2, RAD/AF-3, RAD/AF-4, RAD/AF-5, QA/AF-1, QA/AF-2, QA/BMP-1, QA/BMP-2, SW/AF-4.

Other Bases:

Overlapping Issues:

Because the quality assurance assessment will deal with the QA program as it is applied to environmental sampling and analysis, it will cover a number of overlapping issues:

Corrective Action The QA assessment will address the extent and effectiveness of the corrective actions developed following the 1989 Assessment.

Oversight The QA assessment will evaluate the systems in place to oversee the environmental sampling and analysis program. This will include internal (EG&G), independent (EG&G), and external (RFO and HQ).

Procedures The QA assessment will evaluate whether adequate procedures are being used in the performance of environmental sampling and analysis (S&A) and in the management systems implemented to oversee the S&A activities.

Planning The QA assessment will evaluate whether the environmental QA program has been implemented in accordance with documented, approved plans.

Organization The QA assessment will evaluate whether the organizations tasked with sampling, analysis, and oversight are defined with clear scope and the roles and responsibilities are understood.

Environmental Restoration and IAG The QA assessment will evaluate the systems in place to ensure the accuracy and reliability of environmental data reports and examine actions taken as a result of rejected data reports.

Surface Water and Waste Characterization The QA assessment will require input from the waste characterization and surface water specialists concerning the validity of procedures, methods, and practices being used in support of these environmental programs.

ASSESSMENT APPROACH:

Performance Objectives to be Evaluated:

Quality assurance POCs QA-1, QA-2, QA-3, and QA-4.

Description and Rationale of Approach:

The approach of this assessment will be to examine the existing programs for onsite sampling and analysis. Included in this examination will be tours of the Bldg. 173 HS&E Laboratory, the Bldg. 881 General Laboratory, and the Bldg. 881 Chemical Standards Laboratory. During the tours, interviews with laboratory management and personnel will be conducted. Laboratory plans and procedures will be reviewed and practices will be witnessed. In addition, field sampling events will be witnessed in order that techniques, procedures, and sample handling may be reviewed.

Because RFP currently utilizes the services of as many as fifteen different offsite laboratories, the program in place for qualifying, controlling, reviewing, and overseeing these laboratories will be reviewed. The methods used to determine data quality objectives will be examined.

The management systems that are responsible for oversight of the sampling and analysis activities at RFP will be reviewed to determine whether they are implemented and the level to which they are implemented.

Throughout the assessment, the amount of improvement witnessed will be measured against the 1989 Corrective Action Plan in order to determine whether sufficient progress has been made. In addition, the degree to which the concept of environmental quality assurance has been internalized and institutionalized at RFP will be evaluated.

Planned Interviews:

Refer to Appendix F in this report.

ADDITIONAL DOCUMENTS NEEDED:

Refer to Appendix G in this report.

TO BE COMPLETED BY DOE FIELD OFFICE AND SITE CONTRACTOR				
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**PROGRESS ASSESSMENT SCOPE
ROCKY FLATS PLANT**

Name:	Jack J. Janda	Date:	5/17/93	Rev. #:	3
Telephone #:	319/745-8734	Fax #:	319/754-8734		
Discipline:	Safety and Health				
Area of Responsibility:	Worker Safety and OSHA Programs				

IDENTIFICATION OF ISSUES:

Identification of Issues to Be Addressed:

As a result of the 1989 Assessment, independent evaluation of operations and practices at the Rocky Flats Plant (RFP), EG&G identified five RFP-wide root cause areas (management; formality of operations; procedures and documentation; training; and facility improvement) requiring substantial improvement in order to achieve "operational excellence." I will specifically consider the following issues:

- Issue 1: Have RFO and EG&G developed and implemented effective systems for identifying, tracking, correcting and trending of OS&H deficiencies resulting from OS&H appraisals?
- Issue 2: What policies and programs have been developed and implemented by RFO and EG&G to ensure that OS&H inspection and oversight activities are conducted by trained and qualified staffs?
- Issue 3: Has Rocky Flats management formalized and implemented policies, procedures and programs to ensure that proactive OS&H compliance activities are conducted sitewide?
- Issue 4: Are specific and measurable OS&H goals and objectives reflected in managerial, supervisory and OS&H professional staff performance appraisal plans?
- Issue 5: Is RFP management promoting a positive, proactive worker safety "culture"?

Related Tiger Team Findings:

The 1989 Assessment report focused primarily on environmental issues and did not specifically address worker safety or OSHA programs.

However the report did identify issues that could adversely impact effective management of OS&H programs. For example, at the time of the 1989 Assessment it was noted that implementation of the environmental programs lacked coordination and were hindered by poor communication. The 1989 Assessment further observed that lines of authority and responsibility were determined to be fragmented and lacking clear definition.

Since the assessment, the Rocky Flats Plant (RFP) has undergone a change in operating contractors from Rockwell International, the operating contractor at the time of the 1989 Assessment, to EG&G who took over plant operations on

January 1, 1990. As a result of this transition, the 1989 Assessment safety team acknowledged several proactive transitional improvement actions taken to strengthen the RFP overall ES&H program. These actions included:

- Strengthening line management responsibility and accountability of safety, quality, and environmental compliance.
- Changing "culture" for DOE and contractor staffs by enhancement of formality and discipline of operations, and ensuring supervisory responsibility and accountability for safety, quality, and environmental compliance.

Related Tiger Team Action Plan Items:

None

Other Bases:

Other appraisals and self-assessments conducted since the Special Assessment Team evaluation, e.g. DP Operational Readiness Reviews, etc.

Applicable DOE Orders and OSHA standards and regulations.

OSHA voluntary "Safety and Health Program Management Guidelines."

Overlapping Issues:

Management areas, such as, planning, organization, staffing, training, oversight, policy and procedures, will be included in my review. Results will be furnished to the Progress Assessment Team members. Similarly, incidence of weakness or strength, identified by those Team members, in the OS&H area will be made available to me.

ASSESSMENT APPROACH:

Performance Objectives to be Evaluated:

ES&H Management Performance Objectives and Criteria for Progress Assessments (April 1992): Performance Criteria located in sections 2.2.1 and 4.2.1; 2.3.1.2 and 4.3.1.2; 2.3.2.1 and 4.3.2.1; 2.3.2.2 and 4.3.2.2.; 2.3.4.1 and 4.3.4.1; 2.4.2.4 and 4.4.2.4; 2.4.2.5 and 4.4.2.5; 2.5.2 and 4.5.2; 2.5.5 and 4.5.5; 2.5.7 and 4.5.7.

Supplemental - Performance Objectives and Criteria for Technical Safety Appraisals at Department of Energy Facilities and Sites (June 1990): Performance Criteria located in sections PP.1-3 and OS.1-3; PP.1-4 and OS.1-4; PP.1-8 and OS.1-8; PP.1-10 and OS.1-9; PP.2-8 and OS.2-8; PP.2-9 and OS.2-9; PP.3-1 and OS.3-1; PP.3-5, OS.3-6 and WS.1-3; PP.5-6 and OS.5-3; PP.5-7 and OS.5-4.

Description and Rationale of Approach:

Interviews of DOE-HQ personnel who have responsibility for RFP OS&H oversight; RFO and EG&G OS&H managerial, supervisory and professional field staff coupled with reviews of programmatic documents, (e.g., with emphasis directed towards

the Rocky Flats worker safety and OSHA compliance effort), will be utilized to make determinations concerning the success of establishing, implementing and promoting a positive proactive safety culture which results in an effective OS&H program.

Field visits, concentrating on OSHA compliance efforts at EG&G general industry (e.g. electrical safety, machine guarding, hazard communication etc.) and construction sites, will provide a vertical sampling of the effectiveness of management effort at: (1) OS&H oversight; (2) tracking and trending of OS&H issues; (3) effectiveness of OS&H monitoring programs; (4) training and development of personnel charged with OS&H responsibilities; and (5) accountability of OS&H programs and personnel.

Planned Interviews:

Refer to Appendix F in this report.

ADDITIONAL DOCUMENTS NEEDED:

Refer to Appendix G in this report.

TO BE COMPLETED BY DOE FIELD OFFICE AND SITE CONTRACTOR				
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**PROGRESS ASSESSMENT SCOPE
ROCKY FLATS PLANT**

Name:	Walter L. Futrell	Date: 5/17/93	Rev. # 2
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Discipline:	Safety & Health		
Area of Responsibility:	Fire Protection Program		

IDENTIFICATION OF ISSUES:

Identification of Issues to Be Addressed:

- Issue 1: Adequacy of the RFP Fire Protection program, including its management, development of policy and procedures, assessment and implementation of program requirements from DOE 5480.7A, implementation of fire protection appraisal and fire hazard analysis process, and fire protection system maintenance, including impairment management. An important element in this process will be review of self-assessments of the fire protection program which have been conducted by EG&G and RFO. Direction and guidance given by DOE Headquarters to RFO and EG&G for enhancing the existing fire protection program, and in achieving an acceptable level of fire protection within facilities.
- Issue 2: A review will be made of the fire protection program oversight as carried out by organizations not immediately connected to the EG&G RFP fire protection organization, including its effectiveness, selection process, frequencies and qualification of staff.
- Issue 3: The effectiveness of EG&G and RFO in applying fire protection related lessons learned and successful issue resolution activities from operational review process of Buildings 559 and 707 to other facilities at Rocky Flats.
- Issue 4: Adequacy of the process by which DOE and EG&G ensures that an acceptable level of fire protection is maintained during and following the process of transferring responsibilities from DP to EM in order to ensure protection of the public, environment and workers.

Related Tiger Team Findings:

No findings in the 1989 Assessment related directly to fire protection. Findings from previous TSA's did apply to fire protection and they will be referenced as appropriate.

Related Tiger Team Action Plan Items:

Not applicable. As previously mentioned, the 1989 Assessment did not address fire protection.

Other Bases:

DOE Orders and mandatory standards, Operational Readiness Review-Rocky Flats Plant Building 707, Report of the Oversight Assessment of the Operational Readiness Review of the Rocky Flats Plant Building 707, three Technical Safety Appraisals, Bldg. 707 conducted in July 1986, Bldgs. 771/774 conducted in October/November 1986, Bldg. 776/777 conducted in January 1988, and a site-wide TSA conducted in November/December 1988, DOE Headquarters Policy letter dated November 7, 1992, which addresses conducting Fire Hazard Analysis of nuclear facilities, and other EG&G fire protection related documents as may be applicable.

Overlapping Issues:

Requirements for self-assessment, corrective action implementation, oversight, tracking, trending, training, lessons-learned, and root cause analysis as they relate to the overall fire protection program. Management (planning, prioritization of required corrective actions, allocation of resources, & program progress, self-assessment, policies & procedures) as it relates to the fire protection program including but not limited to the fire department, fire protection engineering, oversight, etc.

ASSESSMENT APPROACH:**Performance Objectives to be Evaluated:**

FP.1, Organization and Administration

FP.6, Fire Department Operations

FP.7, Program Implementation

Description and Rationale of Approach:

1. The approach will consist of both a horizontal review of the overall fire protection program as well as vertical reviews of selected fire protection program elements, i.e., oversight.
2. Review of applicable fire protection related documentation, including but not limited to previous audits, appraisals, reviews and readiness reports, policy and procedure documents, self-assessment documents, and oversight assessment reports.
3. Field verifications of reported conditions as deemed necessary.
4. Interviews with RFO and EG&G personnel having responsibilities for or within the RFP fire protection program.
5. Interviews (by other team members) with DP and EM headquarters personnel having fire protection responsibilities for ensuring that an acceptable level of fire protection is maintained at Rocky Flats Plant.

Planned Interviews:

Refer to Appendix F in this report.

ADDITIONAL DOCUMENTS NEEDED:

Refer to Appendix G in this report.

TO BE COMPLETED BY DOE FIELD OFFICE AND SITE CONTRACTOR				
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**PROGRESS ASSESSMENT SCOPE
ROCKY FLATS PLANT**

Name:	B. Holder/L. Munson	Date:	5/17/93	Rev. #:	2
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Discipline:	Safety and Health				
Area of Responsibility:	Industrial Hygiene Program				

IDENTIFICATION OF ISSUES:

Identification of Issues to Be Addressed:

As the result of the 1989 Assessment, five RFP-wide root cause areas (management; disciplined, formality of operations; procedures and documentation; focused training; and facility improvement) that needed substantial improvements in order to achieve operational excellence.

Issue 1: Has RFO and EG&G developed adequate and formal industrial hygiene and worker health program management systems required for an effective RFP sitewide program implementation?

Issue 2: What is the adequacy and degree of formality by DP, RFO and EG&G in prioritization and integration of budget and funding mechanisms to support the implementation of RFP industrial hygiene programs?

Issue 3: Have RFO and EG&G developed and implemented effective systems for identifying, tracking, correcting and trending deficiencies in industrial hygiene and worker health resulting from OS&H appraisals?

Related Tiger Team Findings:

The 1989 Assessment focused on environmental issues and did not address industrial hygiene or worker health.

However, the 1989 Assessment report identified deficiencies that could adversely impact an effective OS&H program. For example, WM/BMP-1 stated that at the time of this assessment "Implementation of the environmental programs at the Rocky Flats Plant (RFP) lacks coordination, and is hindered by poor communication. The lines of authority are fragmented and not clearly defined."

Another area where deficiencies were observed that could adversely impact worker safety and health was toxic and chemical materials. For example, improper labeling of drums and storage tanks, improper storage of chemicals and asbestos disposal and inadequate training for spill cleanup and handling of hazardous chemicals.

Since the 1989 Assessment, the Rocky Flats Plant has changed operating contractors from Rockwell International, the operating contractor at the time of the assessment, to EG&G who became the operating contractor on January 1, 1990. As a result of this transition, the safety subteam noted several transition improvements toward strengthening the overall Occupational Safety

and Health Program including: (1) strengthening line management responsibility and accountability of safety, quality, and environmental compliance; and (2) changing culture for DOE and contractor staff by upgrading formality and discipline of operations, and upgrading supervisor responsibility and accountability for safety, quality, and environmental compliance.

Related Tiger Team Action Plan Items:

N/A

Other Bases:

DOE Orders, OSHA Regulations 29 CFR 1910 series, other operational readiness reviews, appraisals and self-assessments since the 1989 Assessment evaluation and performance objectives in the ES&H Progress Assessment Manual will form the basis of this review.

Overlapping Issues:

Industrial Hygiene and Worker Health will include management areas of this assessment such as, planning, corrective actions, oversight, staffing, policies and procedures, and training. Additionally, the review of industrial hygiene as related to activities in these overlapping areas will be coordinated with the EH Progress Assessment Team members who have the primary responsibility for evaluating these areas.

ASSESSMENT APPROACH:

It was noted the 1989 Technical Safety Appraisal (TSA) covered the effectiveness and improvements in the RFP safety program across the site, evaluating progress to date against standards of accepted practice. This appraisal included coverage of the timeliness and effectiveness of actions taken in response to the recommendations/concerns in three previous TSAs of RFP Building 707 conducted in July 1986, Buildings 771/774 conducted in October/November 1986, and Buildings 776/77 conducted in January/February 1988. The TSA Team noted that Rockwell International was focused on aggressively responding to individual recommendations and concerns from previous TSAs rather than pursuing an integrated systematic and planned approach designed to achieve and maintain safety excellence. This appraisal also noted 15 recommendations/concerns in the industrial hygiene area. Items satisfactorily corrected required implementing formal programs in carcinogen control, hazard communication, and QA for respiratory protection. In addition, necessary improvements were noted in documentation and control systems for tracking technical recommendation, equipment calibrations and maintenance, consolidation of databases for potential occupational exposure records, and procedures for workplace hazard labeling of chemicals. Three areas remained open: staffing, routine monitoring, and QA.

The 1989 TSA addressed recommendations/concerns OA-1 Through A-3; R-64 (PP.1-1); R-65 (PP.3-1); R-66 (PP.5-1); R-67 (PP.5-2), R-68 (PP.5-3) R-124 (RP.9-1); R-125 (RP.9-2); R-134 (PP.1-1); R-135 (PP.4-1); R-136 (PP.5-1), R-137 (PP.5-2); R-169 (AX.4-1), R-170 (AX.4-2); R-217 (PP.2-1); R-219 (PP.3-1); R-220 (PP.4-1); R-221 (PP.5-1); R-222 (PP.5-2). The progress of implementation of these recommendations/concerns will be considered.

ES&H Management Performance Objective and Criteria for Progress Assessment (April 1992), Sections 1.1 through 1.5 (DOE-HQ); Sections 2.1 through 2.6 (RFO); and Sections 4.1 through 4.6 (EG&G).

Environment, Safety and Health Performance Objective and Criteria for Technical Safety Appraisals (June 1990); Sections OA.1 through OA.3, TC.1, TC.10, WS.1 through WS.6, IH.1 through IH.6, PP.1 through PP.6.

US DOE Self-Assessment Guidance Document dated December 1992 will be used to evaluate the self-assessment program.

Description and Rationale of Approach:

Interviews will be conducted with DOE-HQ personnel who have responsibility for RFP industrial hygiene and worker health oversight; RFO and EG&G Safety and Health Managerial, supervisory and professional field staff; RFO and EG&G industrial hygiene staff; EG&G training staff; EG&G line management; RFO Facilities Representative; and EG&G workers. In addition, EG&G Health and Safety Program Plan, program procedures, plans, manuals, policies, directives, guidance will be reviewed.

Limited field visits of selected facilities and an environmental restoration site will be performed to assess management support and the effectiveness of the implementation of industrial hygiene program as identified within action plans and progress assessment performance objectives. Vertical sampling will be conducted in the programmatic areas of respiratory protection/breathing air, hazard communication, confined spaces, training, routine monitoring, facility baseline hazard evaluation, tracking and trending of industrial hygiene and worker health issues, field surveillance and self-assessments, and quality assurance in order to determine the effectiveness of industrial hygiene implementation.

Planned Interviews:

Refer to Appendix F in this report.

ADDITIONAL DOCUMENTS NEEDED:

Refer to Appendix G in this report.

TO BE COMPLETED BY DOE FIELD OFFICE AND SITE CONTRACTOR				
DOE Counterpart	Name:	Robert M. Ostermeyer Janet Torma-Krajewski		
	Telephone #:	303/966-4865 303/966-7165	Fax #:	303/966-4763
Contractor Counterpart	Name:	Bret M. Clausen		
	Telephone #:	303/966-7781	Fax #:	303/966-4925

Appendix E

Schedule of Onsite Activities

SCHEDULE OF ONSITE ACTIVITIES

Week 1	Mon 5/17/93	Tue 5/18/93	Wed 5/19/93	Thur 5/20/93	Fri 5/21/93
<p>W. Kahew</p> <p>am</p> <p>Corrective Action Programs</p>	<ul style="list-style-type: none"> Interviews M. Berman, EG&G J. Davis, EG&G T. Medahl, EG&G F. Flewellling, EG&G 	<ul style="list-style-type: none"> Interviews R. Wilkinson, EG&G J. Riley, EG&G T. Lukow, RFO M. Van Der Puy, RFO M. McCormick, RFO D. Sargent, RFO 	<ul style="list-style-type: none"> Interviews W. Kirby, EG&G M. Jennett, EG&G E. Schneider, EG&G 	<ul style="list-style-type: none"> Interviews A. Lopez, RFO E. Robbins, RFO J. McDonough, RFO 	<ul style="list-style-type: none"> Followup Interviews W. Bennett, EG&G C. Deitesfeld, EG&G
	<ul style="list-style-type: none"> Interviews K. Adams, EG&G R. Benedetti, EG&G T. Schmidt, EG&G G. Setlock, EG&G S. Weste, EG&G P. Fuller, EG&G K. Stovall, EG&G 	<ul style="list-style-type: none"> Interviews R. Craun, RFO V. Witherill, RFO S. Olinger, RFO 	<ul style="list-style-type: none"> Interviews J. Hartman, RFO F. Lockhart, RFO R. Schessburger, RFO S. Olinger, RFO 	<ul style="list-style-type: none"> Followup interviews, document review 	<ul style="list-style-type: none"> Draft report writing; topical Overviews, Concerns, Strengths, and Weaknesses

SCHEDULE OF ONSITE ACTIVITIES

Week 1	Mon 5/17/93	Tue 5/18/93	Wed 5/19/93	Thur 5/20/93	Fri 5/21/93
M. Jones Self-Assessment Programs	<ul style="list-style-type: none"> Interviews T. Medahl, EC&G G. Francis, EC&G M. Karol, RFO D. Sargent, RFO 	<ul style="list-style-type: none"> Interviews J. Martman, RFO M. McBride, RFO S. Olinger, RFO E. Robbins, RFO 	<ul style="list-style-type: none"> Interviews C. Gilbert, DP-9 D. Simonsen, RFO G. Cannode, RFO T. Anderson, RFO M. McBride, RFO 	<ul style="list-style-type: none"> Interviews J. Lebew, EC&G B. Larson, EC&G B. Mensley, EC&G C. Tuck, EC&G J. Koemel, EC&G 	<ul style="list-style-type: none"> Followup interviews B. Glover, EC&G
	<ul style="list-style-type: none"> Interviews J. Riley, EC&G J. Davis, EC&G 	<ul style="list-style-type: none"> Interviews J. Todd, EC&G E. Schneider, EC&G K. Stovall, EC&G C. Deitesfeld, EC&G B. Glover, EC&G R. Farrell, EC&G 	<ul style="list-style-type: none"> Interviews M. Mann, EC&G A. Strange, EC&G E. Lesses, EC&G C. Ferguson, EC&G G. Thioppin, EC&G 	<ul style="list-style-type: none"> Followup interviews, document review 	<ul style="list-style-type: none"> Draft report writing; topical Overviews, Concerns, Strengths, and Weaknesses

SCHEDULE OF ONSITE ACTIVITIES

Week 1	Mon 5/17/93	Tue 5/18/93	Wed 5/19/93	Thur 5/20/93	Fri 5/21/93
B. Compton am Oversight; Directives, Policies and Procedures	<ul style="list-style-type: none"> Interviews P. Beck, EC&G L. Block, EC&G 	<ul style="list-style-type: none"> Interviews D. Branch, EC&G M. Lopez, RFO E. Robbins, RFO E. Westbrook, RFO 	<ul style="list-style-type: none"> Interviews E. Snider, EC&G J. Hinds, EC&G 	<ul style="list-style-type: none"> Interviews J. Keemel, EC&G B. Mensley, EC&G J. Lehue, EC&G C. Tuck, EC&G B. Larson, EC&G P. Swenson, EC&G 	<ul style="list-style-type: none"> Followup Interviews
	<ul style="list-style-type: none"> Interviews M. McCormick, RFO B. Wallin, RFO 	<ul style="list-style-type: none"> Interviews J. Seian, RFO D. Sargent, RFO B. Glover, EC&G B. Farrell, EC&G 	<ul style="list-style-type: none"> Interviews T. Kehew, EC&G 	<ul style="list-style-type: none"> Interviews D. Croucher, EC&G R. Schussburger, RFO M. Birrenbach, RFO 	<ul style="list-style-type: none"> Draft report writing; topical Overviews, Concerns, Strengths, and Weaknesses

SCHEDULE OF ONSITE ACTIVITIES

Week 1	Mon 5/17/93	Tue 5/18/93	Wed 5/19/93	Thur 5/20/93	Fri 5/21/93
L. Ranzitelli an Organization; Planning, Budgeting, and Resource Allocation	<ul style="list-style-type: none"> Interviews T. Medahl, EC&G G. Francis, EC&G M. Karol, RFO D. Sargent, RFO 	<ul style="list-style-type: none"> Interviews J. Martson, RFO M. McBride, RFO S. Olinger, RFO C. Reed, RFO 	<ul style="list-style-type: none"> Interviews D. Simonsen, RFO T. Anderson M. McBride, RFO G. Cannode, RFO 	<ul style="list-style-type: none"> Interviews J. Komet, EC&G B. Mansley, EC&G L. Lohue, EC&G C. Tuck, EC&G 	<ul style="list-style-type: none"> Followup Interviews Draft report writing: topical Overview, Concerns, Strengths, and Weaknesses

SCHEDULE OF ONSITE ACTIVITIES

Week 1	Mon 5/17/93	Tue 5/18/93	Wed 5/19/93	Thur 5/20/93	Fri 5/21/93
C. Van Horn as Staffing and Training	<ul style="list-style-type: none"> Interviews K. Einig, EC&G G. Marx, EC&G M. Amaral, EC&G D. Durst, EC&G 	<ul style="list-style-type: none"> Interviews M. Davidson, EC&G J. McShane, EC&G B. Troutman, EC&G J. Cassel, EC&G G. Clark, EC&G 	<ul style="list-style-type: none"> Interviews A. Geis, EC&G T. Terrell, EC&G M. Karol, RFO M. McCormick, RFO 	<ul style="list-style-type: none"> Interviews D. Stewart, EC&G D. Bechter, EC&G D. Durst, EC&G 	<ul style="list-style-type: none"> Followup interviews Draft report writing; topical Overview, Concerns, Strengths, and Weaknesses

SCHEDULE OF ONSITE ACTIVITIES

Week 1	Mon 5/17/93	Tue 5/18/93	Wed 5/19/93	Thur 5/20/93	Fri 5/21/93
J. Patterson am Design Basis & Configuration Management	<ul style="list-style-type: none"> Offsite 	<ul style="list-style-type: none"> Interviews J. Fauble, EC&G J. Moore, EC&G D. Snyder, EC&G 	<ul style="list-style-type: none"> Interviews L. Restler, EC&G D. Ferrara, EC&G M. Parker, EC&G R. Harris, EC&G J. Whiting, EC&G 	<ul style="list-style-type: none"> Followup interviews, document reviews 	<ul style="list-style-type: none"> Followup interviews
	<ul style="list-style-type: none"> Travel 	<ul style="list-style-type: none"> Interviews R. Harris, EC&G J. Mahaffey, EC&G S. Miller-Polednick, EC&G 	<ul style="list-style-type: none"> Interviews G. Hudson, EC&G J. Mahaffey, EC&G V. Mohr, EC&G R. Powell, EC&G 	<ul style="list-style-type: none"> Followup interviews, document reviews Report development 	<ul style="list-style-type: none"> Draft report writing; topical Overviews, Concerns, Strengths, and Weaknesses

SCHEDULE OF ONSITE ACTIVITIES

Week 1		Mon 5/17/93	Tue 5/18/93	Wed 5/19/93	Thur 5/20/93	Fri 5/21/93
M. Williams Environmental Compliance Agreements	am	<ul style="list-style-type: none"> Interviews 	<ul style="list-style-type: none"> Interviews 	<ul style="list-style-type: none"> Followup interviews, document review 	<ul style="list-style-type: none"> Document review, report development 	<ul style="list-style-type: none"> Followup interviews
		J. Sanderson, EH-22 H. Mann, EG&G J. Rampe, RFO	S. Anderson, EG&G S. Nasta, EG&G M. Van Der Puy, RFO			R. Feihweg, EG&G
		<ul style="list-style-type: none"> Interviews 	<ul style="list-style-type: none"> Interviews 	<ul style="list-style-type: none"> Followup interviews, document review 	<ul style="list-style-type: none"> Document review, report development 	<ul style="list-style-type: none"> Draft report writing; topical Overviews, Concerns, Strengths, and Weaknesses
		T. Lukow, RFO T. Hedahl, EG&G D. Ward, EG&G	A. Paoule, RFO R. Fiehweg, EG&G A. Church, EG&G C. Deitsefeld, EG&G			

SCHEDULE OF ONSITE ACTIVITIES

Week 1	Mon 5/17/93	Tue 5/18/93	Wed 5/19/93	Thur 5/20/93	Fri 5/21/93
A. Heintzelman IAG Environmental Restoration Program	<ul style="list-style-type: none"> Interviews E. Dillie, EG&G K. Bentzen, EG&G M. Demos, EG&G 	<ul style="list-style-type: none"> Interviews K. Adams, EG&G R. Benedetti, EG&G D. Joseffy, MFT Inc. 	<ul style="list-style-type: none"> Interviews D. Sargent, RFO 	<ul style="list-style-type: none"> Interviews M. McBride, RFO M. Westmark, EPA P. Ornstein, EPA 	<ul style="list-style-type: none"> Followup interviews S. Grace, RFO R. Schassburger, RFO J. Hartman, RFO F. Lockhart, RFO
	<ul style="list-style-type: none"> Interviews M. Hutchins, EG&G D. Simonson, DOE A. Rampertaap, EM-453 	<ul style="list-style-type: none"> Interviews A. Lopez, EG&G E. Westbrook, RFO J. Stansberry, RFO E. Robbins, RFO 	<ul style="list-style-type: none"> Interviews R. Schassburger, RFO 	<ul style="list-style-type: none"> Interviews G. Baughman, CDH J. Schieffelin, CDH 	<ul style="list-style-type: none"> Draft report writing; topical Overviews, Concerns, Strengths, and Weaknesses

SCHEDULE OF ONSITE ACTIVITIES

Week 1	Mon 5/17/93	Tue 5/18/93	Wed 5/19/93	Thur 5/20/93	Fri 5/21/93
C. Lewis am Surface Water Program Management	<ul style="list-style-type: none"> Interviews R. Fiehweg, EG&G K. Motyl, EG&G A. Hollifield, EG&G G. Porter, EG&G F. Rakavina, EG&G 	<ul style="list-style-type: none"> Interviews F. Huffman, EG&G J. Koelmel, EG&G R. Rakavina, EG&G R. Feihweg, EG&G 	<ul style="list-style-type: none"> Interviews D. Yashan, EG&G W. Goodwin, EG&G C. Franklin, RFO D. Grosek, RFO J. Dion, RFO 	<ul style="list-style-type: none"> Interviews C. Stovall, RFO M. Karol, RFO T. Lukow, RFO Bardelic, EG&G 	<ul style="list-style-type: none"> Followup interviews J. Adams, RFO G. Hill, RFO J. Hartman, RFO
	<ul style="list-style-type: none"> Interviews M. Cypher, EG&G R. Teel, EG&G J. Whiting, EG&G R. Fiore, EG&G 	<ul style="list-style-type: none"> Interviews J. Lauratis, EG&G R. Teel, EG&G J. Ciucci, EG&G S. Pettis, EG&G 	<ul style="list-style-type: none"> Interviews M. Johnson, EG&G T. Medahl, EG&G M. Van Der Puy, RFO 	<ul style="list-style-type: none"> Interviews W. Spiegel, EG&G L. Gombos, EG&G 	<ul style="list-style-type: none"> Draft report writing; topical Overview, Concerns, Strengths, and Weaknesses

SCHEDULE OF ONSITE ACTIVITIES

Week 1	Mon 5/17/93	Tue 5/18/93	Wed 5/19/93	Thur 5/20/93	Fri 5/21/93
D. Neal Waste Characterization Program	<ul style="list-style-type: none"> Interviews W. Rask, RFO W. Prymak, RFO T. Lukow, RFO J. Rampe, RFO 	<ul style="list-style-type: none"> Interviews E. Keil, EG&G M. Broussard, EG&G L. Lewis, EG&G J. Weaver, EG&G P. Edrich, EG&G 	<ul style="list-style-type: none"> Interviews V. Pizzuto, EG&G E. Zoumar, EG&G T. Terrell, EG&G B. Shanks, EG&G 	<ul style="list-style-type: none"> Interviews W. Padron, EG&G W. Glover, EG&G R. Sadesky, EG&G D. Tallman, EG&G 	<ul style="list-style-type: none"> Followup interviews V. Church, EG&G C. Smith, EG&G
	<ul style="list-style-type: none"> Interviews A. Schubert, EG&G B. Morgan, EG&G 	<ul style="list-style-type: none"> Interviews L. Gregory-Frost, EG&G 	<ul style="list-style-type: none"> Interviews T. Angelo, EG&G D. Seipp, EG&G S. Anderson, EG&G J. Ciucci, EG&G 	<ul style="list-style-type: none"> Interviews A. Church, EG&G 	<ul style="list-style-type: none"> Draft report writing; topical Overviews, Concerns, Strengths, and Weaknesses

SCHEDULE OF ONSITE ACTIVITIES

Week 1	Mon 5/17/93	Tue 5/18/93	Wed 5/19/93	Thur 5/20/93	Fri 5/21/93
J. Melloni am Environmental QA	<ul style="list-style-type: none"> Interviews J. Zarret, EG&G D. Hunter, EG&G D. Torczon, EG&G 	<ul style="list-style-type: none"> Interviews K. Schoendaller, EG&G B. Benedetti, EG&G T. Schmidt, EG&G C. Schelble, EG&G B. Lyscas, EG&G 	<ul style="list-style-type: none"> Interviews R. Ward, EG&G C. Gee, EG&G M. Nune, EG&G 	<ul style="list-style-type: none"> Interviews V. Church, EG&G J. Zarret, EG&G L. Smith, EG&G 	<ul style="list-style-type: none"> Followup interviews Draft report writing; topical Overviews, Concerns, Strengths, and Weaknesses
	<ul style="list-style-type: none"> Interviews A. Lopez, RFO T. Medahl, EG&G D. Jossefy, NFI E. Robbins, RFO A. Flewelling, EG&G 	<ul style="list-style-type: none"> Interviews L. Smith, EG&G K. Stovall, EG&G M. Glover 	<ul style="list-style-type: none"> Interviews G. Propeck, EG&G K. Juroff, DP-6.1 	<ul style="list-style-type: none"> Interviews M. Van Der Puy, RFO J. Schmidt, EG&G R. Schassburger, RFO 	

SCHEDULE OF ONSITE ACTIVITIES

Week 1	Mon 5/17/93	Tue 5/18/93	Wed 5/19/93	Thur 5/20/93	Fri 5/21/93
J. Janda Worker Safety and OSHA Programs	<ul style="list-style-type: none"> Interviews E. Bryson, RFO A. Lopez, RFO E. Robbins, RFO 	<ul style="list-style-type: none"> Interviews S. Chandler, EC&G J. Todd, EC&G E. Schneider, EC&G C. Deitesdfield 	<ul style="list-style-type: none"> Interviews A. Mollifield, EC&G 	<ul style="list-style-type: none"> Interviews M. Sanlin, EC&G R. Ryken, EC&G 	<ul style="list-style-type: none"> Followup interviews
	<ul style="list-style-type: none"> Interviews R. Craun, RFO S. Olinger, RFO R. Ostmeyer, RFO E. Emch, RFO 	<ul style="list-style-type: none"> Interviews K. Stovall, EC&G 	<ul style="list-style-type: none"> Followup interviews, document review 	<ul style="list-style-type: none"> Followup interviews, document review 	<ul style="list-style-type: none"> Draft report writing; topical Overviews, Concerns, Strengths, and Weaknesses

SCHEDULE OF ONSITE ACTIVITIES

Week 1	Mon 5/17/93	Tue 5/18/93	Wed 5/19/93	Thur 5/20/93	Fri 5/21/93
W. Futrell Fire Protection Program	<ul style="list-style-type: none"> Interviews R. Craun, RFO D. Dowell, EG&G T. Fund, EG&G 	<ul style="list-style-type: none"> Interviews G. Francis, EG&G P. Lain, DP-6.1 K. Miller, EG&G B. Smeaton, EG&G 	<ul style="list-style-type: none"> Interviews M. Mann, EG&G J. Riley, EG&G K. Ferrera, EG&G D. Lanning, EG&G T. Fund, EG&G 	<ul style="list-style-type: none"> Interviews D. Sargent, RFO J. Adams, RFO J. Duffy, RFO D. Malcheski, RFO T. Parker, EG&G B. Smeaton, EG&G 	<ul style="list-style-type: none"> Followup interviews M. McBride, RFO B. Campbell, EG&G K. Miller, EG&G K. Juroff, DP-6.1
	<ul style="list-style-type: none"> Interviews D. Lanning, EG&G C. Tuck, EG&G M. Chavez, EG&G 	<ul style="list-style-type: none"> Interviews B. Olson, EG&G L. Lewis, EG&G L. Colden, EG&G 	<ul style="list-style-type: none"> Interviews S. Olinger, RFO B. Ostmyer, RFO M. Niler, EG&G R. Wyatt, EG&G R. Morgan, EG&G A. Schubert, EG&G 	<ul style="list-style-type: none"> Interviews B. Campbell, EG&G J. Riley, EG&G K. Miller, EG&G A. Wolflield, EG&G R. Farrel, EG&G E. Swenson, EG&G 	<ul style="list-style-type: none"> Draft report writing: topical Overviews, Concerns, Strengths, and Weaknesses

SCHEDULE OF ONSITE ACTIVITIES

Week 1	Mon 5/17/93	Tue 5/18/93	Wed 5/19/93	Thur 5/20/93	Fri 5/21/93
B. Holder L. Munson Industrial Hygiene Program	<ul style="list-style-type: none"> Interviews B. Clausen, EG&G B. Cordova, EG&G J. Riley, EG&G J. Mahaffey, EG&G 	<ul style="list-style-type: none"> Interviews L. Grocki, Contractor V. Witherill, RFO S. Olinger, RFO B. Ostmayer, RFO 	<ul style="list-style-type: none"> Interviews S. Mason, EG&G B. Clausen, EG&G J. Weaver, EG&G V. Smith, EG&G F. Pope, EG&G D. Sweet, EG&G B. Cordova, EG&G 	<ul style="list-style-type: none"> Interviews E. Tietenberg, JOUSC M. Stanley, JOUSC T. Tegler, JOUSC S. Stovall, EG&G 	<ul style="list-style-type: none"> Followup interviews
	<ul style="list-style-type: none"> Interviews E. Nogue, EG&G V. Ronzio-Pascua, EG&G N. Mann, EG&G 	<ul style="list-style-type: none"> Interviews J. Todd, EG&G E. Schneider, EG&G C. Deitesfeld, EG&G K. Stovall, EG&G E. Robbins, RFO 	<ul style="list-style-type: none"> Interviews R. Lucero, RFO A. Nollifield, EG&G E. Roush, EG&G P. Sasa, EG&G R. Packard, EG&G J. Furman, EG&G M. McAfee, EG&G 	<ul style="list-style-type: none"> Followup interviews, document review 	<ul style="list-style-type: none"> Draft report writing; topical Overview, Concerns, Strengths, and Weaknesses

Appendix F

List of Contacts and Interviews

LIST OF CONTACTS AND INTERVIEWS CONDUCTED BY THE PROGRESS ASSESSMENT TEAM

Ref. No.	Date	Organization	Topic
W. Kahew - Corrective Action Program			
1-A-1	5/17/93	ECAG	Corrective action
1-A-2	5/17/93	ECAG	Corrective action
1-A-3	5/17/93	ECAG	Corrective action
1-A-4	5/17/93	ECAG	Corrective action
1-A-5	5/17/93	ECAG	Corrective action
1-A-6	5/17/93	ECAG	Corrective action
1-A-7	5/17/93	ECAG	Corrective action
1-A-8	5/17/93	ECAG	Corrective action
1-A-9	5/17/93	ECAG	Corrective action
1-A-10	5/17/93	ECAG	Corrective action
1-A-11	5/17/93	ECAG	Corrective action
1-A-12	5/18/93	ECAG	Corrective action
1-A-13	5/18/93	ECAG	Corrective action
1-A-14	5/18/93	RFO	Corrective action
1-A-15	5/18/93	RFO	Corrective action
1-A-16	5/18/93	RFO	Corrective action
1-A-17	5/18/93	RFO	Corrective action
1-A-18	5/18/93	RFO	Corrective action
1-A-19	5/19/93	ECAG	Corrective action
1-A-20	5/19/93	ECAG	Corrective action
1-A-21	5/19/93	ECAG	Corrective action
1-A-22	5/19/93	RFO	Corrective action
1-A-23	5/19/93	RFO	Corrective action
1-A-24	5/19/93	RFO	Corrective action
1-A-25	5/19/93	RFO	Corrective action
1-A-26	5/20/93	RFO	Corrective action
1-A-27	5/20/93	RFO	Corrective action

LIST OF CONTACTS AND INTERVIEWS CONDUCTED BY THE PROGRESS ASSESSMENT TEAM

Ref. No.	Date	Organization	Topic
1-A-28	5/20/93	RFO	Corrective action
1-A-29	5/21/93	ECAC	Corrective action
1-A-30	5/21/93	ECAC	Corrective action
1-A-31	5/18/93	RFO	Corrective action
1-A-32	5/18/93	RFO	Corrective action
R. Jones - Self-Assessment Program			
1-B-1	4/20/93	RFO	Self-assessment
1-B-2	4/20/93	ECAC	Self-assessment
1-B-3	4/20/93	RFO	Self-assessment
1-B-4	4/20/93	ECAC	Self-assessment
1-B-5	4/21/93	RFO	Self-assessment
1-B-6	4/21/93	ECAC	Self-assessment
1-B-7	4/21/93	ECAC	Self-assessment
1-B-8	4/21/93	RFO	Self-assessment
1-B-9	4/21/93	RFO	Self-assessment
1-B-10	4/21/93	RFO	Self-assessment
1-B-11	4/22/93	ECAC	Self-assessment
1-B-12	4/22/93	ECAC	Self-assessment
1-B-13	4/22/93	ECAC	Self-assessment
1-B-14	4/22/93	ECAC	Self-assessment
1-B-15	4/23/93	ECAC	Self-assessment
1-B-16	5/12/93	EM-60, EM-63	Self-assessment
1-B-17	5/12/93	EM-25	Self-assessment
1-B-18	5/12/93	EM-20, EM-22, EM-23	Self-assessment
1-B-19	5/17/93	ECAC	Self-assessment
1-B-20	5/17/93	RFO	Self-assessment
1-B-21	5/17/93	RFO	Self-assessment
1-B-22	5/17/93	ECAC	Self-assessment

LIST OF CONTACTS AND INTERVIEWS CONDUCTED BY THE PROGRESS ASSESSMENT TEAM

Ref. No.	Date	Organization	Topic
I-B-23	5/17/93	ECAC	Self-assessment
I-B-24	5/18/93	RFO	Self-assessment
I-B-25	5/18/93	RFO	Self-assessment
I-B-26	5/18/93	ECAC, RFO	Self-assessment
I-B-27	5/18/93	ECAC	Self-assessment
I-B-28	5/19/93	RFO	Self-assessment
I-B-29	5/19/93	ECAC	Self-assessment
I-B-30	5/19/93	DP-9	Self-assessment
I-B-31	5/19/93	ECAC	Self-assessment
I-B-32	5/20/93	ECAC	Self-assessment
I-B-33	5/21/93	ECAC	Self-assessment
R. Compton - Oversight/ Directives, Policies, and Procedures			
I-C-1	4/21/93	ECAC	Oversight, Policies & Procedures
I-C-2	4/21/93	ECAC	Oversight, Policies & Procedures
I-C-3	4/21/93	ECAC	Oversight, Policies & Procedures
I-C-4	4/21/93, 5/18/93	RFO	Oversight, Policies & Procedures
I-C-5	4/21/93	RFO	Oversight, Policies & Procedures
I-C-6	4/21/93	ECAC	Policies & Procedures
I-C-7	4/21/93	ECAC	Policies & Procedures
I-C-8	4/22/93	ECAC	Oversight, Policies & Procedures
I-C-9	4/22/93	ECAC	Oversight, Policies & Procedures
I-C-10	4/22/93, 5/18/93	ECAC	Oversight, Policies & Procedures
I-C-11	4/22/93, 5/20/93	ECAC	Oversight, Policies & Procedures
I-C-12	4/23/93	RFO	Directives, Policies & Procedures, Oversight
I-C-13	4/23/93	RFO	Directives, Policies & Procedures, Oversight
I-C-14	4/23/93, 5/20/93	RFO	Oversight, Policies & Procedures
I-C-15	5/17/93	ECAC	Procedures
I-C-16	5/17/93	ECAC	Procedures

LIST OF CONTACTS AND INTERVIEWS CONDUCTED BY THE PROGRESS ASSESSMENT TEAM

Ref. No.	Date	Organization	Topic
I-C-17	5/17/93	RFO	Oversight, Procedures
I-C-18	5/17/93	RFO	Oversight, Procedures
I-C-19	5/18/93	ECAG	Oversight, Procedures
I-C-20	5/18/93	RFO	Oversight, Procedures
I-C-21	5/18/93	RFO	Oversight, Procedures
I-C-22	5/18/93	RFO	Oversight, Procedures
I-C-23	5/18/93	RFO	Oversight, Procedures
I-C-24	5/18/93	ECAG	Oversight, Procedures
I-C-25	5/19/93	ECAG	Oversight, Procedures
I-C-26	5/19/93	ECAG	Oversight, Directives, Procedures
I-C-27	5/19/93	ECAG	Procedures
I-C-28	5/20/93	ECAG	Oversight, Procedures
I-C-29	5/20/93	ECAG	Oversight, Procedures
I-C-30	5/20/93	ECAG	Oversight, Procedures
I-C-31	5/20/93	ECAG	Oversight, Procedures
I-C-32	5/20/93	ECAG	Oversight, Procedures
I-C-33	5/20/93	ECAG	Oversight, Procedures
I-C-34	5/20/93	ECAG	Oversight, Procedures
I-C-35	5/20/93	RFO	Oversight, Procedures
I-C-36	5/20/93	RFO	Oversight, Procedures
L. Rancitelli - Organization: Planning, Budgeting, and Resource Allocation			
I-D-1	4/20/93	RFO	Organization and Planning, Budgeting, and Resource Allocation
I-D-1	4/20/93	RFO	Organization and Planning, Budgeting, and Resource Allocation
I-D-1	4/20/93	RFO	Organization and Planning, Budgeting, and Resource Allocation
I-D-1	4/20/93	RFO	Organization and Planning, Budgeting, and Resource Allocation

LIST OF CONTACTS AND INTERVIEWS CONDUCTED BY THE PROGRESS ASSESSMENT TEAM

Ref. No.	Date	Organization	Topic
1-0-2	4/20/93	EC&G RF	Organization; and Planning, Budgeting, and Resource Allocation
1-0-2	4/20/93	EC&G RF	Organization; and Planning, Budgeting, and Resource Allocation
1-0-2	4/20/93	EC&G RF	Organization; and Planning, Budgeting, and Resource Allocation
1-0-2	4/20/93	EC&G RF	Organization; and Planning, Budgeting, and Resource Allocation
1-0-2	4/20/93	EC&G RF	Organization; and Planning, Budgeting, and Resource Allocation
1-0-2	4/20/93	EC&G RF	Organization; and Planning, Budgeting, and Resource Allocation
1-0-2	4/20/93	EC&G RF	Organization; and Planning, Budgeting, and Resource Allocation
1-0-2	4/20/93	EC&G RF	Organization; and Planning, Budgeting, and Resource Allocation
1-0-3	4/20/93	RFO	Organization; and Planning, Budgeting, and Resource Allocation
1-0-3	4/20/93	RFO	Organization; and Planning, Budgeting, and Resource Allocation
1-0-3	4/20/93	RFO	Organization; and Planning, Budgeting, and Resource Allocation
1-0-3	4/20/93	RFO	Organization; and Planning, Budgeting, and Resource Allocation
1-0-4	4/20/93	EC&G RF	Organization; and Planning, Budgeting, and Resource Allocation
1-0-5	4/21/93	RFO	Organization; and Planning, Budgeting, and Resource Allocation
1-0-5	4/21/93	RFO	Organization; and Planning, Budgeting, and Resource Allocation
1-0-5	4/21/93	RFO	Organization; and Planning, Budgeting, and Resource Allocation
1-0-5	4/21/93	RFO	Organization; and Planning, Budgeting, and Resource Allocation
1-0-5	4/21/93	RFO	Organization; and Planning, Budgeting, and Resource Allocation

LIST OF CONTACTS AND INTERVIEWS CONDUCTED BY THE PROGRESS ASSESSMENT TEAM

Ref. No.	Date	Organization	Topic
I-D-6	4/21/93	EG&G RF	Organization; and Planning, Budgeting, and Resource Allocation
I-D-6	4/21/93	EG&G RF	Organization; and Planning, Budgeting, and Resource Allocation
I-D-6	4/21/93	EG&G RF	Organization; and Planning, Budgeting, and Resource Allocation
I-D-7	4/21/93	EG&G RF	Organization; and Planning, Budgeting, and Resource Allocation
I-D-7	4/21/93	EG&G RF	Organization; and Planning, Budgeting, and Resource Allocation
I-D-7	4/21/93	EG&G RF	Organization; and Planning, Budgeting, and Resource Allocation
I-D-7	4/21/93	EG&G RF	Organization; and Planning, Budgeting, and Resource Allocation
I-D-7	4/21/93	EG&G RF	Organization; and Planning, Budgeting, and Resource Allocation
I-D-7	4/21/93	EG&G RF	Organization; and Planning, Budgeting, and Resource Allocation
I-D-7	4/21/93	EG&G RF	Organization; and Planning, Budgeting, and Resource Allocation
I-D-7	4/21/93	EG&G RF	Organization; and Planning, Budgeting, and Resource Allocation
I-D-7	4/21/93	EG&G RF	Organization; and Planning, Budgeting, and Resource Allocation
I-D-7	4/21/93	EG&G RF	Organization; and Planning, Budgeting, and Resource Allocation
I-D-7	4/21/93	EG&G RF	Organization; and Planning, Budgeting, and Resource Allocation
I-D-7	4/21/93	EG&G RF	Organization; and Planning, Budgeting, and Resource Allocation
I-D-8	4/21/93	RFO	Organization; and Planning, Budgeting, and Resource Allocation
I-D-8	4/21/93	RFO	Organization; and Planning, Budgeting, and Resource Allocation
I-D-8	4/21/93	RFO	Organization; and Planning, Budgeting, and Resource Allocation
I-D-8	4/21/93	RFO	Organization; and Planning, Budgeting, and Resource Allocation
I-D-9	4/21/93	RFO	Organization; and Planning, Budgeting, and Resource Allocation
I-D-9	4/21/93	RFO	Organization; and Planning, Budgeting, and Resource Allocation

LIST OF CONTACTS AND INTERVIEWS CONDUCTED BY THE PROGRESS ASSESSMENT TEAM

Ref. No.	Date	Organization	Topic
I-D-9	4/21/93	RFO	Organization; and Planning, Budgeting, and Resource Allocation
I-D-10	4/21/93	RFO	Organization; and Planning, Budgeting, and Resource Allocation
I-D-10	4/21/93	RFO	Organization; and Planning, Budgeting, and Resource Allocation
I-D-11	4/22/93	EG&G RF	Organization; and Planning, Budgeting, and Resource Allocation
I-D-11	4/22/93	EG&G RF	Organization; and Planning, Budgeting, and Resource Allocation
I-D-12	4/22/93	EG&G RF	Organization; and Planning, Budgeting, and Resource Allocation
I-D-12	4/22/93	EG&G RF	Organization; and Planning, Budgeting, and Resource Allocation
I-D-13	4/22/93	EG&G RF	Organization; and Planning, Budgeting, and Resource Allocation
I-D-13	4/22/93	EG&G RF	Organization; and Planning, Budgeting, and Resource Allocation
I-D-13	4/22/93	EG&G RF	Organization; and Planning, Budgeting, and Resource Allocation
I-D-13	4/22/93	EG&G RF	Organization; and Planning, Budgeting, and Resource Allocation
I-D-13	4/22/93	EG&G RF	Organization; and Planning, Budgeting, and Resource Allocation
I-D-13	4/22/93	EG&G RF	Organization; and Planning, Budgeting, and Resource Allocation
I-D-13	4/22/93	EG&G RF	Organization; and Planning, Budgeting, and Resource Allocation
I-D-14	4/22/93	EG&G RF	Organization; and Planning, Budgeting, and Resource Allocation
I-D-14	4/22/93	EG&G RF	Organization; and Planning, Budgeting, and Resource Allocation
I-D-14	4/22/93	EG&G RF	Organization; and Planning, Budgeting, and Resource Allocation
I-D-14	4/22/93	EG&G RF	Organization; and Planning, Budgeting, and Resource Allocation

LIST OF CONTACTS AND INTERVIEWS CONDUCTED BY THE PROGRESS ASSESSMENT TEAM

Ref. No.	Date	Organization	Topic
I-D-15	4/23/93	EG&G RF	Organization; and Planning, Budgeting, and Resource Allocation
I-D-15	4/23/93	EG&G RF	Organization; and Planning, Budgeting, and Resource Allocation
I-D-16	5/12/93	EH-60	Organization; and Planning, Budgeting, and Resource Allocation
I-D-16	5/12/93	EH-60	Organization; and Planning, Budgeting, and Resource Allocation
I-D-16	5/12/93	EH-63	Organization; and Planning, Budgeting, and Resource Allocation
I-D-17	5/12/93	DP-6.1	Organization; and Planning, Budgeting, and Resource Allocation
I-D-17	5/12/93	DP-6.1	Organization; and Planning, Budgeting, and Resource Allocation
I-D-18	5/17/93	EG&G RF	Organization; and Planning, Budgeting, and Resource Allocation
I-D-18	5/17/93	EG&G RF	Organization; and Planning, Budgeting, and Resource Allocation
I-D-20	5/17/93	RFO	Organization; and Planning, Budgeting, and Resource Allocation
I-D-21	5/17/93	RFO	Organization; and Planning, Budgeting, and Resource Allocation
I-D-22	5/17/93	EG&G RF	Organization; and Planning, Budgeting, and Resource Allocation
I-D-22	5/17/93	EG&G RF	Organization; and Planning, Budgeting, and Resource Allocation
I-D-23	5/17/93	EG&G RF	Organization; and Planning, Budgeting, and Resource Allocation
I-D-24	5/18/93	RFO	Organization; and Planning, Budgeting, and Resource Allocation
I-D-24	5/18/93	RFO	Organization; and Planning, Budgeting, and Resource Allocation
I-D-25	5/18/93	RFO	Organization; and Planning, Budgeting, and Resource Allocation

LIST OF CONTACTS AND INTERVIEWS CONDUCTED BY THE PROGRESS ASSESSMENT TEAM

Ref. No.	Date	Organization	Topic
I-D-26	5/18/93	EG&G RF	Organization; and Planning, Budgeting, and Resource Allocation
I-D-27	5/19/93	RFO	Organization; and Planning, Budgeting, and Resource Allocation
I-D-27	5/19/93	RFO	Organization; and Planning, Budgeting, and Resource Allocation
I-D-27	5/19/93	RFO	Organization; and Planning, Budgeting, and Resource Allocation
I-D-27	5/19/93	RFO	Organization; and Planning, Budgeting, and Resource Allocation
I-D-28	5/19/93	EG&G RF	Organization; and Planning, Budgeting, and Resource Allocation
I-D-28	5/19/93	EG&G RF	Organization; and Planning, Budgeting, and Resource Allocation
I-D-28	5/19/93	EG&G RF	Organization; and Planning, Budgeting, and Resource Allocation
I-D-28	5/19/93	EG&G RF	Organization; and Planning, Budgeting, and Resource Allocation
I-D-29	5/19/93	EG&G RF	Organization; and Planning, Budgeting, and Resource Allocation
I-D-30	5/20/93	EG&G RF	Organization; and Planning, Budgeting, and Resource Allocation
I-D-30	5/20/93	EG&G RF	Organization; and Planning, Budgeting, and Resource Allocation
I-D-30	5/20/93	EG&G RF	Organization; and Planning, Budgeting, and Resource Allocation
I-D-30	5/20/93	EG&G RF	Organization; and Planning, Budgeting, and Resource Allocation
I-D-30	5/20/93	EG&G RF	Organization; and Planning, Budgeting, and Resource Allocation
I-D-30	5/20/93	EG&G RF	Organization; and Planning, Budgeting, and Resource Allocation
I-D-31	5/20/93	EG&G RF	Organization; and Planning, Budgeting, and Resource Allocation

LIST OF CONTACTS AND INTERVIEWS CONDUCTED BY THE PROGRESS ASSESSMENT TEAM

Ref. No.	Date	Organization	Topic
C. Van Horn - Staffing and Training			
I-E-1	4/20/93	RFO Facility Operations	Human resource management and training
I-E-2	4/20/93	RFO Operations Division	Human resource management and training
I-E-3	4/20/93	RFO Waste Programs Division	Human resource management and training
I-E-4	4/20/93	RFO Defense Programs Division	Human resource management and training
I-E-5	4/20/93	EC&G Standards, Audits, Assurance	Human resource management and training
I-E-6	4/20/93	EC&G Standards, Audits, Assurance	Human resource management and training
I-E-7	4/20/93	EC&G Compliance Program Integration	Human resource management and training
I-E-8	4/20/93	EC&G Site QA	Human resource management and training
I-E-9	4/20/93	EC&G Commitment Review	Human resource management and training
I-E-10	4/20/93	EC&G Standards and Policy	Human resource management and training
I-E-11	4/20/93	EC&G Assessment	Human resource management and training
I-E-12	4/20/93	RFO	Human resource management and training
I-E-13	4/20/93	RFO Performance Assessment and Quality Assurance	Human resource management and training
I-E-14	4/20/93	RFO Training and Development Office	Human resource management and training
I-E-15	4/20/93	RFO	Human resource management and training
I-E-16	4/20/93	EC&G, Environmental Restoration Management	Human resource management and training
I-E-17	4/22/93	RFO Waste Programs	Human resources and training
I-E-18	4/22/93	RFO Nuclear Material Management	Human resources and training
I-E-19	4/22/93	RFO Occupational Safety Branch	Human resources and training
I-E-20	4/22/93	RFO Nuclear Safety Branch	Human resources and training
I-E-21	4/22/93	RFO Environmental Protection Division	Human resources and training
I-E-22	4/22/93	RFO Operations Division	Human resources and training
I-E-23	4/22/93	RFO Construction Engineering Division	Human resources and training
I-E-24	4/22/93	RFO Human Resources	Human resources and training
I-E-25	4/22/93	RFO Waste Operations	Human resources and training
I-E-26	4/22/93	RFO Radiological Protection	Human resources and training

LIST OF CONTACTS AND INTERVIEWS CONDUCTED BY THE PROGRESS ASSESSMENT TEAM

Ref. No.	Date	Organization	Topic
I-E-27	4/22/93	RFO ANA	Human resources and training
I-E-28	4/22/93	RFO ANA	Human resources and training
I-E-29	4/22/93	RFO ANTER	Human resources and training
I-E-30	4/22/93	RFO Performance Assessment and Quality Assurance Office	Human resources and training
I-E-31	4/22/93	RFO ANA	Human resources and training
I-E-32	4/22/93	RFO ANA/RMO	Human resources and training
I-E-33	4/22/93	RFO ANFO/MPD	Human resources and training
I-E-34	4/22/93	RFO ANTER/EPO	Human resources and training
I-E-35	4/22/93	RFO Environmental Restoration Division	Human resources and training
I-E-36	4/22/93	RFO CED	Human resources and training
I-E-37	4/22/93	RFO Defense Programs Division	Human resources and training
I-E-38	5/17/93	EC&G	Training
I-E-39	5/17/93	EC&G	Training
I-E-40	5/17/93	EC&G	Human resource management
I-E-41	5/17/93	EC&G	Human resources management
I-E-42	5/17/93	EC&G	Safety culture
I-E-43	5/17/93	EC&G	Training, human resources management
I-E-44	5/18/93	EC&G Corporate	Labor relations
I-E-45	5/18/93	EC&G	Labor relations
I-E-46	5/18/93	EC&G	Training qualifications
I-E-47	5/18/93	EC&G	Training
I-E-48	5/18/93	EC&G	Training
I-E-49	5/18/93	RFO	Human resources and training
I-E-50	5/18/93	RFO	Human resources and training
I-E-51	5/18/93	RFO	Human resources and training
I-E-52	5/18/93	RFO	Human resources
I-E-53	5/19/93	EC&G Plutonium Operations 559	Human resources and training
I-E-54	5/19/93	EC&G Plutonium Operations 559	Human resources and training

LIST OF CONTACTS AND INTERVIEWS CONDUCTED BY THE PROGRESS ASSESSMENT TEAM

Ref. No.	Date	Organization	Topic
1-E-55	5/19/93	RFO, Facility Operations	Human resources and training
1-E-56	5/19/93	RFO, Operations Division	Human resources and training
1-E-57	5/19/93	RFO, Waste Operations Branch	Human resources and training
1-E-58	5/19/93	RFO, Operations Division	Human resources and training
1-E-59	5/19/93	EG&G	Training development
1-E-60	5/19/93	RFO Training	RFO training
1-E-61	5/20/93	EG&G Central Planning and Budget	Budget and FTEs
1-E-62	5/20/93	EG&G Human Resources and Management	Human resources
1-E-63	5/24/93	EG&G P&T Training Verification	P&T training program
1-E-64	5/25/93	RFO Training Development Office	RFO Training Program
1-E-65	5/25/93	RFO Training Development Office	RFO Training Program
1-E-66	5/25/93	RFO Training Development Office	RFO Training Program
1-E-67	5/25/93	EG&G	EG&G training
1-E-68	5/25/93	EG&G	EG&G training
1-E-69	5/25/93	EG&G	Training assessment
J. Patterson - Design Basis and Configuration Management			
1-F-1	5/18/93	Engineering & Tech	Engineering Change Control
1-F-2	5/18/93	SS&S	Engineering Change Control
1-F-3	5/18/93	Engineering & Tech	Engineering Change Control
1-F-4	5/18/93	Engineering & Tech	Engineering Change Control
1-F-5	5/18/93	Engineering & Tech	Engineering Change Control
1-F-6	5/18/93	Engineering & Tech	Engineering Change Control
1-F-7	5/18/93	Engineering & Tech	Engineering Change Control
1-F-8	5/19/93	Engineering & Tech	Engineering Change Control Engineering Priorities
1-F-9	5/19/93	Engineering & Tech	Engineering Change Control Engineering Priorities
1-F-10	5/19/93	Engineering & Tech	Engineering Change Control Engineering Priorities
1-F-11	5/19/93	Engineering & Tech	Engineering Change Control Engineering Priorities
1-F-12	5/19/93	Engineering & Tech	Engineering Change Control Engineering Priorities

LIST OF CONTACTS AND INTERVIEWS CONDUCTED BY THE PROGRESS ASSESSMENT TEAM

Ref. No.	Date	Organization	Topic
I-F-13	5/19/93	Engineering & Tech	Engineering Change Control Engineering Priorities
I-F-14	5/19/93	SSES	Maintenance Action Center (CMAC)
I-F-15	5/19/93	NAPS	Maintenance Action Center (CMAC)
I-F-16	5/19/93	NAPS	Maintenance Action Center (CMAC)
I-F-17	5/19/93	CP&B	Maintenance Action Center (CMAC)
I-F-18	5/19/93	Operations	Maintenance Action Center (CMAC)
I-F-19	5/12/93	DP	Rocky Flats ESM Performance
I-F-20	5/12/93	EM	Rocky Flats ESM Performance Rocky Flats Transition
I-F-21	5/12/93	EM	Rocky Flats ESM Performance Rocky Flats Transition
I-F-22	5/12/93	EM	Rocky Flats ESM Performance Rocky Flats Transition
I-F-23	4/21/93	RFO	ESM Staffing
I-F-24	4/21/93	EG&G	Process Improvement
I-F-25	5/12/93	DP	DOE Oversight
N. Williams - Environmental Compliance Agreements			
I-G-1	4/15/93	RFO	Environmental compliance agreements
I-G-2	4/19/93	Contractor to DP	Environmental compliance agreements
I-G-3	4/19/93	EG&G	LDR FFCA
I-G-4	4/20/93	EG&G	LDR FFCA
I-G-5	4/21/93	EG&G	LDR FFCA
I-G-6	4/21/93	EG&G	MESMAP compliance order
I-G-7	4/21/93	EG&G	NPOES FFCA
I-G-8	4/21/93	EG&G	NPOES FFCA
I-G-9	4/22/93	RFO	Environmental compliance agreements
I-G-10	4/22/93	GC-11	Mixed Residues Compliance Order
I-G-11	4/22/93	RFO	DOE-MQ and RFO interface
I-G-12	4/22/93	RFO	DOE-MQ and RFO interface
I-G-13	4/22/93	RFO	DOE-MQ and RFO interface
I-G-14	4/22/93	RFO	DOE-MQ and RFO interface

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Ref. No.	Date	Organization	Topic
I-G-15	4/23/93	EG&G	LDR FFCA and Mixed Residues Consent Order
I-G-16	5/17/93	EH-22	Environmental compliance agreements, LDR FFCA, and DOE-MO and RFO interface issues
I-G-17	5/17/93	EG&G	Environmental compliance agreements
I-G-18	5/17/93	RFO	Environmental compliance agreements
I-G-19	5/17/93	RFO	Environmental compliance agreements
I-G-20	5/17/93	EG&G	Environmental compliance agreements
I-G-21	5/17/93	EG&G	WESHAP Compliance Order and MPDES FFCA
I-G-22	5/18/93	EG&G	NEPA impacts on environmental compliance agreements
I-G-23	5/18/93	RFO	Environmental compliance agreements
I-G-24	5/18/93	RFO	Environmental compliance agreements
I-G-25	5/18/93	EG&G	Environmental compliance agreements
I-G-26	5/18/93	EG&G	MPDES FFCA
I-G-27	5/18/93	RFO	Environmental compliance agreements
I-G-28	5/18/93	EG&G	Issues management
I-G-29	5/18/93	EG&G	LDR FFCA
I-G-30	5/21/93	EG&G	MPDES FFCA
A. Heintzelman - IAG Environmental Restoration Activities			
I-N-1	4/20/93	Environmental Restoration Division	Roles, responsibilities, O&U management, events leading up to MOV
I-N-2	4/21/93	RFO	DOE staffing and management of ER Program
I-N-3	4/21/93	Environmental Protection Division	Environmental Restoration/Environmental Protection Division interface, ADS involvement
I-N-4	4/21/93	Environmental Restoration Division	IAG funding, ADSs, EG&G Award Fee Performance Evaluations
I-N-5	4/21/93	Transition & Environmental Restoration	Role, responsibilities, Transition, IAG management, "presumption", ER infrastructure, training
I-N-6	4/21/93	Transition & Environmental Restoration	Role, responsibilities, Transition, IAG management, "presumption", ER infrastructure, training
I-N-7	4/21/93	Environmental Engineering and Technology	Development of AIP and IAG

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Ref. No.	Date	Organization	Topic
I-H-8	4/22/93	Remedial Projects Management	Responsibilities, staffing, OI mgmt, OAT, interface with regulators, IAG milestone docs, ER field problems, ER funding, training, OI Scopes of Work, procedures
I-H-9	4/22/93	Facilities Operations Management	OI management, document control, ER field problems, training, procedures development, OAT
I-H-10	4/22/93	Issues Management and Analysis	Responsibilities, Infrastructure Management Plan, Plan deficiencies
I-H-11	4/22/93	Environmental Quality Support	Organizational structure, group responsibilities, purpose, staffing, review processes, lessons learned
I-H-12	4/22/93	Environmental Quality Support	"Resumption," training, document control
I-H-13	4/22/93	EG&G	ER activities management, "walk-around Wednesdays", "resumption," training, mgmt control systems, PATS, EG&G Award Fee Performance Evaluation
I-H-14	4/27/93	DOE-HQ, EH-22, Office of Environmental Compliance	IAG and compliance issues, interface with EM-60, communications with regulators
I-H-15	5/3/93	DOE-HQ, DP-6.1, Facilities Administration Operations Group	Facilities Transfer and Transition
I-H-16	5/4/93	DOE-HQ, DP-6.1	Responsibilities, Mission Transition Program Management Plan
I-H-17	5/5/93	Environmental Restoration Division	Responsibilities, lessons learned, interface with regulators, ER activities and problems, staffing, IAG commitments, OI2 MOV, AIP, OAT, IAG document review, tracking, ER management control
I-H-18	5/11/93	DOE-HQ, EH-453.1, Rocky Flats Branch	Responsibilities, EH-453 Self-Assessment, RF management control for ER activities
I-H-19	5/11/93	DOE-HQ, EH-453, Rocky Flats/Albuquerque Production Division	Oversight, Transition, OI2 MOV, IAG
I-H-20	5/12/93	DOE-HQ, EH-6, Facility Transition	Transition planning, environmental monitoring responsibilities, ESM, infrastructure, MOA between EH-30/40/60, IAG, ER management control
I-H-21	5/12/93	DOE-HQ, DP-6, Facilities	E in ESM, ER at RFP, environmental compliance issues, "resumption"
I-H-22	5/12/93	DOE-HQ, DP-6.1, Facilities Administration Operations Group	Order Compliance, "resumption," EM and DP program management at RFP
I-H-23	5/12/93	DOE-HQ, DP-6.1	"Resumption," EM and DP program management at RFP

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Ref. No.	Date	Organization	Topic
I-N-24	5/17/93	ER Management, Remedial Project Management	Responsibilities, IAG document technical/peer reviews, IAG MDV, QI2 management, doc. review schedules, training
I-N-25	5/17/93	Records and Documents	Responsibilities, document change control, document change authorities, lessons learned in CAP, training
I-N-26	5/17/93	Historical Release Reporting	Responsibilities, identification and reporting of IAGSs, Transition, PACs, UICs
I-N-27	5/17/93	Environmental Science and Engineering	Responsibilities, training, management control, field work priorities
I-N-28	5/17/93	Environmental Management	IAG development, IAG funding, Solar Ponds, ER/DP site management, IAG milestone commitment
I-N-29	5/17/93	DOE-MQ, ER-453, Rocky Flats Branch	Contractor interface with regulators, Solar Ponds, AIP, IAG management control, OAT, MD oversight, IAG milestone commitments
I-N-30	5/18/93	ER Project Integration and Reporting	Management Implementation Plan, procedures development, management control, contractor interface with regulators, reporting inconsistencies, IAG & Admin. Record development, ER tracking system, ER doc. control, ER OAT
I-N-31	5/18/93	ER Management	Management control, IAG milestone commitments, interface with regulators
I-N-32	5/18/93	Quality Assurance Division	Responsibilities, OAT oversight, ER/DP split, audit scheduling, IAG
I-N-33	5/18/93	Quality Evaluation Branch	Audits and assessments, training
I-N-34	5/18/93	Quality Evaluation Branch	Field audits
I-N-35	5/18/93	Environmental Waste Program	Auditing
I-N-36	5/18/93	Quality Engineering Branch	Training, auditing
I-N-37	5/19/93	Performance Assessment and Quality Assurance	Trending, procedures development, environmental awareness, ER management, ER tracking system
I-N-38	5/19/93	Environmental Restoration Division	Management control, interface with regulators, IAG milestone commitments, Change Control Board, ER separation, staffing
I-N-39	5/20/93	Transition & Environmental Restoration	Management control
I-N-40	5/20/93	EPA, Rocky Flats Project	RFO and EDCs interface, OAT, Transition, management control, ER commitment, regulator staffing, public meetings/ perception, renegotiation of IAG, ADS review, Local Impacts Initiative

LIST OF CONTACTS AND INTERVIEWS CONDUCTED BY THE PROGRESS ASSESSMENT TEAM

Ref. No.	Date	Organization	Topic
I-N-41	5/20/93	EPA	ER commitment, public meetings perception
I-N-42	5/20/93	CDM, Facilities Section, Hazardous Waste Control Program	ABS review, Local Impacts Initiative, Waste Management
I-N-43	5/20/93	CDM, Hazardous Waste Control Program	Transition, ER commitment, staffing
I-N-44	5/21/93	Environmental Restoration Division	ER commitment, notifications to regulators, management control
I-N-45	5/21/93	Environmental Restoration Division	QA7 authority, QA7 implementation process
I-N-46	5/21/93	Transition & Environmental Restoration	Staffing outlooks, formal lines of communication and reporting (internally & externally), mission change, ER tracking, BP mandate, ER separation, QA7
I-N-47	5/21/93	Environmental Restoration Division	IAG development, funding, QA2 problems, regulator interface, management control, Scopes of work changes, internal and external lines of formal communication
I-N-48	5/25/93	Remedial Projects Management	QA2 Milestone
C. Lewis - Surface Water Program Management			
I-1-1	4/20/93	ECAG/Surface Water	Program overview
I-1-2	4/20/93	ECAG/Surface Water	Program overview
I-1-3	4/21/93	RFO Environmental Protection Division	Program overview
I-1-4	4/21/93	RFO Environmental Protection Division	Program overview
I-1-5	4/22/93	ECAG Emergency Preparedness	Spill control, reporting, training, site history, program status
I-1-6	4/22/93	ECAG Emergency Preparedness	drills, BP finding status
I-1-7	5/11/93	EN 453.1	Program Overview, Option B management
I-1-8	5/17/93	ECAG Surface Water	FFCA Projects, SPCC/BMP Plan, oversight role
I-1-9	5/17/93	ECAG Surface Water	Surface Water Division overview, program management
I-1-10	5/17/93	ECAG Surface Water	Brain Study
I-1-11	5/17/93	ECAG Surface Water	SPCC/BMP Plan
I-1-12	5/17/93	ECAG	SPCC/BMP Plan, outside tanks
I-1-13	5/17/93	ECAG	SPCC/BMP, outside tanks
I-1-14	5/17/93	ECAG	SPCC/BMP, outside tank

LIST OF CONTACTS AND INTERVIEWS CONDUCTED BY THE PROGRESS ASSESSMENT TEAM

Ref. No.	Date	Organization	Topic
I-1-15	5/17/93	EC&G	SPOC/MP, tanks, outside valve vaults, site history
I-1-16	5/17/93	EC&G	SPOC/MP, Valve vault inspections, history of near miss spill
I-1-17	5/18/93	EC&G Surface Water	Bldg 218 Nitric Acid Tanks, oversight
I-1-18	5/18/93	EC&G Surface Water	Bldg 218 Nitric Acid Tanks, SPOC/MP
I-1-19	5/18/93	EC&G	Bldg 218 Nitric Acid Tanks, SPOC/MP
I-1-20	5/18/93	EC&G	Bldg 218 Nitric Acid Tanks ownership history
I-1-21	5/18/93	EC&G	Bldg 218 Nitric acid usability
I-1-22	5/18/93	EC&G Regulated Waste	Unplanned release identification, treatment and control, plant operations and performance
I-1-23	5/18/93	EC&G Regulated Waste	SPOC/MP Plan, plant operations and performance, conduct of operations
I-1-24	5/18/93	EC&G Surface Water	Pond operations, A-4 pond treatment system, pond configuration control, interim pond management plan
I-1-25	5/19/93	EC&G Surface Water	Surface Water Division self assessment program
I-1-26	5/19/93	EC&G Surface Water	Surveillance program, SPOC/MP Plan
I-1-27	5/19/93	EC&G Surface Water	Pond telemetry monitoring and operation system
I-1-28	5/19/93	RFO Waste Operations	Historic occurrence reporting system
I-1-29	5/19/93	RFO Waste Operations	Emergency Preparedness, spill reporting
I-1-30	5/19/93	EC&G Waste Reg Programs	Emergency Preparedness, spill reporting
I-1-31	5/19/93	EC&G Environmental & Waste Management	Long term planning, pond configuration control, SPOC/MP Plan, FFCA(WPES) drain study status, S&D surveillance findings correction
I-1-32	5/19/93	RFO Environmental Protection Division	Pond configuration control, long term pond management, EC&G performance, RFO reorganization, Option 8 management system
I-1-33	5/20/93	RFO Emergency Preparedness	Spill control and reporting
I-1-34	5/20/93	RFO Operations	tank management program, risk/issue management
I-1-35	5/20/93	RFO Operations	tank management, pond management, program interfaces
I-1-36	5/20/93	EC&G Emergency Preparedness	Emergency Plan structure, spill control drills, spill reporting, program interfaces

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Ref. No.	Date	Organization	Topic
I-1-37	5/20/93	EC&G Emergency Preparedness	Verification documentation, and validation trending on unified spill reporting 1989 finding
I-1-38	5/21/93	RFO Contracts	Option B grants management requirements and system
I-1-39	5/21/93	RFO Env Protection	Option B, CERCLA, citizen relations
I-1-40	5/21/93	RFO Transition and Environmental Restoration	Long term surface water management plans, MPOES/CERCLA pond management impacts to planning, relationships with regulators and citizens, citizen objections to Option B
I-1-41	5/17/93	EC&G Surface Water	Land Management
I-1-42	5/19/93	RFO EP	Oversight, Review and approval of SOPP/SMP
I-1-43	5/20/93	EC&G Surface Water	SUP protection level
D. Neal - Waste Characterization Program			
I-J-1	4/20/93	EC&G	Waste characterization programs
I-J-2	4/21/93	EC&G	Waste and Environmental Management System (WEMS)
I-J-3	4/21/93	EC&G	Waste Stream and Residue Identification and Characterization System (WSRIC)
I-J-4	4/21/93	EC&G	Nonradioactive waste characterization
I-J-5	4/21/93	DOE NV	Radioactive waste characterization
I-J-6	4/22/93	EC&G	Saltcrete and Solar Ponds
I-J-7	4/22/93	EC&G	Building 776, Supercompactor
I-J-8	4/22/93	EC&G	Building 374
I-J-9	4/22/93	DOE NV	Nevada Test Site pre audit cleanup
I-J-10	4/22/93	EC&G	Waste characterization analytical capabilities
I-J-11	4/22/93	EC&G	Waste Operations
I-J-12	5/3/93	DOE NV	MPO-325 training requirements
I-J-13	5/17/93	RFO	RFO Oversight
I-J-14	5/17/93	RFO	RFO Oversight
I-J-15	5/17/93	RFO	RFO Oversight
I-J-16	5/17/93	RFO	RFO Oversight
I-J-17	5/17/93	EC&G	Waste characterization
I-J-18	5/17/93	EC&G	Waste characterization

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Ref. No.	Date	Organization	Topic
I-J-19	5/18/93	EG&G	Waste characterization
I-J-20	5/18/93	EG&G	Real time radiography, Building 564
I-J-21	5/18/93	EG&G	Residues
I-J-22	5/18/93	EG&G	Waste characterization and permitting
I-J-23	5/18/93	EG&G	Waste characterization
I-J-24	5/19/93	EG&G	Waste characterization and Environmental Compliance Pilot Program
I-J-25	5/19/93	EG&G	Waste generator training
I-J-26	5/19/93	EG&G	Building 559 Tour
I-J-27	5/19/93	EG&G	Backlog waste re-characterization and LDR FFCA
I-J-28	5/19/93	EG&G	Waste characterization
I-J-29	5/20/93	EG&G	Building 460 Tour
I-J-30	5/20/93	EG&G	Waste characterization oversight
I-J-31	5/20/93	EG&G	Waste characterization
I-J-32	5/21/93	EG&G	Waste characterization
I-J-33	5/21/93	EG&G	Waste generator training
J. Mellon - Environmental Quality Assurance			
I-K-1	4/20/93	EG&G	Laboratory operations
I-K-2	4/20/93	EG&G	Laboratory QC
I-K-3	4/20/93	EG&G	Sample handling/ chain-of-custody
I-K-4	4/20/93	EG&G	Sample receipt/ chain-of-custody
I-K-5	4/20/93	EG&G	Chemical Standards Laboratory operations
I-K-6	4/20/93	EG&G, Environmental Protection Division	Environmental Protection sampling and analysis
I-K-7	4/21/93	EG&G	Laboratory operations
I-K-8	4/21/93	EG&G	Records management
I-K-9	4/21/93	EG&G	Laboratory QC
I-K-10	4/21/93	EG&G	Laboratory QC
I-K-11	4/21/93	EG&G, Environmental Restoration Division	SNO operations
I-K-12	4/22/93	EG&G, Environmental Protection Division	Field sampling

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Ref. No.	Date	Organization	Topic
I-K-13	4/22/93	Jacobs Engineering	Field sampling
I-K-14	4/22/93	Jacobs Engineering	Field sampling
I-K-15	4/22/93	Jacobs Engineering	Field sampling
I-K-16	4/22/93	Jacobs Engineering	Field sampling
I-K-17	4/22/93	Jacobs Engineering	Field sampling
I-K-18	4/22/93	DOE Quality Engineering Branch	Environmental QA
I-K-19	4/22/93	Nuclear Filter Technology	Environmental QA
I-K-20	4/22/93	EG&G Environmental Restoration Division	Environmental QA
I-K-21	4/22/93	EG&G Environmental Protection Division	Environmental QA
I-K-22	4/22/93	EG&G Environmental Protection	Environmental QA
I-K-23	5/17/93	EG&G	Laboratory operations
I-K-24	5/17/93	EG&G	Laboratory operations
I-K-25	5/17/93	EG&G	Procurement quality
I-K-26	5/17/93	RFO	RFO QA oversight
I-K-27	5/17/93	Nuclear Filter Technology, Inc	RFO QA oversight
I-K-28	5/17/93	RFO	RFO QA oversight
I-K-29	5/17/93	EG&G	Oversight and QA of environmental protection activities
I-K-30	5/17/93	EG&G	E&M QA program
I-K-31	5/18/93	EG&G	Control of offsite laboratories
I-K-32	5/18/93	EG&G	Oversight and QA of environmental restoration activities
I-K-33	5/18/93	EG&G	QA program in environmental restoration management
I-K-34	5/18/93	EG&G	QA program in environmental restoration management
I-K-35	5/18/93	EG&G	QA Training
I-K-36	5/18/93	EG&G	QA of offsite laboratories
I-K-37	5/18/93	EG&G	QA of offsite laboratories
I-K-38	5/18/93	EG&G	Environmental QA oversight
I-K-39	5/18/93	EG&G	Environmental QA oversight
I-K-40	5/18/93	EG&G	Environmental QA oversight
I-K-41	5/19/93	EG&G	Procurement QA

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Ref. No.	Date	Organization	Topic
I-K-42	5/19/93	EG&G	Sampling and analysis and data reporting
I-K-43	5/19/93	EG&G	Self-evaluation
I-K-44	5/19/93	EG&G	Self-evaluation
I-K-45	5/19/93	DP-6.1	HQ QA oversight
I-K-46	5/20/93	EG&G	Sample management
I-K-47	5/20/93	EG&G	Self-evaluation
I-K-48	5/20/93	EG&G	Assessment
I-K-49	5/20/93	RFO	Environmental oversight
I-K-50	5/20/93	EG&G	Self-evaluation
I-K-51	5/20/93	RFO	Environmental oversight
J. Janda - Worker Safety and OSHA Programs			
I-L-1	4/21/93	EG&G	Stop work authority; Line Control Safety and Health Program (LCSHP); RFS safety culture; budget for the LCSHP
I-L-2	4/21/93	EG&G	Hazard Assessment Program
I-L-3	4/21/93	EG&G	Hazard Assessment Program
I-L-4	4/21/93	EG&G	Electrical safety work practices; OS&H work area walkarounds
I-L-5	4/21/93	EG&G	LCSHP; performance standards re: OS&H elements; budget input relating to OS&H issues
I-L-6	4/21/93	EG&G	IDPs; OJEs; management development
I-L-7	4/21/93	EG&G	IDPs; OJEs; management development
I-L-8	4/21/93	USMA	Stop work authority; LCSHP; JCUSC; site safety culture
I-L-9	4/21/93	USMA	Stop work authority; LCSHP; JCUSC; site safety culture
I-L-10	4/22/93	EG&G	Occupational injury and illness reporting and tracking systems
I-L-11	4/22/93	EG&G	OS&H management development, OS&H budget process, OS&H accountability
I-L-12	4/22/93	EG&G	Construction safety program implementation
I-L-13	4/28/93	DOE/DP-6.1	Oversight of RF occupational safety programs
I-L-14	5/17/93	RFO	Oversight of OS&H programs

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Ref. No.	Date	Organization	Topic
I-L-15	5/17/93	RFO	Construction safety oversight
I-L-16	5/17/93	RFO	Oversight of the employee safety and health complaint program
I-L-17	5/17/93	RFO	Oversight of the employee safety and health complaint program, PATs tracking system
I-L-18	5/17/93	RFO	Construction safety oversight
I-L-19	5/17/93	RFO	IDPs, performance standards and plans, OS&H oversight, scheduling
I-L-20	5/17/93	RFO	IDPs, performance standards and plans, OS&H oversight, scheduling
I-L-21	5/18/93	EG&G	Construction safety, oversight, scheduling and planning
I-L-22	5/18/93	EG&G	PATs tracking system
I-L-23	5/18/93	EG&G	PATs tracking system
I-L-24	5/18/93	EG&G	PATs tracking system
I-L-25	5/18/93	EG&G	PATs tracking system
I-L-26	5/19/93	EG&G	"Walkaround Wednesday," internal oversight
I-L-27	5/20/93	EG&G	Construction safety requirements for construction sub-contractors
I-L-28	5/20/93	EG&G	Construction safety requirements for construction sub-contractors
W. Futrell - Fire Protection Program			
I-M-1	4/20/93	EG&G Fire Prot.	RF fire protection
I-M-2	4/20/93	Fire Dept	RF Fire Dept
I-M-3	4/20/93	Fire Dept	Fire prevention program
I-M-4	4/20/93	Safety, Safeguards & Security	Fire protection program
I-M-5	4/20/93	Safety, Safeguards & Security	Fire protection program
I-M-6	4/20/93	RFO, Technical Support	Counterpart introduction
I-M-7	4/21/93	Fire Protection Engineering	Fire protection engineering
I-M-8	4/21/93	RFO	RFO fire protection program
I-M-9	4/21/93	RFO, AMTS	RFO fire protection program
I-M-10	4/21/93	DP-6.1	DP-6.1 fire protection responsibilities

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Ref. No.	Date	Organization	Topic
I-N-11	4/22/93	Assessment	Current program status, future plans, staffing methods, & staff training
I-N-12	4/22/93	Operations & Program Assessment	Duties, responsibilities, latest tasks, and training needs
I-N-13	4/22/93	Operations & Program Assessment	Assessment of fire protection program
I-N-14	4/22/93	DOE Headquarters, EM 60	EH assessment and preparation for transfer of facilities from DP to EH
I-N-15	4/22/93	Independent Verification & Sampling	Responsibilities of organization as it related to verification of fire protection issues
I-N-16	4/22/93	DP-6.1 Safety & Security	Fire barrier issue in Building 707
I-N-17	5/5/93	DOE DP-6.1	1. Status of RFP Assessments by DP 2. Life Safety Status
I-N-18	5/6/93	EG&G Fire Protection Eng.	1. FM Action Plan 2. PLC Life Safety Report
I-N-19	5/7/93	DP-6.1	1. Status of concealed space in Building 776
I-N-20	5/7/93	EG&G Fire Protection Eng.	Building 130 Life Safety code deficiencies
I-N-21	5/17/93	RFO Construction & Engineering	Construction & Engineering responsibilities that relate to fire protection
I-N-22	5/17/93	EG&G Fire Department Fire Prevention	Tour of Building 707 and 776 AMIC
I-N-23	5/17/93	EG&G Fire Department Fire Prevention	Tour of Building 707 and 776 AMIC
I-N-24	5/17/93	EG&G Fire Protection Engineering	Tour of Building 707 and 776 AMIC
I-N-25	5/17/93	Building 776 Operations	Status of concealed space action plans
I-N-26	5/17/93	Building 776 Operations	Status of concealed space action plans
I-N-27	5/18/93	Transition Management	Transition process & fire protection
I-N-28	5/18/93	EG&G Fire Protection Dept.	1. Fire System Impairments 2. Fire Procedures 3. Fire Panel False Starts
I-N-29	5/18/93	EG&G Fire Protection Dept.	Fire protection system surveillance requirements
I-N-30	5/18/93	DP-6.1	Building 664 Tour
I-N-31	5/18/93	EG&G Fire Protection Dept.	Building 664 Tour
I-N-32	5/18/93	EG&G Fire Protection Dept.	Building 664 Tour

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Ref. No.	Date	Organization	Topic
I-M-33	5/18/93	EG&G Fire Protection Engineering	Building 664 Tour
I-M-34	5/18/93	EG&G Waste Assay & Shipping	Building 664 fire protection status and upgrades
I-M-35	5/18/93	EG&G Waste Assay & Shipping	Building 664 FSAR & limit on waste boxes
I-M-36	5/19/93	EG&G	EG&G fire protection program
I-M-37	5/19/93	EG&G - Safety, Safeguards and Security	EG&G fire protection program
I-M-38	5/19/93	EG&G Engineering & Technology	EG&G fire protection program
I-M-39	5/19/93	RFO Safety & Health	RFO & EG&G fire protection program
I-M-40	5/19/93	RFO Safety & Health	RFO & EG&G fire protection program
I-M-41	5/19/93	DP-6.1	Building 881 Tour
I-M-42	5/19/93	EG&G Fire Protection	Building 881 Tour
I-M-43	5/19/93	EG&G Fire Protection	Building 881 Tour
I-M-44	5/19/93	EG&G Building 881 Operations	1. Life Safety Issues. 2. Combustible storage in computer room.
I-M-45	5/19/93	EG&G Computer & Telecomm Operations	Combustible storage in computer room
I-M-46	5/19/93	EG&G Waste Operations	Fire protection for waste storage facilities
I-M-47	5/19/93	EG&G Waste Programs	Fire protection for waste storage facilities
I-M-48	5/20/93	RFO Oversight	RFO Oversight and fire protection
I-M-49	5/20/93	RFO, DAMA	Funding for fire protection upgrades
I-M-50	5/20/93	RFO, DAMF	Funding for fire protection upgrades
I-M-51	5/20/93	RFO, BD	Funding for fire protection upgrades
I-M-52	5/20/93	EG&G Fire Protection Eng.	1. EG&G Fire Protection Engineering Responsibilities 2. Building 707 3. Impairments
I-M-53	5/20/93	EG&G Fire Protection Eng.	Meeting on Building 707 fire protection system impairments
I-M-54	5/20/93	EG&G Safety, Safeguards & Security	Meeting on Building 707 fire protection system impairments
I-M-55	5/20/93	EG&G Fire Protection	Meeting on Building 707 fire protection system impairments
I-M-56	5/20/93	EG&G Building 707 Operations	Meeting on Building 707 fire protection system impairments

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Ref. No.	Date	Organization	Topic
I-N-57	5/20/93	EC&G Fire Protection	Meeting on Building 707 fire protection system impairments
I-N-58	5/20/93	EC&G Fire Protection	Meeting on Building 707 fire protection system impairments
I-N-59	5/20/93	EC&G Prog. & Oper. Assessment	Assessment process for fire protection
I-N-60	5/20/93	EC&G Standards & Policy	Development of standards for transition
I-N-61	5/21/93	RFO, Transition & Env. Restoration	RFO involvement in transition
I-N-62	5/21/93	EC&G Fire Protection Eng.	General information on fire protection engineering responsibilities
I-N-63	5/21/93	EC&G Fire Protection	1. Cost of fire watches 2. Trailers under steam lines
I-N-64	5/21/93	DP-6.1	Bldg. 707 fire protection issues
B. Holder/L. Munson - Industrial Hygiene Program			
I-N-1	5/17/93	Industrial Hygiene	Industrial hygiene
I-N-2	5/17/93	Industrial Hygiene and Safety	Half-Mask respirators used for egress; EC&G and RFO Bldg. 771 Review; RFO Policy to Contain Hazard Not People; IH Program Policy
I-N-3	5/17/93	Safety, Safeguards, and Security	Half-Mask respirators used for egress; EC&G and RFO Bldg. 771 Review; RFO Policy to Contain Hazard Not People; Management decision to allocate resources based on risk; IH Policy
I-N-4	5/17/93	Safety, Safeguards, and Security	Half-Mask respirators used for egress; EC&G and RFO Bldg. 771 Review; RFO Policy to Contain Hazard Not People; Management decision to allocate resources based on risk; IH Policy
I-N-5	5/17/93	Line Control Safety Program	Line Control Safety Program
I-N-6	5/17/93	Line Control Safety Program	Line Control Safety Program Training
I-N-7	5/17/93	EC&G	Commitment to Safety and Health from the Top Management
I-N-8	5/18/93	Mel Chew Associates	Industrial Hygiene and Worker Health Program - Surveillances by RFO
I-N-9	5/18/93	Technical Support	IH Programs, RFO Budget, Health & Safety

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Ref. No.	Date	Organization	Topic
I-N-10	5/18/93	Safety and Health Division	RFO/EG&G IH Program
I-N-11	5/18/93	Safety and Health Division	RFO/EG&G IH Program
I-N-12	5/19/93	EG&G Occupational Health	Industrial Hygiene and Medical Interfaces
I-N-13	5/19/93	EG&G Industrial Hygiene	Review and Status of emergency issues
I-N-14	5/18/93	Independent Verification	PATS System and Issues Management
I-N-15	5/18/93	Plant Action Tracking System	PATS System and Issues Management
I-N-16	5/18/93	Issues Management	PATS System and Issues Management
I-N-17	5/18/93	Site Quality Assurance	PATS System and Issues Management
I-N-18	5/18/93	RFO/QAD-Issues Management	PATS system and issues management
I-N-19	5/19/93	SS&S Management Systems	Industrial hygiene programs
I-N-20	5/19/93	Internal Support	IMCP
I-N-21	5/19/93	H&S Administrators	Industrial hygiene programs
I-N-22	5/19/93	Industrial Hygiene and Safety	Building 771 Review
I-N-23	5/19/93	RFO	Tour 707
I-N-24	5/19/93	Building 707	Tour 707
I-N-25	5/19/93	Building 707	Tour 707
I-N-26	5/19/93	Building 707	Tour 707
I-N-27	5/19/93	S&H Administrator for Bldg. 707	Tour 707
I-N-28	5/20/93	Joint Company-Union Safety Committee	Health & safety concerns
I-N-29	5/20/93	Joint Company-Union Safety Committee	Health & safety concerns
I-N-30	5/20/93	Joint Company-Union Safety Committee	Health & safety concerns
I-N-31	5/20/93	Laundry	Laundry health & safety concern
I-N-32	5/19/93	EG&G Occupational Health	Occupational Medicine Program
I-N-33	4/20/93	Occupational Safety Branch	RFO and EG&G Industrial Program
I-N-34	4/21/93	EG&G Industrial Hygiene	Asbestos Program
I-N-35	4/21/93	EG&G IH	Environmental Restoration Plan and PPE
I-N-36	4/21/93	EG&G IH	OU2 Decon area; confined space entry and PPE

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Ref. No.	Date	Organization	Topic
I-N-37	4/21/93	EG&G IH	Safety and Hygiene Hazard Assessment Inventory; Carcinogen Control Program
I-N-38	4/21/93	EG&G Occupational Safety	Safety and Hygiene Hazard Assessment Inventory
I-N-39	4/21/93	FNP SOP&A Projects	EG&G Asbestos Program
I-N-40	4/21/93	EG&G Industrial Hygiene	EG&G Asbestos Program
I-N-41	4/21/93	Env. & Quality Training	IH Training Courses, i.e. HAZCOM; Records
I-N-42	4/21/93	Env. & Quality Training	Training courses
Intentionally omitted			
I-N-44	4/21/93	Plant Training Records	Training records
I-N-45	4/21/93	Industrial Hygiene	HAZCOM
I-N-46	4/22/93	EG&G IH	HAZCOM
I-N-47	4/22/93	EG&G IH	HAZCOM; Hearing Conservation
I-N-48	4/22/93	Woodward-Clyde	UO2 DECOM Pad Policy and PPE
I-N-49	4/22/93	Woodward-Clyde	UO2 DECOM Pad Policy and PPE
I-N-50	4/22/93	EG&G Nuclear Materials Control	UO2 DECOM Pad Policy and PPE
I-N-51	4/22/93	Envir. Prog. Ops	UO2 DECOM Pad Policy and PPE
I-N-52	4/22/93	EG&G Industrial Hygiene	Building 566 Beryllium Concern; Heat Stress; Overhead rail accident
I-N-53	4/22/93	Engineering	Building 566 Beryllium Concern; Heat Stress; Overhead rail accident
I-N-54	4/22/93	Occupational Safety	Building 566 Beryllium Concern; Heat Stress; Overhead rail accident
I-N-55	4/22/93	M&S Group	Building 566 Beryllium Concern; Heat Stress; Overhead rail accident
I-N-56	4/22/93	Laundry	Building 566 Beryllium Concern; Heat Stress; Overhead rail accident
I-N-57	5/19/93	EG&G Industrial Hygiene	Building 771 Tour, Industrial Hygiene
I-N-58	5/19/93	EG&G	Building 771 Tour, Industrial Hygiene
I-N-59	5/19/93	Industrial Hygiene	Building 771 Tour, Industrial Hygiene
I-N-60	5/24/93	Performance Assessment	Independent assessment performed on the industrial hygiene program

Appendix G

List of Site Documents Reviewed

LIST OF SITE DOCUMENTS REVIEWED BY THE PROGRESS ASSESSMENT TEAM

Ref. No.	Document #	Title/Description	Document Author/ Issuing Org.	Revision/ Issue Date
W. Kehew - Corrective Action Program				
D-A-1	None indicated	Engineering and Tech Improvement Programs	EG&G	4/93
D-A-2	None indicated	PATS Task Schedule Performance	EG&G	3/93
D-A-3	None indicated	Strategic Plan ER & Waste Management Office Of Oversight and Self-assessment (EM-20)	DOE	Rev. 2/19/93
D-A-4	EM-23 DAVIDSON;3	Safety Analysis Report Bldg. 664	DOE	6/92
D-A-5	None indicated	DOE-Verification of Closure File	DOE	4/93
D-A-6	Action Plan 13	Operational Readiness Review, Bldg.707	EG&G	5/93
D-A-7	EM-22 6-0338	Draft EM NEPA Audit Checklist	DOE	4/92
D-A-8	None indicated	DOE Commitment Action Tracking List	DOE	5/93
D-A-9	1-20000-HWR-XXX	Environmental Compliance Program Deficiency Response/reporting Procedure	EG&G	5/93
D-A-10	None indicated	Monthly Environmental Compliance Report	EG&G	5/93
D-A-11	None indicated	Tiger Team Commitments PATS System	EG&G	5/93
D-A-12	2-PA-ADM-09.04	Rocky Flats Plant Performance Assurance-Issues And Commitments	EG&G	7/91
D-A-13	2-11000	Conduct Of Verifications	EG&G	2/91
D-A-14	1-10000-EWAA	TSCA (Toxic Substances Control Act) Management Plan	EG&G	2/93
D-A-15	None indicated	ESA Tiger Team Issues	DOE	5/93
D-A-16	DWS-05463	Interim Rocky Flats Office Procedure For Commitments Management	DOE	5/93
D-A-17	None indicated	Site-Wide Corrective Action Program	EG&G	5/93
D-A-18	EM-22	Delegation Of Section D NEPA Determination Authority To The Rocky Flats Office	DOE	3/92
D-A-19	None indicated	Program Plan Fiscal 1993 Office Of Special Projects (EH-5)	DOE	9/92

LIST OF SITE DOCUMENTS REVIEWED BY THE PROGRESS ASSESSMENT TEAM

Ref. No.	Document #	Title/Description	Document Author/ Issuing Org.	Revision/ Issue Date
D-A-20	DOE RFO AMTS SHD RFB	Building 883 Tour, April 21 1993	Richard G. Johnson, DOE	4/93
D-A-21	None indicated	Rocky Flats Occurrence Reports	DOE	3/93
D-A-22	None indicated	ERM External Action Tracking Commitments	DOE	5/93
D-A-23	EH-30.3	Office Of Environment, Safety And Health (EH) Site Representative Performance Assessment Reports	DOE	2/93
D-A-24	1-50000	Sitewide Corrective Action Program (Draft A)	RFP	Rev. O. No date indicated
H. Jones - Self-Assessment Program				
D-B-1	DOE/EH-0107	Assessment of Environmental Conditions at the Rocky Flats Plant	EH	8/89
D-B-2	None indicated	Action Plan for Correcting the Deficiencies Identified by the Assessment of Environmental Conditions at the Rocky Flats Plant	DP	None indicated
D-B-3	None indicated	Reconstruction of Historical Rocky Flats Operations & Identification of Release Points	Chemflak	8/92
D-B-4	None indicated	Strategic Plan for The Rocky Flats Office	D. Simonsen/RFO	1/25/93
D-B-5	SRTPL00002	Plutonium Operations Phased Resumption Management Plan, Revision 3	L. Riney/EG&G	9/14/90
D-B-6	PAOP 1325.5	Division Records	RFO	8/3/92
D-B-7	None indicated	Defense Programs Environment, Safety, and Health Five-Year Plan for Fiscal Years 1994-1998	DP	7/20/92
D-B-8	PAOP 1321.1	Office Directives	RFO	8/3/92
D-B-9	PAOP 5480.20.03	Oral Boards	RFO	8/3/92
D-B-10	None indicated	Strategic Plan Environmental Restoration and Waste Management 1993 - Draft	EM	None indicated
D-B-11	GAO/RCED-92-219	NUCLEAR MATERIALS: Removing Plutonium Residues From Rocky Flats Will Be Difficult and Costly	J. Dexter Peck/GAO	9/92

LIST OF SITE DOCUMENTS REVIEWED BY THE PROGRESS ASSESSMENT TEAM

Ref. No.	Document #	Title/Description	Document Author/ Issuing Org.	Revision/ Issue Date
D-B-12	GAORCED-93-10	NUCLEAR SECURITY: Improving Correction of Security Deficiencies at DOE's Weapons Facilities	J. Dexter Pech/GAO	11/92
D-B-13	PAOP 5480.20.04	Written Examinations	RFO	8/3/92
D-B-14	PAOP 1100.2	Office Organization	RFO	8/3/92
D-B-15	PAOP 7300.01	Self Assessment Procedures	RFO	8/3/92
D-B-16	None indicated	Letter - C. Guidice to M. Seitz re: Transmittal of Information - Rocky Flats Progress Assessment	C. Guidice	5/18/93
D-B-17	None indicated	Memorandum - L. Vaughn, EM-20 to Distribution re: EM Oversight Integrated Schedule for 1993-94	EM-20	2/24/93
D-B-18	None indicated	Memorandum - EM-24 to EM-20 Staff re: Guidance for EM-20 Review of the Award Fee Process	EM-24	7/1/91
D-B-19	None indicated	EH-23 Policy and Guidance Listing	EM-23	10/25/92
D-B-20	None indicated	EM Self-Assessment Status Briefing	EM-	5/11/93
D-B-21	RFOP 7100	Procedure: Contractor Activity Oversight	RFO	4/3/92
D-B-22	PAOP 5480.20.02	Training Course Development, Review and Approval	RFO	8/3/92
D-B-23	PAOP 5480.20.01	Self-Assessment Training and Qualification Program	RFO	8/3/92
D-B-24	None indicated	Memorandum - Bachner to Manager, SR re: Self-assessment responsibilities	DP	3/17/92
D-B-25	None indicated	Pre-Turnover Review of Rocky Flats Buildings Prior to Transfer from Defense Programs (DP) to Environmental Restoration and Waste Management (EM)	None indicated	12/92
D-B-26	None indicated	Memorandum - A. Lopez to J. Davis, et. al. re: QAD Evaluation Report	RFO	3/22/93
D-B-27	RFOP 1100.6	Procedure: Rocky Flats Office Organization and Functions	RFO	10/4/91
D-B-28	None indicated	Memorandum - V. Le to F. Gilbert re: U.S. DOE Order 5000.3A Field Implementation Review (FIR) at DOE Rocky Flats Office	DP-9.21	5/4/93
D-B-29	RFI 5700.605	Instruction: Rocky Flats Issues Management System	RFO	10/15/91

LIST OF SITE DOCUMENTS REVIEWED BY THE PROGRESS ASSESSMENT TEAM

Ref. No.	Document #	Title/Description	Document Author/ Issuing Org.	Revision/ Issue Date
D-B-30	None indicated	Surveillance Report No. QA SR92-006	DOE NV	None indicated
D-B-31	DE-AC04-90DP62349	Prime Contract Between the U.S. Department of Energy and EG&G Rocky Flats, Incorporated	DOE & EG&G	12/28/89
D-B-32	None indicated	Memorandum re: RFP Infrastructure	R. Nelson, Jr./RFO	2/19/93
D-B-33	RFO-93-003	Rocky Flats DOE Manager's Weekly Meeting Memorandum re: Implementation of Infrastructure at Rocky Flats Plant	RFO	1/25/93
D-B-34	None indicated	Vu-Graph Presentation entitled Infrastructure Management	W. Bennett/EG&G	4/13/93
D-B-35	None indicated	Vu-Graph Presentation entitled Infrastructure Management	J. Davis/EG&G	4/16/93
D-B-36	None indicated	Memorandum to Distribution re: Possible Rocky Flats Plant (RFP) Infrastructure Control systems for Review - DAW-002-93	D. Webber/EG&G	4/8/93
D-B-37	None indicated	EG&G Rocky Flats, Inc. Policy - Draft, Plant Infrastructure	EG&G	4/22/93
D-B-38	None indicated	Infrastructure Integrated Plan - Draft	EG&G	4/22/93
D-B-39	PP-6	Policies and Procedures Program Plan (Rev. 1)	J. Davis/EG&G	10/10/91
D-B-40	NS-6	Nuclear Safety Program Plan (Revision 0)	EG&G	3/15/91
D-B-41	TN-6	Training Program Plan (Revision 0)	EG&G	3/15/91
D-B-42	RP-6	Radiological Protection Program Plan (Rev. 0)	EG&G	3/15/91
D-B-43	SA-6	Self-Assessment Program Plan (Revision 0)	EG&G	3/15/91
D-B-44	HS-6	Industrial Health and Safety Program Plan (Revision 0)	EG&G	3/17/91
D-B-45	OP-6	Operations Program Plan (Revision 0)	EG&G	3/15/91
D-B-46	None indicated	RFO Safety Division Accomplishment (Listing)	RFO	1992
D-B-47	RFOF 1321.2	Procedure: RFO Responsibilities for DOE Orders, Notices, and Secretary of Energy Notices	RFO	10/1/91

LIST OF SITE DOCUMENTS REVIEWED BY THE PROGRESS ASSESSMENT TEAM

Ref. No.	Document #	Title/Description	Document Author/ Issuing Org.	Revision/ Issue Date
D-B-48	None indicated	Memorandum - R. Levernier, RFO to W. Casey, RFO re: 1993 Implementation Schedule for Surveillances and Self-Assessments	RFO	11/3/92
D-B-49	DOE/EM-0079	Report to Congress - Rocky Flats Transition Plan	EM	7/92
D-B-50	None indicated	Mission Transition Program Management Plan	EG&G	3/11/92
D-B-51	None indicated	Rocky Flats Plant Site Development Plan	J. Zane/EG&G	3/1/93
D-B-52	None indicated	Rocky Flats Plant Integrated Roadmap Project Management Plan - Final Draft	EG&G	1/21/93
D-B-53	None indicated	Requests for and Responses to Deficiencies	T. Vaeth	None indicated
D-B-54	None indicated	Memorandum to W. S. Glover, re: Training of Assessors-REF-013-93	R. Farrell/EG&G	4/29/93
D-B-55	None indicated	Memorandum To Distribution, re: Training Status-BAT-O40-91	B. Troutman/EG&G	9/6/91
D-B-56	None indicated	Memorandum To Distribution, re: Fiscal Year 1994 Program Execution Guidance	M. Bishop/RFO	3/8/93
D-B-57	None indicated	Memorandum To Distribution, re: FY 1994 Congressional Budget Request	P. Grim/RFO	4/1/93
D-B-58	None indicated	Memorandum - T. Anderson, QAD to all QAD Personnel re: QADP 5700.6-04	RFO	6/11/91
D-B-59	None indicated	Rocky Flats Plant Work Break Down Structure Dictionary, Book 1 of 4, FY 93 Budget	EG&G	9/92
D-B-60	None indicated	Rocky Flats Plant Work Break Down Structure Dictionary, Book 2 of 4, FY 93 Budget	EG&G	9/92
D-B-61	None indicated	Rocky Flats Plant Work Break Down Structure Dictionary, Book 3 of 4, FY 93 Budget	EG&G	9/93
D-B-62	None indicated	Rocky Flats Plant Work Break Down Structure Dictionary, Book 4 of 4, FY 93 Budget	EG&G	9/93
D-B-63	WP NSB-3	DOE RFO Safety and Health Division FY 1993 Work Plan Package Documentation-Draft	RFO	None indicated
D-B-64	RFOP 7100	Contractor Activity Oversight	R. Nelson, Jr./RFO	4/3/92

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Ref. No.	Document #	Title/Description	Document Author/ Issuing Org.	Revision/ Issue Date
D-B-65	RFI 5700.6-05	Rocky Flats Issues Management System	RFO	10/15/91
D-B-66	RFI 7300	Instruction: Rocky Flats Plant Self-Assessment Program	RFO	7/10/92
D-B-67	None indicated	Radiological Health FY 1993 Work Package Documentation	J. Quillin/EG&G	9/24/92
D-B-68	None indicated	Radiological Operations FY 1993 Work Package Documentation	M. Littleton/EG&G	9/24/92
D-B-69	None indicated	Radiological Engineering FY 1993 Work Package Documentation	W. Zurlene/EG&G	9/24/92
D-B-70	None indicated	Standards, Audits, and Assurance "Mission and Function Statement" Assessment Directorate	W. Glover/EG&G	2/93
D-B-71	2-50000-ADM-01.01	Standards, Audits, and Assurance Mission, Organization, and Function	EG&G	None indicated
D-B-72	2-50000-ADM-01.06	Qualifications and Training For Standards, Audits and Assurance Personnel	EG&G	None indicated
D-B-73	2-53000-AMD-05.08	Trend Analysis, Rev. 0	J. Davis/EG&G	4/16/93
D-B-74	None indicated	Strategic Plan Environmental Restoration and Waste Management, Office of Oversight and Self-Assessment (EM-20) Draft-Rev. 2/19/93	EM	2/19/93
D-B-75	None indicated	Memorandum To EM-20 Staff, Subject: Guidance for EM-20 Review of the Award Fee Process	R. Scott/EM-20	7/1/91
D-B-76	None indicated	Memorandum To Distribution, re: Cost and Schedule Estimating Policy for the Office of Environmental Restoration and Waste Management	L. Duffy/EM	2/14/92
D-B-77	None indicated	Memorandum To L. P. Duffy, EM-1, re: Compilation of EM Policies on Cost and Schedule Estimating and Analysis	R. Scott/EM-20	11/2/92
D-B-78	1-11000-ADM-16.09	Issues Management, Revision 0	EG&G	3/15/92
D-B-79	None indicated	Memorandum To A. Paule, re: Division of Environmental Monitoring Branch Staff and Responsibilities	J. Hartman and M. Karol/RFO	None indicated

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Ref. No.	Document #	Title/Description	Document Author/ Issuing Org.	Revision/ Issue Date
D-B-80	None indicated	Rocky Flats Plant Air Quality Management Plan	EG&G	12/24/91
D-B-81	None indicated	Assessment and Integration of Radioactive Ambient Air Monitoring at Rocky Flats Plant	EG&G	3/93
D-B-82	RFO-93-003	Action Item from the Rocky Flats DOE Manager's Weekly Meeting, Friday, April 16, 1993	RFO	4/16/93
D-B-83	None indicated	Memorandum To T. A. Vaeth, re: Environmental Management Surveillance Programs	J. Hartman/RFO	6/27/92
D-B-84	None indicated	Informal Memorandum To J. Lehr, re: Draft Self-Assessment Plan	J. Leifer/RFO	2/12/92
D-B-85	1-50000-ADM-16.01	Sitewide Corrective Action Program, Draft A	EG&G	None indicated
D-B-86	None indicated	EG&G Committee Charters	EG&G	Various
D-B-87	None indicated	FY93 Waste Minimization Program Plan	EG&G	9/30/92
D-B-88	SHDP-002, Rev. 0	Safety and Health Division Self-Assessment Plan - SHDP-002	S. Olinger/RFO	5/18/93
D-B-89	1-10000-EWAA, Section 1.5, Rev. 0	TSCA (Toxic Substances Control Act) Management Plan	T. Hedahl/EG&G	2/93
D-B-90	None indicated	Rocky Flats Plant Fiscal Year 1993 Site-Specific Plan	RFO	8/31/92
D-B-91	RFO Committee Charter No. 5.1	Radiological Instrumentation, Source and Device Committee (RISDC) Charter	EG&G	10/5/92
D-B-92	None indicated	Instrumentation and Source/Device Request Form	RISDC/EG&G	None indicated
D-B-93	Policy Number 10-17	Radiological Instrumentation, Source and Device Procurement Management Policy	J. Zane/EG&G	1/26/93
D-B-94	1-50000-ADM-15.02	Stop Work Action, Revision 1	J. Zane/EG&G	4/14/92
D-B-95	None indicated	Vu Graph Presentation: Rocky Flats Plant Integrated Planning Process Pilot Project Bimonthly Review	EG&G	5/18/93
D-B-96	None indicated	FY 93 Self-Assessment Schedule Performance Assessment Office	PAO	None indicated
D-B-97	None indicated	Vu Graph Presentation: Integrated Planning Process	P. Swenson/EG&G	5/18/93

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Ref. No.	Document #	Title/Description	Document Author/ Issuing Org.	Revision/ Issue Date
D-B-98	None indicated	Rocky Flats Plant Strategic Planning Steering Committee Charter	EG&G	4/16/93
D-B-99	None indicated	Rocky Flats Plant Mission Statement	RFO	None indicated
D-B-100	None indicated	Draft EG&G Rocky Flats, Inc. Policy, Integrated Planning process, Revision 0	EG&G	5/11/93
D-B-101	None indicated	Vu Graph Presentation: Rocky Flats Plant Systems Engineering Analysis	D. Shain/EG&G	5/18/93
D-B-102	None indicated	Vu Graph Presentation: Facility/Land Use Component for the Strategic Engineering Analysis	K. Ryan/EG&G	5/18/93
D-B-103	SHDP-002	Safety and Health Division Self-Assessment Plan	RFO	5/18/93
D-B-104	None indicated	Facilities Management and Operations (FM&O) Environmental Compliance Operations Order for 771 Area Operations - Draft	K. Bates/EG&G	3/8/93
D-B-105	None indicated	Memorandum to Distribution, re: Reorganization-JOZ-500-92	J. Zane/EG&G	7/16/92
D-B-106	None indicated	Memorandum to J. G. Davis, re: Transmittal of FY93 Assessment Schedule (Third and Forth Quarters) - WSG-131-93	W. Glover/EG&G	4/22/93
D-B-107	None indicated	An Integrated Compliance Management Program For EG&G Rocky Flats - Draft F	EG&G	4/21/93
D-B-108	None indicated	Memorandum To Al Paule, re: Division of Environmental Monitoring Branch Staff and Responsibilities - Unsigned	J. Hartman & M. S. Karol/RFO	None indicated
D-B-109	None indicated	Self Review of ES&H Performance Objectives	EG&G	5/14/93
D-B-110	None indicated	EG&G Rocky Flats, Inc. Policy - Plant Infrastructure - Draft	EG&G	4/22/93
D-B-111	None indicated	EM Self-Assessment Management Plan	EM-20	1/93
D-B-112	None indicated	Memorandum - Field Input to EM-Self-Assessment Program	R. Scott, EM-20	1/11/93
D-B-113	14.01	Internal Surveillance Procedure	EG&G	2/11/91

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Ref. No.	Document #	Title/Description	Document Author/ Issuing Org.	Revision/ Issue Date
D-B-114	None indicated	2.1 Planning	None indicated	None indicated
D-B-115	None indicated	RFO Security Division Self-Assessment Program	RFO	11/4/92
D-B-116	SID-PP-17	Standards Identification Document for the Policies and Procedures Program	EG&G	10/6/92
D-B-117	2-50000-ADM-01.06	Qualification and Training for Standards, Audits and Assurance Personnel	EG&G	3/3/93
D-B-118	None indicated	Area Maintenance Self-Evaluation Schedule	D. Ferrara, EG&G	4/1/93
D-B-119	Procedure 18.05	ERM Self-Evaluation	EG&G	4/21
D-B-120	92-PCN-000158	Procedure Change Notice	EG&G	3/5/92
D-B-121	Procedure 16.03	Root Cause Analysis	EG&G	2/7/91
D-B-122	None indicated	Metrology Laboratories Self-Evaluation Program	Metrology Laboratories	3/11/93
D-B-123	None indicated	Lessons Learned Program Plan	None indicated	3/15/91
D-B-124	93-PCN-000146	Procedure Change Notice	EG&G	1/7/93
D-B-125	None indicated	EG&G Policy: Performance Indicator Program	EG&G	4/30/92
D-B-126	None indicated	EG&G Policy: Lessons Learned Program	EG&G	2/15/91
D-B-127	None indicated	EG&G Policy: Commitments Management	EG&G	3/9/92
D-B-128	2-11000-ADM-08.05	Performance Assurance Implementation of Self-Evaluation Program	EG&G	2/92
D-B-129	1-11000-ADM-16.10	Self-Evaluation Program	EG&G	12/91
D-B-130	93-RF-3924	Rocky Flats Plant Safety Analysis Program Implementation Plan	EG&G	3/93
D-B-131	None indicated	EG&G Policy: Self Assessment	EG&G	3/31/92
D-B-132	None indicated	EG&G Policy: Management Oversight	EG&G	1/29/93
D-B-133	RMP 16.03	Root Cause Evaluation	EG&G	12/90
D-B-134	None indicated	EG&G Policy: Root Cause Program	EG&G	2/15/91
D-B-135	None indicated	Performance Indicator Program Concept	None indicated	4/22/93

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Ref. No.	Document #	Title/Description	Document Author/ Issuing Org.	Revision/ Issue Date
D-B-136	SID-SA-16	Standards Identification Document for the Self-Assessment Program	EG&G	10/92
D-B-137	Procedure 16.05	Implementation of Lessons Learned Program	EG&G	2/7/91
D-B-138	None indicated	Bldg 374 Operations Assessment	None indicated	10/19/92
D-B-139	2-50000-ADM-20.02	Quality Assurance Self-Evaluation Procedure	EG&G	4/92
D-B-140	None indicated	Interoffice Correspondence - B. White to Distribution re: Process Improvement Team Activities	EG&G	2/1/93
D-B-141	None indicated	Interoffice Correspondence - J. Zane to Distribution re: Monitoring of Bldg 707 by AGMs and Directors	EG&G	1/25/93
D-B-142	None indicated	Listing of ER Self-Assessments	None indicated	4/21/93
D-B-143	2-53000-ADM-05.08	Trend Analysis	EG&G	3/93
D-B-144	None indicated	QADPs	RFO	None indicated
D-B-145	None indicated	Self-Assessment Program Plan	None indicated	3/15/91
D-B-146	00-707-56	PUFAB Self-Evaluation Program Management	EG&G	5/29/92
D-B-147	93-PCN-000146	Procedure Change Notice	EG&G	1/7/93
D-B-148	None indicated	Fire Department Self-Evaluation Program	EG&G	None indicated
R. Compton - Oversight/Directives, Policies, and Procedures				
D-C-1	RFOP 7100	Contractor Activity Oversight	RFO	4/3/92
D-C-2	RFOP 1321.2	RFO Responsibility for DOE Orders, Notices, and Secretary of Energy Notices	RFO	10/1/91
D-C-3	None indicated	Safety and Health Division Oversight Instruction	RFO	Draft
D-C-4	RFI 1321.1	Rocky Flats Office Directive System	RFO	5/29/91
D-C-5	3-21000-ADM, 18.03	Readiness Review	EG&G	Rev. 0, 8/2/91
D-C-6	Committee Charter 5.0	Safety Committees	EG&G	11/15/91
D-C-7	Committee Charter 5.2	Joint Company-Union Safety Committee	EG&G	4/92
D-C-8	Committee Charter 5.3	Nuclear Criticality Safety Committee	EG&G	11/15/91
D-C-9	Committee Charter 5.5	Executive Safety Review Board	EG&G	4/92

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Ref. No.	Document #	Title/Description	Document Author/ Issuing Org.	Revision/ Issue Date
D-C-10	Committee Charter 5.6	ALARA Oversight Committee (AOC)	EG&G	10/26/92
D-C-11	Committee Charter 5.7	ALARA Action Committee	EG&G	4/92
D-C-12	Committee Charter 5.9	Executive Safety Committee	EG&G	7/29/92
D-C-13	Committee Charter 5.10	Emergency Preparedness Review Committee	EG&G	7/29/92
D-C-14	Committee Charter 5.14	Waste Management Committee	EG&G	1/22/93
D-C-15	3-21000-ADM-18.02	Surveillance	EG&G	Rev. 1, 5/11/92
D-C-16	Policy 7-1	Policies and Procedures System	EG&G	Rev. 1, 4/30/91
D-C-17	Policy 7-19	Root Cause Program	EG&G	2/15/91
D-C-18	Policy 7-25	Readiness Review	EG&G	3/9/92
D-C-19	Policy 7-27	Issues Management	EG&G	9/20/91
D-C-20	Policy 7-33	The Rocky Flats Plant Document Hierarchy	EG&G	Rev. 0, 9/30/92
D-C-21	Policy 7-34	Management Oversight	EG&G	Rev. 0, 1/29/93
D-C-22	Policy 7-37	Sitewide Corrective Action Program	EG&G	Rev. 0, 3/30/93
D-C-23	Policy 11-1	Quality Assurance Program	EG&G	6/3/91
D-C-24	1-50000-ADM-16.16	Corrective Action Request (CAR)	EG&G	Rev. 3, 2/11/93
D-C-25	1-50000-ADM-18.01	Quality Assurance Audit Program	EG&G	Rev. 0, 2/17/92
D-C-26	1-50000-ADM-16.17	Deficiency Report System	EG&G	Rev. 1, 10/9/92
D-C-27	1-50000-ADM-05.01	Document Hierarchy Definition and Administration	EG&G	Rev. 0, 2/23/93
D-C-28	1-48000-DM-001	Document Control Program	EG&G	Rev. 0, 7/6/92
D-C-29	WSG-131-93	FY93 Assessment Schedule (Third and Fourth Quarters)	EG&G	4/22/93
D-C-30	ODP 1100.1	Facility Representative Charter	RFO	Rev. 0, 5/6/91
D-C-31	RFO-92-001	Self-Assessment of Facility Representative Program	RFO	6/4/92
D-C-32	RFO-93-001	Self-Assessment of Issues Management Program	RFO	1/25/93
D-C-33	PP-6	Policies and Procedures Program Plan	EG&G	Rev. 1, 10/10/91
D-C-34	None indicated	Production Division Oversight Plan	RFO	10/21/92

LIST OF SITE DOCUMENTS REVIEWED BY THE PROGRESS ASSESSMENT TEAM

Ref. No.	Document #	Title/Description	Document Author/ Issuing Org.	Revision/ Issue Date
D-C-35	None indicated	Production Division Self-Assessment Plan	RFO	10/92
D-C-36	None indicated	Oversight Plan, Environmental Restoration Div, FY92	RFO	6/27/92
D-C-37	None indicated	Operational Oversight Plan, Waste Management and Environment Division, FY92	RFO	6/27/92
D-C-38	None indicated	Safety and Health Division (SHD) FY 1993 Oversight Plan	RFO	10/19/92
D-C-39	HSP 3.02	Health & Safety Practices, Radiological Deficiency Report	EG&G	6/10/91
D-C-40	None indicated	Environmental Compliance Task Force Meeting Minutes for April 6, 1993	EG&G	None indicated
D-C-41	None indicated	Environmental Compliance Task Force Meeting Minutes for April 13, 1993	EG&G	None indicated
D-C-42	PCN HSD-123-92 to Health & Safety Practice (HSP) 2.10	Administration of H&S Design Review	EG&G	6/15/92
D-C-43	HSP 2.02	H&S Area Engineer/Area Safety Teams Functions and Responsibilities	EG&G	11/15/90
D-C-44	None indicated	Minutes, DOE/FPM Roundtable, January 6, 1993 (with attachments)	EG&G	1/8/93
D-C-45	None indicated	Minutes, DOE/FPM Roundtable, February 3, 1993 (with attachments)	EG&G	2/9/93
D-C-46	93-RF-4360, with attachments	Letter from J. G. Davis (EG&G) to A. H. Paule (RFO) re: status of impact assessment regarding RFI 5700.6, Quality Assurance	EG&G	4/12/93
D-C-47	None indicated	Draft of Integrated Infrastructure Plan	EG&G	Draft, 4/22/93
D-C-48	PAOP 7300-1	Self-Assessment Procedures	RFO	Rev. O, 8/3/92
D-C-49	RFOP 1100.6	Rocky Flats Office Organization and Function	RFO	10/4/91
D-C-50	RFOP 7110	Contractor Activity Oversight	RFO	4/3/92
D-C-51	RFI 7300	Rocky Flats Self-Assessment Program	RFO	7/10/92
D-C-52	RFI 5700.6-05	Rocky Flats Issues Management System	RFO	10/15/91

LIST OF SITE DOCUMENTS REVIEWED : THE PROGRESS ASSESSMENT TEAM

Ref. No.	Document #	Title/Description	Document Author/ Issuing Org.	Revision/ Issue Date
D-C-53	QADP 5700.6-01	Planning and Scheduling Evaluation Activities	RFO	Rev. 0, 9/16/91
D-C-54	QADP 5700.6-03	Level 1 Evaluation Activities	RFO	Rev. 1, 3/5/92
D-C-55	QADP 5700.6-04	Level 2 Evaluation Activities	RFO	Rev. 1, 3/5/92
D-C-56	QADP 5700.6-07	Review of Contractor and RFO Documents	RFO	Rev. 0, 9/30/91
D-C-57	SHDP-001	M&O Contractor Safety and Health Oversight	RFO	Rev. 0, 3/27/92
D-C-58	SHDP-002	Self-Assessment Plan	RFO	Draft Rev. 0, 10/1/92
D-C-59	Work Plan NSB-1	Safety Analysis Support	RFO	Rev. A, 4/21/93
D-C-60	Work Plan NSB-2	DOE Order and Standard Compliance	RFO	Rev. A, 4/21/93
D-C-61	Work Plan NSB-3	Nuclear and Criticality Safety Program Oversight	RFO	Rev. A, 4/21/93
D-C-62	Work Plan NSB-4	Miscellaneous Technical Support	RFO	Rev. A, 4/21/93
D-C-63	Work Plan OSB-5	FEOSH	RFO	Rev. 0, Draft
D-C-64	Work Plan OSB-02	Occupational Safety and Health Program	RFO	Rev. 0, Draft
D-C-65	Work Plan OSB-01	Occupational Health/Industrial Hygiene Work Plan	RFO	Rev. 0, Draft
D-C-66	2-56000-ADM-02.01	Independent Assessments	EG&G	Rev. 0, Draft
D-C-67	None indicated	Safety and Health Division Surveillance Log	RFO	1992
D-C-68	PAOP 1321.1	Office Directives	RFO	Rev. 0, 8/3/92
D-C-69	2-11000-ADM-02.03	Assessment Reports	EG&G	Rev. 0, 11/1/91
D-C-70	PA-02.02	Conduct of Assessments	EG&G	Rev. 0, 5/8/91
D-C-71	2-11000-ADM-02.04	Unannounced Assessments	EG&G	Rev. 0, 2/15/92
D-C-72	2-11000-ADM-02.05	Augmented Assessment Teams	EG&G	Rev. 0, 2/15/92
D-C-73	2-11000-PAM, 19.02	Conduct of Verifications	EG&G	Rev. 0, 2/15/91
D-C-74	2-PA-ADM-09.04	Issues and Commitments Document Management	EG&G	Rev. 0, 8/21/91
D-C-75	2-11000-ADM-01.05	Review Process for Level 1 and Level 2 Performance Assurance Procedures	EG&G	Rev. 0, 7/1/92
D-C-76	None indicated	Triennial Assessment Report	EG&G	2/26/93

LIST OF SITE DOCUMENTS REVIEWED BY THE PROGRESS ASSESSMENT TEAM

Ref. No.	Document #	Title/Description	Document Author/ Issuing Org.	Revision/ Issue Date
D-C-77	None indicated	FY93 Self-Assessment Schedule, Performance Assessment Office	RFO	None indicated
D-C-78	None indicated	FY93 Self-Assessment Schedule, Performance Assessment Office	RFO	None indicated
D-C-79	2-11000-ADM-02.01	Assessment Program and Schedule	EG&G	Rev. 0, 4/1/92
D-C-80	2-50000-ADM-21.01	Quality Assurance Surveillance Procedure	EG&G	Rev. 0, 7/21/92
D-C-81	None indicated	EG&G Rocky Flats Quality Program Plan	EG&G	Rev. 0, 2/11/92
D-C-82	1-11000-PAPG-001	Technical Procedures Preparation Process	EG&G	Rev. 0, 1/4/93
D-C-83	1-11000-PAPG-002	Administrative Procedures Preparation Process	EG&G	Rev. 0, 1/4/93
D-C-84	1-88000-PP-001	Procedures Process	EG&G	Rev. 0, Draft
D-C-85	1-88000-PP-003	Procedure Writing	EG&G	Rev. 0, Draft
D-C-86	1-88000-PP-004	Procedure Edit, Review, and Comment	EG&G	Rev. 0, Draft
D-C-87	1-11000-PAPG-003	Procedure Writing Guide for Technical and Administrative Procedures	EG&G	Rev. 0, 10/12/91
D-C-88	1-50000-ADM-05.02	Development and Control of Rocky Flats Plant Procedures	EG&G	Rev. 0, Draft D
D-C-89	1-10000-ADM-03.02	Commitments Management	EG&G	Rev. 0, 4/29/92
D-C-90	1-11000-ADM-10.01	Readiness Review Process	EG&G	Rev. 0, 9/1/92
D-C-91	1-11000-PAPG-006	Development and Control of Policies	EG&G	Rev. 0, 9/2/92
D-C-92	Health and Safety Practice 1.01	Document Control	EG&G	8/2/91, (1/24/92)
D-C-93	1-11000-ADM-16.09	Issues Management	EG&G	Rev. 0, 3/15/92
D-C-94	1-11000-ADM-16.08	Compliance Management Program	EG&G	Rev. 0, 6/12/92
D-C-95	1-10000-ADM-16.03	Root Cause Analysis	EG&G	Rev. 0, 2/15/91
D-C-96	None indicated	Recovery Operations Branch Instruction Manual	RFO	Rev. 0, 6/25/92
D-C-97	None indicated	Fabrication Operations Branch Instruction Manual	RFO	Rev. 0, 8/30/92
D-C-98	None indicated	Laboratory Operations Branch Instruction Manual	RFO	Rev. 0, 11/15/91

LIST OF SITE DOCUMENTS REVIEWED BY THE PROGRESS ASSESSMENT TEAM

Ref. No.	Document #	Title/Description	Document Author/ Issuing Org.	Revision/ Issue Date
D-C-99	None indicated	Building Tour Report by RPB member of S&H Division Building Assessment Team for Building 883	RFO	4/26/93
D-C-100	None indicated	Memo from AMO to EG&G Re RCRA Compliance in Building 707	RFO	9/29/92
D-C-101	SID-PP-17	Standards Identification: Document of the Policies and Procedures Program	EG&G	Rev. 2. 9/15/92
D-C-102	None indicated	Memo from DP-6.1 to RFO Manager re. Management by Walking Around	DP	8/27/92
D-C-103	None indicated	RFO Management Inspection Plan for Facility Operations	RFO	1/7/93
D-C-104	None indicated	Program Management Plan for the Inspection and Repackaging of Special Nuclear Material at the Rocky Flats Plant	RFO	Draft
D-C-105	92-WM-OOS-776-007	Building 776 Conduct of Operations Surveillance Report	RFO	5/11/93
D-C-106	92-WM-OOS-664-015	Building 664 Conduct of Operations Surveillance Report	RFO	2/1/93
D-C-107	1-50000-ADM-18.01	Quality Assurance Audit Program	EG&G	2/17/92
D-C-108	A-PA-92-49	Assessment of Conduct of Operations in building 991 and 777 in conjunction with the movement of Special Nuclear Materials	EG&G	11/5/92
D-C-109	SHDP-003	Safety and Health Division Surveillance Procedure	RFO	3/25/93
D-C-110	SHDP-001	Safety and Health Division Oversight Instruction	RFO	Rev. 1. 5/19/93
D-C-111	None indicated	Oversight Plan, Environmental Restoration Division, FY 1993	RFO	None indicated
D-C-112	RFO-93-003	Office of Performance Assessment Self Assessment of Training of Personnel to Conduct Effective Facility Walkdowns	RFO	Draft, (conducted 1/25/93 through 2/12/93)
D-C-113	QA Evaluation Report 92-QA-L2-004	Drawings & Documents for OSR	RFO	6/25/92

LIST OF SITE DOCUMENTS REVIEWED BY THE PROGRESS ASSESSMENT TEAM

Ref. No.	Document #	Title/Description	Document Author/ Issuing Org.	Revision/ Issue Date
D-C-114	QA Evaluation Report 92- QA-L2-009	Lessons Learned Program	RFO	3/22/93
D-C-115	QA Evaluation Report 92- QA-L1-001	Document Control	RFO	5/27/92
D-C-116	QA Evaluation Report 92- QA-L1-002	RFO Contractor Oversight Programs	RFO	6/19/92
D-C-117	None indicated	Compliance Summary Report, DOE 5482.1B	EG&G	Current, date not indicated
D-C-118	OD:MSM:11510	Memorandum from RFO AMO to EG&G AGM, Plutonium Production re. RCRA compliance surveillance conducted in building 707	RFO	9/29/92
D-C-119	RMP-16.06	Safety Review Board Administrative Resumption Procedure	EG&G	Rev. 0. 12/18/90
D-C-120	RFOP 7100	Review and Closure of Requests for Compliance Schedule Approvals, Exemptions, and Short Term Compliance Statements	RFO	10/9/91
D-C-121	Plutonium Production Operations Order 00-707- 04	Internal Inspection Program	EG&G	1/22/92
D-C-122	1-52000-ADAM-02.01	Operations Review Committee Requirements	EG&G	Rev. 0. 5/31/93
D-C-123	OD:MSM:06302	Memorandum, Acting Mgr RFO to General Mgr. EG&G re issues related to Plutonium operations in Building 371	RFO	5/13/93
D-C-124	None indicated	Rocky Flats Office Compliance Summary Report for DOE 5482.1B	RFO	None indicated
D-C-125	EH-286-92	ALARA Oversight Committee #13 Meeting Minutes	EG&G	10/12/92
D-C-126	TJC-030-93	ALARA Oversight Committee #14 Meeting Minutes	EG&G	1/25/93
D-C-127	KSK-068-93	1992 Annual Summarization on Radiological Deficiency Reports (RDRs)	EG&G	2/11/93
D-C-128	ALR-141-93	Monthly Summary Reflecting Radiological Deficiency Reports (RDRs) for February 1993	EG&G	4/20/93

LIST OF SITE DOCUMENTS REVIEWED BY THE PROGRESS ASSESSMENT TEAM

Ref. No.	Document #	Title/Description	Document Author/ Issuing Org.	Revision/ Issue Date
D-C-129	Various	13 Annual Nuclear Criticality Safety Committee (NCSC) Assessments conducted in 1992	EG&G	Various
D-C-130	SHDP-010	Safety and Health Division Building Assessment Procedure for Non Resumption Buildings	RFO	Draft
D-C-131	None indicated	Building Assessment Team Guidelines	RFO	None indicated
D-C-132	A-PA-92-50	Assessment of Operations, Building 374	EG&G	None indicated
D-C-133	92-BLC-EP-10.40-108	S&H Division Surveillance	RFO	9/14/92
D-C-134	91-RLD-NS2.7-15	S&H Division Surveillance	RFO	None indicated
D-C-135	92-CHC-RP4.40-188	S&H Division Surveillance	RFO	None indicated
D-C-136	92-WWT-RP4.40-139	S&H Division Surveillance	RFO	10/13/92
L. Rancitelli - Organization/Planning, Budgeting, and Resource Allocation				
D-D-1	DOE/EH-0107	Assessment of Environmental Conditions at the Rocky Flats Plant	EH	8/89
D-D-2	None indicated	Action Plan for Correcting the Deficiencies Identified by the Assessment of Environmental Conditions at the Rocky Flats Plant	DP	None indicated
D-D-3	None indicated	Reconstruction of Historical Rocky Flats Operations & Identification of Release Points	ChemRisk	8/92
D-D-4	None indicated	Strategic Plan for The Rocky Flats Office	D. Simonsen/RFO	1/25/93
D-D-5	SRTFL00002	Plutonium Operations Phased Resumption Management Plan, Revision 3	L. R. Jhey/EG&G	9/14/90
D-D-6	None indicated	Defense Programs Strategic Plan	R. Claytor/DP-1	12/92
D-D-7	None indicated	Defense Programs Environment, Safety, and Health Five-Year Plan for Fiscal Years 1994-1998	DP	7/20/92
D-D-8	DOE/EM/RM01	EM-40 Management Policies and Requirements, Revision 1	R. Whitfield/EM-40	3/92
D-D-9	DOE/EM/RM02	EM-40 Management Plan, Revision 1	R. Whitfield/EM-40	3/92
D-D-10	None indicated	Strategic Plan Environmental Restoration and Waste Management 1993 - Draft	EM	None indicated

LIST OF SITE DOCUMENTS REVIEWED BY THE PROGRESS ASSESSMENT TEAM

Ref. No.	Document #	Title/Description	Document Author/ Issuing Org.	Revision/ Issue Date
D-D-11	GAO/RCED-92-219	NUCLEAR MATERIALS: Removing Plutonium Residues From Rocky Flats Will Be Difficult and Costly	J. Daxder Peach/GAO	9/92
D-D-12	GAO/RCED-93-10	NUCLEAR SECURITY: Improving Correction of Security Deficiencies at DOE's Weapons Facilities	J. Daxder Peach/GAO	11/92
D-D-13	None indicated	Defense Nuclear Facilities Safety Board Report	J. Connevy, Chairman/DNFSB	2/22/90
D-D-14	None indicated	Defense Nuclear Facilities Safety Board Report	J. Connevy, Chairman/DNFSB	3/8/90
D-D-15	None indicated	Defense Nuclear Facilities Safety Board Report	J. Connevy, Chairman/DNFSB	3/7/91
D-D-16	None indicated	Defense Nuclear Facilities Safety Board Report	J. Connevy, Chairman/DNFSB	3/27/91
D-D-17	None indicated	Defense Nuclear Facilities Safety Board Report	J. Connevy, Chairman/DNFSB	4/26/91
D-D-18	None indicated	Defense Nuclear Facilities Safety Board Report	J. Connevy, Chairman/DNFSB	9/30/91
D-D-19	None indicated	Defense Nuclear Facilities Safety Board Report	J. Connevy, Chairman/DNFSB	10/19/91
D-D-20	None indicated	Defense Nuclear Facilities Safety Board Report	J. Connevy, Chairman/DNFSB	12/19/91
D-D-21	None indicated	Defense Nuclear Facilities Safety Board Report	J. Connevy, Chairman/DNFSB	5/21/92
D-D-22	None indicated	Defense Nuclear Facilities Safety Board Report	J. Connevy, Chairman/DNFSB	5/28/92
D-D-23	None indicated	Defense Nuclear Facilities Safety Board Report	J. Connevy, Chairman/DNFSB	5/29/92
D-D-24	None indicated	Defense Nuclear Facilities Safety Board Report	J. Connevy, Chairman/DNFSB	7/6/92
D-D-25	None indicated	Defense Nuclear Facilities Safety Board Report	J. Connevy, Chairman/DNFSB	8/5/92
D-D-26	None indicated	Defense Nuclear Facilities Safety Board Report	J. Connevy, Chairman/DNFSB	8/17/92
D-D-27	None indicated	Defense Nuclear Facilities Safety Board Report	J. Connevy, Chairman/DNFSB	8/26/92
D-D-28	None indicated	Defense Nuclear Facilities Safety Board Report	J. Connevy, Chairman/DNFSB	9/22/92
D-D-29	None indicated	Defense Nuclear Facilities Safety Board Report	J. Connevy, Chairman/DNFSB	1/21/93
D-D-30	None indicated	Defense Nuclear Facilities Safety Board Report	J. Connevy, Chairman/DNFSB	2/8/93
D-D-31	DE-AC04-90DP62349	Prime Contract between the U.S. Department of Energy and EG&J Rocky Flats, Incorporated	DOE & EG&J	12/28/89
D-D-32	None indicated	Memorandum, re: RFP Infrastructure	R. Nelson, Jr./NFO	2/19/93

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Ref. No.	Document #	Title/Description	Document Author/ Issuing Org.	Revision/ Issue Date
D-D-33	RFO-93-003	Rocky Flats DOE Manager's Weekly Meeting Memorandum, re: Implementation of Infrastructure at Rocky Flats Plant	None indicated	1/25/93
D-D-34	None indicated	Vu-Graph Presentation entitled Infrastructure Management	W. Bennett/EG&G	4/13/93
D-D-35	None indicated	Vu-Graph Presentation entitled Infrastructure Management	J. Davis/EG&G	4/16/93
D-D-36	None indicated	Memorandum to Distribution, re: Possible Rocky Flats Plant (RFP) Infrastructure Control systems for Review - DAW-002-93	D. Webber/EG&G	4/6/93
D-D-37	None indicated	EG&G Rocky Flats, Inc. Policy - Draft, Plant Infrastructure	EG&G	4/22/93
D-D-38	None indicated	Infrastructure Integrated Plan - Draft	EG&G	4/22/93
D-D-39	PP-6	Policies and Procedures Program Plan (Revision 1)	J. Davis/EG&G	10/10/91
D-D-40	NS-6	Nuclear Safety Program Plan (Revision 0)	EG&G	3/15/91
D-D-41	TN-6	Training Program Plan (Revision 0)	EG&G	3/15/91
D-D-42	RP-6	Radiological Protection Program Plan (Revision 0)	EG&G	3/15/91
D-D-43	SA-6	Self-Assessment Program Plan (Revision 0)	EG&G	3/15/91
D-D-44	HS-6	Industrial Health and Safety Program Plan (Revision 0)	EG&G	3/17/91
D-D-45	OP-6	Operations Program Plan (Revision 0)	EG&G	3/15/91
D-D-46	None indicated	Designation of Contracting Officer's Representative (COR): B. Jones	R. Nelson, Jr./RFO	5/2/93
D-D-47	None indicated	Memorandum To Directives Points of Contact, re: DOE 5483.X, Safety and Health 5-Year Plans	H. Raiken/AD	11/93
D-D-48	None indicated	Guidance Manual to Support Development for the FY 1995-1999 Safety and Health Five-Year Plan (Draft)	EH	10/26/92
D-D-49	DOE/EM-0079	Report to Congress - Rocky Flats Transition Plan	EM	7/92
D-D-50	None indicated	Mission Transition Program Management Plan	EG&G	3/11/92

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Ref. No.	Document #	Title/Description	Document Author/ Issuing Org.	Revision/ Issue Date
D-D-51	None indicated	Rocky Flats Plant Site Development Plan	J. Zane/EG&G	3/1/93
D-D-52	None indicated	Rocky Flats Plant Integrated Roadmap Project Management Plan - Final Draft	EG&G	1/21/93
D-D-53	None indicated	Defense Programs Strategic Plan	DP	7/92
D-D-54	None indicated	Memorandum to W. S. Glover, re: Training of Assessors-REF-013-93	R. Farrell/EG&G	4/29/93
D-D-55	None indicated	Memorandum To Distribution, re: Training Status-BAT-040-91	B. Troutman/EG&G	9/6/91
D-D-56	None indicated	Memorandum To Distribution, re: Fiscal Year 1994 Program Execution Guidance	M. Bishop/RFO	3/8/93
D-D-57	None indicated	Memorandum To Distribution, re: FY 1994 Congressional Budget Request	P. Grim/RFO	4/1/93
D-D-58	None indicated	Memorandum To Manager, DOE Rocky Flats Office, re: Request for Plans to Implement the FY 1994 Budget Decisions	E. Beckner/DP	3/31/93
D-D-59	None indicated	Rocky Flats Plant Work Break Down Structure Dictionary, Book 1 of 4, FY 93 Budget	Various/EG&G	9/92
D-D-60	None indicated	Rocky Flats Plant Work Break Down Structure Dictionary, Book 2 of 4, FY 93 Budget	Various/EG&G	9/92
D-D-61	None indicated	Rocky Flats Plant Work Break Down Structure Dictionary, Book 3 of 4, FY 93 Budget	Various/EG&G	9/93
D-D-62	None indicated	Rocky Flats Plant Work Break Down Structure Dictionary, Book 4 of 4, FY 93 Budget	Various/EG&G	9/93
D-D-63	WP NSB-3	DOE RFO Safety and Health Division FY 1993 Work Plan Package Documentation-Draft	RFO	None indicated
D-D-64	RFOP 7100	Contractor Activity Oversight	R. Nelson, Jr./RFO	4/3/92
D-D-65	RFI 5700.6-05	Rocky Flats Issues Management System	RFO	10/15/91
D-D-66	DOE/IG-0308	Packaging, Transportation, and Burying Low-Level Waste	DOE Office of the Inspector General	4/30/92

LIST OF SITE DOCUMENTS REVIEWED BY THE PROGRESS ASSESSMENT TEAM

Ref. No.	Document #	Title/Description	Document Author/ Issuing Org.	Revision/ Issue Date
D-D-67	None indicated	Radiological Health FY 1993 Work Package Documentation	J. Quillin/EG&G	9/24/92
D-D-68	None indicated	Radiological Operations FY 1993 Work Package Documentation	M. Littleton/EG&G	9/24/92
D-D-69	None indicated	Radiological Engineering FY 1993 Work Package Documentation	W. Zurliene/EG&G	9/24/92
D-D-70	None indicated	Standards, Audits, and Assurance "Mission and Function Statement" Assessment Directorate	W. Glover/EG&G	2/93
D-D-71	2-50000-ADM-01.01	Standards, Audits, and Assurance Mission, Organization, and Function	EG&G	None indicated
D-D-72	2-50000-ADM-C1.06	Qualifications and Training For Standards, Audits and Assurance Personnel	EG&G	None indicated
D-D-73	2-53000-AMD-05.08	Trend Analysis, Rev. 0	J. Davis/EG&G	4/16/93
D-D-74	None indicated	Strategic Plan Environmental Restoration and Waste Management, Office of Oversight and Self-Assessment (EM-20) Draft-Rev. 2/19/93	EM	2/19/93
D-D-75	None indicated	Memorandum To EM-20 Staff, re: Guidance for EM-20 Review of the Award Fee Process	R. Scott/EM-20	7/1/91
D-D-76	None indicated	Memorandum To Distribution, re: Cost and Schedule Estimating Policy for the Office of Environmental Restoration and Waste Management	L. Duffy/EM	2/14/92
D-D-77	None indicated	Memorandum To L. P. Duffy, EM-1, re: Compilation of EM Policies on Cost and Schedule Estimating and Analysis	R. Scott/EM-20	11/2/92
D-D-78	1-11000-ADM-16.09	Issues Management, Revision 0	Numerous/EG&G	3/15/92
D-D-79	None indicated	Memorandum To A. Paule, re: Division of Environmental Monitoring Branch Staff and Responsibilities	J. Hartman and M. S. Karol/RFO	None indicated
D-D-80	None indicated	Rocky Flats Plant Air Quality Management Plan	EG&G	12/24/91
D-D-81	None indicated	Assessment and Integration of Radioactive Ambient Air Monitoring at Rocky Flats Plant	EG&G	3/93

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Ref. No.	Document #	Title/Description	Document Author/ Issuing Org.	Revision/ Issue Date
D-D-82	RFO-93-003	Action Item from the Rocky Flats DOE Manager's Weekly Meeting, Friday, April 16, 1993	RFO	4/16/93
D-D-83	None indicated	Memorandum To T. A. Vaeth, re: Environmental Management Surveillance Programs	J. Hartman/RFO	6/27/92
D-D-84	None indicated	Informal Memorandum To J. Lehr, re: Draft Self-Assessment Plan	J. Leifer/RFO	2/12/92
D-D-85	1-50000-ADM-16.01	Sitewide Corrective Action Program, Draft A	EG&G	None indicated
D-D-86	None indicated	EG&G Committee Charters	Various/EG&G	Various
D-D-87	None indicated	FY93 Waste Minimization Program Plan	EG&G	9/30/92
D-D-88	SHDP-002, Rev. 0	Safety and Health Division Self-Assessment Plan - SHDP-002	S. Olinger/RFO	5/18/93
D-D-89	1-10000-EWAA, Section 1.5, Rev. 0	TSCA (Toxic Substances Control Act) Management Plan	T. Hedahl/EG&G	2/93
D-D-90	None indicated	Rocky Flats Plant Fiscal Year 1993 Site-Specific Plan	RFO	8/31/92
D-D-91	RFO Committee Charter No. 5.1	Radiological Instrumentation, Source and Device Committee (RISDC) Charter	EG&G	10/5/92
D-D-92	None indicated	Instrumentation and Source/Device Request Form	RISDC/EG&G	None indicated
D-D-93	Policy Number 10-17	Radiological Instrumentation, Source and Device Procurement Management Policy	J. Zane/EG&G	1/26/93
D-D-94	1-50000-ADM-15.02	Stop Work Action, Revision 1	J. Zane/EG&G	4/14/92
D-D-95	None indicated	Vu Graph Presentation: Rocky Flats Plant Integrated Planning Process Pilot Project Bimonthly Review	EG&G	5/18/93
D-D-96	None indicated	Rocky Flats Local Impacts Initiative	D. Butterfield and T. Heston/Director of Local Affairs, Planning and Outreach; and Director of Governmental Relations and Economic Development	None indicated
D-D-97	None indicated	Vu Graph Presentation: Integrated Planning Process	P. Swenson/EG&G	5/18/93
D-D-98	None indicated	Rocky Flats Plant Strategic Planning Steering Committee Charter	EG&G	4/16/93
D-D-99	None indicated	Rocky Flats Plant Mission Statement	RFO	None indicated

LIST OF SITE DOCUMENTS REVIEWED BY THE PROGRESS ASSESSMENT TEAM

Ref. No.	Document #	Title/Description	Document Author/ Issuing Org.	Revision/ Issue Date
D-D-100	None indicated	Draft EG&G Rocky Flats, Inc. Policy, Integrated Planning process, Revision 0	EG&G	5/11/93
D-D-101	None indicated	Vu Graph Presentation: Rocky Flats Plant Systems Engineering Analysis	D. Shain/EG&G	5/18/93
D-D-102	None indicated	Vu Graph Presentation: Facility/Land Use Component for the Strategic Engineering Analysis	K. Ryan/EG&G	5/18/93
D-D-103	None indicated	Position Description: 707 facilities Manager	P. Yela/EG&G	8/90
D-D-104	None indicated	Facilities Management and Operations (FM&O) Environmental Compliance Operations Order for 771 Area Operations - Draft	K. Bates/EG&G	3/8/93
D-D-105	None indicated	Memorandum to Distribution, re: Reorganization-JOZ-500-92	J. Zane/EG&G	7/16/92
D-D-106	None indicated	Memorandum to J. G. Davis, re: Transmittal of FY93 Assessment Schedule (Third and Forth Quarters) - WSG-131-93	W. Glover/EG&G	4/22/93
D-D-107	None indicated	An Integrated Compliance Management Program For EG&G Rocky Flats - Draft F	EG&G	4/21/93
D-D-108	None indicated	Memorandum To Al Paule, re: Division of Environmental Monitoring Branch Staff and Responsibilities - Unsigned	J. Hartman & M. S. Karol/RFO	None indicated
D-D-109	None indicated	Self Review of ES&H Performance Objectives	EG&G	5/14/93
D-D-110	None indicated	EG&G Rocky Flats, Inc. Policy - Plant Infrastructure - Draft	EG&G	4/22/93
C. Van Horn - Human Resources Management				
D-E-1	None indicated	Report of the Oversight Assessment of the Operational Readiness Review of the Rocky Flats Plant Building 707	DOE	12/92
D-E-2	None indicated	ES&H Progress Assessment of the Savannah River Site	DOE	3/93
D-E-3	None indicated	Training and Scheduling Records System (TSR) User Manual	EG&G	Rev. O, 8/14/92

LIST OF SITE DOCUMENTS REVIEWED BY THE PROGRESS ASSESSMENT TEAM

Ref. No.	Document #	Title/Description	Document Author/ Issuing Org.	Revision/ Issue Date
D-E-4	None indicated	Agreement Between EG&G Rocky Flats, Inc, Rocky Flats Plant and the United Steelworkers of America AFL-CIO-CLC, Local Union 8031	United Steelworkers of America	4/8/90
D-E-5	None indicated	Progression Programs	Rockwell International, Rocky Flats Plant	7/89
D-E-6	None indicated	Flammability Evaluation Qualification of G. Clark PMG-221-92	P. Golan	11/4/92
D-E-7	None indicated	Qualification Standard Package, RCRA Custodian/ G. Clark	R. Trostel, E&WM	7/17/92
D-E-8	None indicated	Qualification Standard Package, Waste Generator, Solid Radioactive Waste/ G. Clark	D. Koch	5/14/92
D-E-9	None indicated	Qualification Standard Package, Analytical Laboratory Technician, Material Handling/ G. Clark	D. Dry	2/5/91
D-E-10	None indicated	Radiation Protection Technologist Progression Program 1991	EG&G	8/91
D-E-11	None indicated	RFO Organization and Staffing Overview	RFO Human Resources Division	None indicated
D-E-12	None indicated	FY 1994 Program Execution Guidance and Development of FY 1994 Work Packages	A. Paule	3/23/93
D-E-13	None indicated	Implementation of the RFO Strategic Plan	A. Paule	3/26/93
D-E-14	None indicated	RFP Budget "Fact" Book, Work Breakdown Structure Listing FY 1993, May	EG&G	5/11/93
D-E-15	None indicated	EG&G Workforce Report - April 1993 GEM-244-93	G. Marx, EG&G	5/19/93
D-E-16	None indicated	FY 1994 Budget Call GEM-187-93	G. Marx, EG&G	4/16/93
D-E-17	None indicated	Training User's Manual	EG&G	2/4/91
D-E-18	None indicated	Training Program Support Manual (TAP 3)	DOE	3/1/89
D-E-19	None indicated	Vulnerability Assessment Results for the Nuclear Safety Branch (Draft)	V. Witherhill, RFO	None indicated
D-E-20	None indicated	Safety & Health Division Job Task Analysis (Draft)	RFO	None indicated
D-E-21	None indicated	Training & Qualifications Procedure for the Safety and Health Division, RFO (Draft)	RFO	4/21/93

LIST OF SITE DOCUMENTS REVIEWED BY THE PROGRESS ASSESSMENT TEAM

Ref. No.	Document #	Title/Description	Document Author/ Issuing Org.	Revision/ Issue Date
D-E-22	RF-93-02	Office of ES&H, Site Representative Program, RF Regional Office (Draft)	G. Drieth	3/1/93 - 4/9/93
D-E-23	None indicated	Safety & Health Division, Surveillance Procedure - SHDP-010, Building Assessment Procedure for Non- resumption Buildings	RFO	2/10/93
D-E-24	None indicated	Safety & Health Division Oversight Instruction (Draft)	RFO	None indicated
D-E-25	SHDP-001	US DOE-RFO, Safety and Health Division Procedure, Rocky Flats Plant, M&O Contractor Safety & Health Oversight	RFO	Rev. 0, 3/27/92
D-E-26	SHDP-002	US DOE-RFO Safety & Health Division, Self- Assessment Plan (Draft)	RFO	Rev. 0, None indicated
D-E-27	None indicated	Safety & Health Program Management Guidelines	RFO	12/11/91
D-E-28	93-TJL-IH-12.10-008	Safety Division Surveillance, Training - Confined Space	RFO	1/4/93
D-E-29	None indicated	RFO-Individual Development Plans: Safety & Health Division, Nuclear Engineers, Chemical Engineers, Safety Engineers, Safety Specialist, Industrial Hygienist	RFO	1/1/93
D-E-30	None indicated	DOE Performance Records for Physical Scientist, Industrial Hygienist	RFO	7/22/92
D-E-31	None indicated	MOA to Begin Transferring Management Responsibilities at Rocky Flats from DP to EM (Draft)	DOE	None indicated
D-E-32	None indicated	Individual Development Plan	RFO	10/26/92
D-E-33	None indicated	Rocky Flats Training Office Standard Operating Procedure Number: 93-0001	RFO	None indicated
D-E-34	None indicated	Rocky Flats Office Training Program Instruction RFI 3410	RFO	2/25/92
D-E-35	None indicated	FY 1993 Training Plans	DOE	None indicated
D-E-36	None indicated	Report to Congress, Rocky Flats Transition Plan	DOE	7/92
D-E-37	JOZ-032-93	EG&G Rocky Flats Plant Training Implementation Matrix - DOE Order 5480.20	EG&G	Rev. 1, 2/1/93

LIST OF SITE DOCUMENTS REVIEWED BY THE PROGRESS ASSESSMENT TEAM

Ref. No.	Document #	Title/Description	Document Author/ Issuing Org.	Revision/ Issue Date
D-E-38	None indicated	Training Program Plan	EG&G	3/15/91
D-E-39	2-50000-ADM-01.06	Qualification & Training for Standards, Audits & Assurance Personnel (Draft)	EG&G	None indicated
D-E-40	None indicated	Training Program Manual (TAP 1)	DOE	Rev. 1, 3/1/89
D-E-41	None indicated	Rocky Flats Procedure 1100.6, Rocky Flats Office Organizations and Functions	RFO	10/4/91
D-E-42	None indicated	Rocky Flats Plant, site Development Plan	EG&G	2/26/93
D-E-43	None indicated	RFP Infrastructure	RFO	2/19/93
Intentionally omitted				
D-E-45	2-11000-ER-ADM 2.01	ERM Administrative Procedures Manual	EG&G	Rev. 1, 5/17/93
D-E-46	2-11000-ER-ADM 2.02	ERM Administrative Procedures Manual	EG&G	Rev. 1, 5/17/93
D-E-47	ERM-001	QA Briefing Module	EG&G	3/22/93
D-E-48	TDS-220-93	QA Overview Briefing	EG&G	3/18/93
D-E-49	None indicated	Position Information Questionnaire (PIQ)	EG&G	4/21/93
D-E-50	None indicated	Staff Requiring RCRA 435 CBT (computer Printout)	EG&G	4/21/93
D-E-51	None indicated	RFO Facility Representatives Resumes (17)	RFO	None indicated
D-E-52	None indicated	Supplemental Information for Progress Assessment Team (White Paper)	None indicated	3/29/93
D-E-53	None indicated	Rocky Flats Procedures: RF 3410.2, RFOP 3335.1B, RFOP 3430.3A, RFOP 3550.2A	RFO	Various
D-E-54	None indicated	Guide to Preparing SF-52, Personnel Action Requests and Position Descriptions (Draft)	RFO	None indicated
D-E-55	HPM-003-93	CY 93 Performance Plans	EG&G	1/4/93
D-E-56	HPM-001-93	Environmental Compliance Performance Standards	EG&G	1/8/93
D-E-57	GEM-444-92	Self-Evaluation Plan for Administration and Planning	G. Marx, EG&G	12/1/92
D-E-58	None indicated	FY 93 Cost/Schedule Performance Report, Month: February	EG&G	3/24/93

LIST OF SITE DOCUMENTS REVIEWED BY THE PROGRESS ASSESSMENT TEAM

Ref. No.	Document #	Title/Description	Document Author/ Issuing Org.	Revision/ Issue Date
D-E-59	None indicated	Rocky Flats Site Facilities Initial Screening Report for Transition Planning (Pre-decisional unverified information)	Krenzer, Civallo, and Murthy	11/5/92
D-E-60	None indicated	Performance Records for PMRS Employees and PMS Employees (33 supervisory)	RFO	7/92
D-E-61	None indicated	Performance Based training Manual (TAP 2)	DOE	3/1/89
D-E-62	None indicated	Mission Transition Program Management Plan	EG&G	3/11/93
D-E-63	None indicated	Reconstruction of Historical Rocky Flats Operations & Identification of Release Points	CDH	8/92
D-E-64	RFF-013-93	Training of Assessors	EG&G	9/29/93
D-E-65	None indicated	Strategic Plan for the Rocky Flats Office	RFO	1/25/93
D-E-66	42FL-H-001	KSA Development and Individual Development Plans 42FL, Participant Workbook	RFO	10/92
D-E-67	None indicated	ES&H Progress Assessment Inbrief Notebook	EG&G, RFO	4/93
D-E-68	None indicated	Information on Training Objectives	RFO	5/21/93
D-E-69	None indicated	Rocky Flats Plant Training Implementation Matrix	RFO	2/9/93
D-E-70	None indicated	Approval of the Training Implementation Matrix for the Rocky Flats Plant	DOE-HQ	9/15/92
D-E-71	RBW-93-91	Training Procedures and Standards	EG&G	3/25/91
D-E-72	None indicated	Performance Based Training Schedule 1-10000-TUM Planned Revision Schedule	EG&G	None indicated
D-E-73	None indicated	Implementation of DOE Order 5480.18A	RFO	7/16/92
D-E-74	None indicated	Training Program Accreditation Plan Program	DOE-HQ	6/18/92
D-E-75	None indicated	DOE-RFO Training Office Course Catalog	RFO	2/1/93
D-E-76	None indicated	RFO Annual Surveillance Plan Summary FY 1993	RFO	None indicated
D-E-77	None indicated	RFO Training Development Office Standard Operating Procedures 93-0001 - 93-0009	RFO	Various
D-E-78	None indicated	Report of Training Activities	RFO	5/21/93

LIST OF SITE DOCUMENTS REVIEWED BY THE PROGRESS ASSESSMENT TEAM

Ref. No.	Document #	Title/Description	Document Author/ Issuing Org.	Revision/ Issue Date
J. Patterson - Design Basis and Configuration Management				
D-F-1	EO 35409	Engineering Order Project #TDO48914	ENGR/TECH	3/31/93
D-F-2	EO 35367	Engineering Order Project #TIO12431	ENGR/TECH	3/18/93
D-F-3	EO 35365	Engineering Order Project #TBO48212	ENGR/TECH	3/18/93
D-F-4	EO 35265	Engineering Order Project #TJO33193	ENGR/TECH	2/23/93
D-F-5	PRR 92-000026	Baseline Document Change Form	ENGR/TECH	4/30/92
D-F-6	1-74000-WCP	Glossary	Support Services	9/8/92
D-F-7	1-74000-WCP-1	Work Control Form Processing	Support Services	7/8/92
D-F-8	1-74000-WCP-5	Conduct Of Work	Support Services	2/17/92
D-F-9	1-74000-WCP-6	Maintenance Emergency Priority Work	Support Services	11/8/92
D-F-10	None indicated	Conduct Of Engineering Manual	ENGR/TECH	Various
D-F-11	None indicated	Central Maintenance Action Center Work Order Schedule	EG&G	5/19/93
D-F-12	COED 6.1.1	Design Modification Package Requirements	Engr/Tech	8/24/92
N. Williams - Environmental Compliance Agreements				
D-G-1	EPA Doc. No. RCRA (3008) VIII-91-09	Federal Facility Compliance Agreement for the Land Disposal Restrictions of the RCRA	U.S. Environmental Protection Agency and U.S. Department of Energy	5/10/91
D-G-2	EPA No. FFCA-CWA-90-1	Federal Facility Compliance Agreement for NPDES issues pursuant to the Clean Water Act	U.S. Environmental Protection Agency-Region VIII and U.S. Department of Energy	3/25/91
D-G-3	State of Colorado No. 89-10-30-01	Settlement Agreement and Compliance Order on Consent for Mixed Residues issues pursuant to RCRA	Colorado Department of Health and U.S. Department of Energy	11/3/89
D-G-4	Docket No. CAA-113-91-08	Compliance Order on NESHAP issues pursuant to the Clean Air Act	U.S. Environmental Protection Agency-Region VIII and EG&G Rocky Flats	3/3/92
D-G-5	None	CENC-Environmental Compliance Commitments-Plant Action Tracking System-Standard Commitment Report	EG&G	4/27/93
D-G-6	None indicated	Status Report for Environmental Deficiencies Identified at Rocky Flats Plant in November 1992	EG&G	2/26/93

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Ref. No.	Document #	Title/Description	Document Author/ Issuing Org.	Revision/ Issue Date
D-G-7	None indicated	Environmental Compliance Task Force-Make-up, Scope and Agenda-Revision 1	EG&G and RFO	2/18/93
D-G-8	93-RF-4945	Letter, Minutes of April 8, 1993, Rocky Flats RCRA Regulatory Issues Meeting-ALS-232-93	EG&G	4/22/93
D-G-9	None indicated	LDR FFCA I and II - Milestone Status Summary from 1989 to 1993	EG&G	4/5/93
D-G-10	None indicated	LDR FFCA I and II - Milestone Status Summary from 1989 to 1993	EG&G	4/5/93
D-G-11	None indicated	LDR FFCA at Rocky Flats	S. Anderson, EG&G	11/16/92
D-G-12	None indicated	Letter - EPA Region VIII to DOE re: LDR FFCA II Modification to include third thirds	J. McGraw, EPA	5/6/92
D-G-13	RCRA (3008) VIII-89-25	FFCA (II) and Compliance Order on Consent for the Land Disposal Restrictions of the Resource Conservation and Recovery Act	CDH and DOE	5/15/89
D-G-14	RCRA (3008) VIII-89-25	FFCA (III) and Compliance Order for the Land Disposal Restrictions of the Resource Conservation and Recovery Act	EPA and DOE	5/10/91
D-G-15	None indicated	Comprehensive Treatment and management Plan (issued pursuant to the requirements of LDR FFCA III)	RFO	6/9/92
D-G-16	93-RF-4945	Letter w/ Attachment EG&G to RFO re: Minutes of April 8, 1993 Rocky Flats RCRA Regulatory Issues Meeting	A. Schubert, EG&G	4/22/93
D-G-17	93-DOE-05077	Letter w/ Attachment DOE to EPA Region VIII re: Draft Minutes of Meeting among LDR FFCA Project managers	T. Lukow, RFO	4/30/93
D-G-18	93-RF-1923	Letter - EG&G to RFO re: LDR FFCA Program Manager's Meeting Minutes for February	A. Schubert, EG&G	2/18/93
D-G-19	93-RF-1318	Letter and Enclosure - EG&G to RFO re: Response to Request for Information Regarding Sierra Club V. DOE (mixed residues matter)	T. Hadahl, EG&G	2/2/93

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Ref. No.	Document #	Title/Description	Document Author/ Issuing Org.	Revision/ Issue Date
D-G-20	EPA Region VIII 8ART-AP	Letter - EPA Region VIII to EG&G re: Clean Air Act Section 113 Order for Compliance docket No. CAA-113-91-08	J. Hefinger, EPA	3/3/92
D-G-21	92-RF-14317	Letter - EG&G to EPA Region VIII re: Transmittal of Duct Assessment Reports required by NESHAP compliance Order	T. Hadzhi, EG&G	12/11/92
D-G-22	None indicated	Chart - NPDES FFCA Quarterly Progress Report Compliance Plant Schedule	EG&G	4/12/93
D-G-23	DOE/EM-0079	Report to Congress, Rocky Flats Transition Plan, Appendix B - Summary of Formal Agreements, Consent Decrees, and Court Decisions Potentially Affecting the Transition at the Rocky Flats Plant	DOE-HQ	7/92
D-G-24	None indicated	Plant Action Tracking System, Tiger Team Plan Status	EG&G	4/15/93
D-G-25	PATR CM10	Environmental compliance commitments Plant Action Tracking System - Standard Commitment Report	EG&G	4/27/93
D-G-26	93-RF-3702	Letter - EG&G to RFO re: Responses to Request for Enforceable Agreement Milestone Status from FY 1992 through FY 1995	T. Hadzhi, EG&G	3/24/93
D-G-27	None indicated	Status Report for Environmental Deficiencies identified at Rocky Flats Plant in November 1992	EG&G	2/26/93
D-G-28	None indicated	Environmental Compliance Task Force, Make-up, Mission, Scope and Responsibilities	RFO and EG&G	2/28/93
D-G-29	PWE-102-92	Memorandum - EG&G to Distribution re: Rocky Flats Plant RCRA History	P. Edlich, EG&G	8/20/92
D-G-30	None indicated	Comprehensive Treatment and Management Plan	RFO	6/9/92
D-G-31	None indicated	News Briefs Concerning Rocky Flats Plant	Lassie-Noxie	2/1/93
D-G-32	None indicated	Data Base Subject Printout Concerning Rocky Flats Grand Jury Proceedings.	Lassie-Noxie	12/3/92
D-G-33	None indicated	Memorandum M. O'Rear to Dist re: Rocky Flats Site Visit	M. O'Rear, SR	9/2/92

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Ref. No.	Document #	Title/Description	Document Author/ Issuing Org.	Revision/ Issue Date
D-G-34	None indicated	Progress Assessment Introductory Material From EH-5	EH-5	4/1/83
D-G-35	None indicated	RFO POCs, 2.1 through 2.6	RFO	None indicated
D-G-36	None indicated	Memorandum - A. Paula, Manager to AD-10, P. Grimm, E. Beckner re: Field Office Comments to Organizational Reassignment	RFO	4/15/83
D-G-37	None indicated	NFDES FFCA Quarterly Progress Report (Milestone Chart)	RFO	4/8/83
D-G-38	None indicated	Settlement Agreement and Compliance Order on consent No. 89-07-10-01	CDH	7/13/83
D-G-39	None indicated	Letter - D. Shelton, CDH to E. Goldberg, RFO re: Compliance Order 89-06-07-01	CDH	6/7/83
D-G-40	89-RF-3833	Letter - D. Sanchini, RI to D. Simonson, RFO re: Information for the responses to the CDH Order No. 89-06-07-01	Rockwell International	10/20/83
D-G-41	None indicated	Fax - J. Rampe, RFO to J. Sowinski, CDH w/ Attachment: Predecisional Review Draft Federal Facility Compliance Agreement and Compliance Order on Consent	RFO	10/23/82
D-G-42	None indicated	Appendix C-1 Status Summary Report	None indicated	None indicated
D-G-43	None indicated	Position Description for the General Manager, EG&G	EG&G	1/22/83
D-G-44	None indicated	Rocky Flats Plant Transition - DP-6.1 Briefing Package	P. Lain, DP-6.1	4/1/83
D-G-45	None indicated	RFO Organization Chart	RFO	None indicated
D-G-46	None indicated	DP-6.1 Organization Chart	DP-6.1	None indicated
D-G-47	93-RF-1600	Letter - A. Schubert, EG&G to T. Lukow RFO	EG&G	2/9/83
D-G-48	93-RF-0942	Letter - G. Sedlock, EG&G to J. Hartman, RFO	EG&G	1/28/83
D-G-49	None indicated	Summary of Activity on Radionuclide NESHAP at the Rocky Flats Plant	RFO	4/23/83
D-G-50	None indicated	Radionuclide NESHAP Report	RFO	2/23/83

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Ref. No.	Document #	Title/Description	Document Author/ Issuing Org.	Revision/ Issue Date
D-G-51	None indicated	Informal Memorandum - Response to N. Williams Questions	T. Lukow, RFO	5/10/93
D-G-52	None indicated	Informal Memo - S. Tulaczky, RFO to W. Prymak, RFO re: Comments Addressing Progress Assessment Team Concerns	S. Dulasky, RFO	5/20/93
D-G-53	None indicated	Site Environmental Report for 1992 - Chapter 2: Compliance Summary	P. Eschert	None indicated
D-G-54	None indicated	Informal Memorandum - G. Griffin to A. Church re: Response to DOE Tiger Team Request for Information	B. Griffin, FFCA Programs	4/22/93
D-G-55	None indicated	Supplemental Information for Progress Assessment Team	EG&G	None indicated
D-G-56	None indicated	Memorandum - M. Karol, RFO to G. Marx, EG&G re: Issues Management of Chronic Acid Incident	RFO	None indicated
D-G-57	None indicated	EPA Letter to J. Hartman, RFO re: NFOES Permit CO-0001333	EPA	1/7/93
D-G-58	None indicated	Memorandum - M. Roy, RFO to M. Johnston, GC-20 re: CDH v. DOE Settlement Agreement	M. Roy, RFO	4/28/93
D-G-59	RFP-ENV-91	Rocky Flats Plant Site Environmental Report	EG&G	12/91
D-G-60	93-RF-5-53	Letter - H. Mann, EG&G to A. Pascale, RFO re: Land Disposal Restricted Waste-Generating Operations Curtailment	H. Mann, EG&G	5/10/93
D-G-61	None indicated	Listing of LDR-Generating Operations Curtailed as A Result of FFCA Expiration	EG&G	None indicated
D-G-62	None indicated	Significant Issues and Activities at Rocky Flats	J. Sanderson	3/28/93
D-G-63	None indicated	Memorandum - P. Grimm, EM to the Secretary re: Missed Compliance and Cleanup Milestones	P. Grimm, EM	3/15/93
D-G-64	DOE/EM-0079	Report to Congress: Rocky Flats Transition Plan	DOE EM	7/92
D-G-65	DOE/EH-0107	Assessment of Environmental Conditions at the Rocky Flats Plant	DOE EH	9/89

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Ref. No.	Document #	Title/Description	Document Author/ Issuing Org.	Revision/ Issue Date
D-G-66	None indicated	Interoffice Correspondence - J. Zane to Distribution re: Support Required to Comply With An Environmental Protection Agency Administrative Compliance Order	J. Zane, EG&G	4/30/92
D-G-67	None indicated	Section IV. Supplemental Information	None indicated	None indicated
D-G-68	None indicated	Letter - T. Tucks, EPA to R. Goodwin, EG&G re: Compliance Order	EPA	11/4/92
D-G-69	92-RF-14057	Letter - T. Hedahl, EG&G to P. Hull, EPA re: EPA Compliance Order Quarterly Status Report	EPA	12/7/92
D-G-70	93-RF-2226	Letter - T. Hedahl, EG&G to P. Hull, EPA re: EPA Compliance Order Quarterly Status Report	EPA	2/23/93
D-G-71	None indicated	Letter - T. Lukas, EPA to F. McKenna, EG&G re: Compliance Order Docket No. CAA-113-91-08	EPA	3/10/93
D-G-72	93-RF-3165	Letter - T. Hedahl, EG&G to A. Paule, RFO re: EPA Approval of Alternate Sampling Methodology and suggested Course of Action	EG&G	3/18/93
D-G-73	92-RF-9855	Letter - J. Kersh, EG&G to P. Hull, EPA re: EPA compliance Order Quarterly Status Report	EG&G	9/3/92
A. Heintzelman - IAG Environmental Restoration Program				
D-H-1	None indicated	Memorandum of Agreement to begin transferring management responsibilities at Rocky Flats from Defense Programs (DP) to Environmental Restoration and Waste Management (EM)	L. Duffy, EM-1 and R. Claytor, DP, to W. Bixby, EM-60	1/11/93
D-H-2	None indicated	Rocky Flats Interagency Agreement	RFO, EPA Region VIII, and CDH	1/22/91
D-H-3	None indicated	Rocky Flats Plant Environmental Restoration Major System Acquisition Project	Rocky Flats Environmental Restoration Division	3/9/93
D-H-4	None indicated	A Preliminary Quality Management Review of Rocky Flats Interagency Interaction: Draft Findings, Recommendations and Tools for Improved Interactions	Tim Holeman, Holeman Consulting, Allen Hines, Booz-Allen & Hamilton, Jim Monaghan, Monaghan & Associates	3/16/93

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Ref. No.	Document #	Title/Description	Document Author/ Issuing Org.	Revision/ Issue Date
D-H-5	Manual No. QAPjP	Rocky Flats Plant Site-Wide Quality Assurance Project Plan for CERCLA Remedial Investigations/Feasibility Studies and RCRA Facility Investigations/Corrective Measures Studies Activities (Manual No. QAPjP)	Environmental Restoration Program, Rocky Flats	None indicated
D-H-6	None indicated	Environmental Management Administration Procedures Manual (Manual No. 3-21000-ADM)	EG&G	6/3/92
D-H-7	None indicated	Historical Release Report for the Rocky Flats Plant (Manual No. 21100-TR-12501.01: Vols I&II)	EG&G	6/92
D-H-8	None indicated	Final Rocky Flats Plant Community Relations Plan: Environmental Restoration Program	EG&G	12/4/91
D-H-9	None indicated	Final Responsiveness Summary for Rocky Flats Plant Community Relations Plan: Environmental Restoration Program	EG&G	12/4/91
D-H-10	None indicated	Cost Plus Award Fee Self-Assessment Report	EG&G	4/10/93
D-H-11	None indicated	IHSS General Description/Location (collection of viewgraphs)	EG&G	None indicated
D-H-12	None indicated	Interagency Agreement Milestone Status (viewgraphs for EM-60 Mid-Year Review)	Jim K. Hartman (RFO)	4/8/93
D-H-13	None indicated	Rocky Flats Corrective Action Plan (in response to 1989 RFP Assessment)	Rocky Flats Plant	7/20/90
D-H-14	None indicated	Site Health and Safety Plan Workbook (RFP)	EG&G	10/26/90
D-H-15	None indicated	Health and Safety Program Plan (RFP)	EG&G	10/26/90
D-H-16	None indicated	Historical Release Report (HRR) Quarterly Update	EG&G	4/30/93
D-H-17	None indicated	RCRA/Environmental Compliance Management Program - JOZ-581-92	EG&G	8/17/92
D-H-18	None indicated	FY 1994 Congressional Budget Request	Paul Grimm, Acting Assistant Secretary for Environmental Restoration and Waste Management (DOE-HQ)	4/1/93
D-H-19	None indicated	AMEM Bimonthly Meeting - May 4-5, 1993	Gloria S. Patton, Special Assistant to the Assistant Secretary for Environmental Restoration and Waste Management (DOE-HQ)	3/30/93

LIST OF SITE DOCUMENTS REVIEWED BY THE PROGRESS ASSESSMENT TEAM

Ref. No.	Document #	Title/Description	Document Author/ Issuing Org.	Revision/ Issue Date
D-H-20	Letter No. 0855-RF-93	RFP Infrastructure	Robert M. Nelson, Jr., Manager (RFO)	2/19/93
D-H-21	Item No. RFO-93-003	Implementation of Infrastructure at Rocky Flats Plant	Rocky Flats DOE Manager's Weekly Meeting	2/5/93
D-H-22	Item No. RFO-93-003	Implementation of Infrastructure at Rocky Flats Plant	Rocky Flats DOE Manager's Weekly Meeting	2/4/93
D-H-23	Item No. RFO-93-003 & JGD-0349-93	Implementation of Infrastructure at Rocky Flats Plant	J. G. Davis, Standards, Audits, and Assurance (EG&G)	2/22/93
D-H-24	None indicated	Infrastructure Management (viewgraphs)	William S. Bennett	4/13/93
D-H-25	93-RF-2637	Rocky Flats Plant Environmental Compliance Program Description	EG&G	None indicated
D-H-26	92-DOE-7047	Rocky Flats Plant Environmental and Waste Management Program Descriptions	EG&G	4/93
D-H-27	None indicated	Letter in response to EPA/CDH June 19, 1992 letter regarding delays in the start of fieldwork for approved RFI/RI workplans	James K. Hartman, Assistant Manager for Environmental Management (RFO)	7/2/92
D-H-28	None indicated	Draft Charter: Environmental Protection Division	RFO	2/93
D-H-29	93-RF-3702	Response to Request for Enforceable Agreement Milestone Status from FY 1992 through FY 1995 TGH-240-93	T. Hedahl, Associate General Manager, Environmental and Waste Management (EG&G)	3/24/93
D-H-30	93-DOE-03935	Letter re: EPA/CDH's denial of DOE's request for an extension to the date of submittal for the OU2 draft and final RFI/RI Reports.	A. Paule, Acting Manager (RFO)	3/31/93
D-H-31	None indicated	Letter re: EPA/CDH's response to DOE's request to meet with EPA/CDH to attempt reaching an agreement on approach for OU2 and request expansion of role of QAT at Rocky Flats.	Jack W. McGraw, Acting Regional Administrator, EPA and Thomas P. Looby, Director, Office of Environment, CDH	4/30/93
D-H-32	Procedure No. 5.03, Rev. 0	RFI/RI Work Plan Development (in EM Administrative Manual)	EG&G	8/15/91
D-H-33	RFP-DP/EM-SPLITS	Letter Re: RFO Split of Waste Management Operations Responsibilities between Defense Programs and Environmental Restoration and Waste Management V. Stello/J. Lytle to Manager RFO	V. Stello/J. Lytle to Manager RFO, DP & EM	3/20/91
D-H-34	None indicated	DOE Order 4700.1 "Project Org. Net. Sys.	DOE-HQ	3/6/87

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Ref. No.	Document #	Title/Description	Document Author/ Issuing Org.	Revision/ Issue Date
D-H-35	None indicated	IAG Amendment Strategy Decision Doc.	RFP	8/25/92
D-H-36	None indicated	ER MSA Project, Project Management Plan (DRAFT)	Office of ER Southwestern Area Program	4/14/93
D-H-37	None indicated	ER MSA Project, Project Management Plan (DRAFT)	RF ER Division	4/14/93
D-H-38	None indicated	ER MSA Project, Management Implementation Plan (DRAFT)	EG&G, Rocky Flats	4/93
D-H-39	None indicated	List of Outstanding Notices of Violation and Warning Letters	Office of Environmental Compliance	4/93
D-H-40	None indicated	Program Assessment of Field surveillance Report on ER Field Activities at U.S. DOE RFP	Hazardous Waste Remedial Actions Program	5/93
D-H-41	None indicated	Letter Re: Review of RFI/RI Rocky flats Plant, 881 Hillside Area (Operable Unit 1) October 1992 and Baseline Biological Characterization of the Terrestrial and Aquatic Habitats at Rocky Flats Plant, Final Report, September 1992	Colorado Department of Health	1/28/93
D-H-42	8HWM-FF	Letter Re: Review of the draft RFI/RI Report for Operable Unit 1 (OU 1)	EPA	1/29/93
D-H-43	None indicated	Letter Re: Review Comments for Draft Final EM-453, Phase III RFI/RI Report, OU 1	Rocky Flats/Albuquerque Production Division	1/27/93
D-H-44	EFD:SRG:3049	Letter re: Operable Unit 2 Bedrock Work Plan	J. Hartman RFO to J. M. Kersh, EG&G	3/24/92
D-H-45	92-DOE-4331	Letter re: Request for Extension of Schedule for the Operable Unit 2 Draft RFI/RI Phase II Report	J. Hartman RFO to M. Heestmark, EPA	11/10/92
D-H-46	92-RF-4570	Letter re: Response to Request to Conduct Additional Monitoring Well Sampling and Bedrock Drilling, Operable Unit 2 Bedrock Work Plan	J. Kersh, EG&G to R. M. Nelson, RFO	4/24/92
D-H-47	92-RF-9196	Letter re: Notification of Interagency Agreement Noncompliance and Extension Request for OU 2 Phase II RFI/RI Report	M. Kersh, EG&G to T. A. Vaeth, RFO	8/19/92
D-H-48	ERD:SG:11335	Letter re: OU 2 Bedrock Characterization	J. Hartman, RFO to R. Benedetti, EG&G	9/28/92
D-H-49	ERD:SG:11335 (Comments before Finalizing)	Draft Letter re: OU2 Bedrock Characterization and Draft Remedial Investigation Report	J. Hartman RFO to Lee, EG&G	None indicated

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Ref. No.	Document #	Title/Description	Document Author/ Issuing Org.	Revision/ Issue Date
D-H-50	None indicated	Draft Strategy for OU2 Bedrock: Developed by S. Grace & E. Dille	RFO	10/1/92
D-H-51	None indicated	Drinking Water Ingestion Risk Operable Unit 2: Upper HSU and Lower HSU Presentation to EPA/CDH	RFP	11/9/92
D-H-52	ERD-SG:13462	Letter re: OU2 Bedrock Characterization	J. Hartman, RFO to R. Benedetti, EG&G	12/4/92
D-H-53	None indicated	SRG Notes on the 12-18-92 EG&G OU2 Schedule		12/10/92
D-H-54	93-RF-0883	Letter re: Milestone Extension Request and Rescheduling of OU 2 RFI/RI Report, Bedrock Program, CMS/FS and CAD/ROD	R. Benedetti, EG&G to R. M. Nelson, RFO	1/26/93
D-H-55	ERD-SG:01397	Letter re: Operable Unit 2 Request for Schedule Extension Memorandum 93-RF-0883	J. Hartman, RFO to R. Benedetti, EG&G	2/1/93
D-H-56	93-RF-1401	Letter re: Supporting Documentation for Operable Unit No. 2 Schedule Extension Request	R. Benedetti, EG&G to R. M. Nelson, RFO	2/1/93
D-H-57	93-RF-2402	Letter re: Schedule Extension Request for the OU2 Draft Phase II RFI/RI Report	R. Benedetti, EG&G to J. K. Hartman RFO	2/26/93
D-H-58	ERD-FRL:1366	Letter re: Environmental Restoration FY92 Budget	D. Simonson, RFO to R. P. Whitfield, Office of Environmental Restoration, EM-40	2/26/91
D-H-59	None indicated	Letter re: Fiscal Year 1992 Funding Shortfall Impacts on Rocky Flats Interagency Agreement and Agreement-In-Principle Activities	Ralph G. Lightner, Division Southwestern Area Programs to R. P. Whitfield, EM-40 and J. Baublitz, EM-40	9/5/91
D-H-60	None indicated	Letter re: Fiscal Year 1992 Funds Should Not Be Transferred from Interagency Agreement Activities to Agreement-In-Principle Activities	Ralph G. Lightner, Division of Southwestern Area Programs to Dave Simonson, RFO	9/12/91
D-H-61	ERD-HDR:7843	Letter re: Fiscal Year 1992 Funding Shortfall in Rocky Flats Interagency Agreement and Agreement in Principle Activities	D. Simonson, RFO to Ralph Lightner, Division of Southwestern Programs, EM-45	9/19/91
D-H-62	None indicated	Letter re: DOE fiscal years 1992 and 1993 obligations regarding the cleanup of Rocky Flats Plant under an Interagency Agreement with the EPA and State of Colorado	J. Watkins, Secretary of Energy to David E. Skaggs, U. S. House of Representatives	10/31/91
D-H-63	None indicated	FY 1991 Year End Program Review with HQ, Albuquerque, N. M., Potential FY 92 Funding Impacts	EG&G	11/21-22/91

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Ref. No.	Document #	Title/Description	Document Author/ Issuing Org.	Revision/ Issue Date
D-H-64	None indicated	1991 Annual Report to Congress	EG&G	None indicated
D-H-65	RF-1002	Environmental Restoration and Waste Management Five Year Plan Activity Data Sheet FY94-98	EG&G	3/30/92
D-H-66	None indicated	Rocky Flats FY92 ER Budget Issue	F. Lockhart, RFO	6/12/92
D-H-67	None indicated	Title: EPA Concern That Rocky Flats Is Not Being Allocated Enough Funding To Meet It's Cleanup Obligations	A. Rampertaap, EM-452	6/15/92
D-H-68	None indicated	Title: Overview Of The Rocky Flats Environmental Restoration Program	A. Rampertaap, EM-452	6/12/92
D-H-69	None indicated	Letter re: Congressional Request for Rocky Flats Roadmap/Release of Documents to Regulators	R. Greenberg, Rocky Flats/Albuquerque Production Division to J. Hartman, RFO	7/24/92
D-H-70	ERD:FRL:8891	Letter re: Release of Documents	F. Lockhart, Environmental Restoration Division, RFO to Raymond I. Greenberg, Rocky Flats/Albuquerque Production Division, EM- 453	8/3/92
D-H-71	None indicated	Letter re: Rocky Flats Response to the Regulators Regarding Notice of Violation	R. Whitfield, Environmental Restoration to Acting Manager, RFO	3/29/93
D-H-72	None indicated	Letter re: FY-92 Rocky Flats IAG Funding	M. Hestmark Rocky Flats Project U. S. EPA to F. Lockhart, DOE/RFP	1/10/92
D-H-73	8RC	Letter re: Transmittal of State of Colorado Letter Dated 2-10-92	R. Duprey, Hazardous Waste Management Division, EPA to D. Simonson, RFO	1/13/92
D-H-74	None indicated	Letter re: Activity Data Sheets	G. Baughman, CDH to F. Lockhart, RFO	1/10/92
D-H-75	None indicated	Letter re: OU 2 (903 Pad) Field Work	M. Hestmark, EPA to J. K. Hartman RFO	4/2/92
D-H-76	None indicated	Letter re: Activity Data Sheets for Five Year Plan - FY04 to FY98, Environmental Restoration	G. Baughman, CDH, to F. Lockhart, RFO	4/15/92
D-H-77	None indicated	Letter re: Comments on the April 1, 1992, Environmental Restoration and Waste Management Activity Data Sheets for Rocky Flats.	R. Duprey, EPA to J. Hartman, RFO	4/17/92
D-H-78	None indicated	Letter re: (Held by F. Lockhart) Requesting extension of the schedule for the OU2 Draft RFI/RI Phase II Report...(Replaced by October 14, 1992 letter)	J. Hartman, RFO to M. Hestmark EPA	None indicated

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Ref. No.	Document #	Title/Description	Document Author/ Issuing Org.	Revision/ Issue Date
D-H-79	92-RF-9196	Letter re: Notification of Interagency Agreement Noncompliance and Extension Request for OU 2 Phase II RFI/RI Report	J. Keresh, EG&G to Terry A. Vaeth RFO	8/19/92
D-H-80	92-DOE-11364	Letter re: Operable Unit 2 Bedrock RFI/RI Work Plan activities were not conducted in FY92	J. Hartman, RFO, to Martin Hestmark, EPA	10/14/92
D-H-81	None indicated	Letter re: Early Warning of Pending IAG Violation and Stipulated Penalty Assessment	M. Hestmark, RFP/EPA, to R. Schasseburger, DOE/RFP	1/7/93
D-H-82	None indicated	Letter re: Rocky Flats Plant Anticipated IAG Default	T. McCall, EPA, to P. D. Grimm, DOE HQ	2/3/93
D-H-83	92-DOE-01465	Draft Letter re: Request a schedule extension for OU 2 (903 Pad, Mound, and East Trenches)....	J. Hartman, DOE/RFP, to M. Hestmark, EPA	2/9/93
D-H-84	93-DOE-03935	Letter re: Response to letter dated March 16, 1992, which denied DOE request for an extension to the date of submittal for the OU2 draft and final RFI/RI Reports	A. Paule, RFO, to J. McGraw EPA	3/31/93
D-H-85	None indicated	Letter re: Rocky Flats Environmental Restoration Quality Action Teams (QAT)	F. Lockhart, RFO to C. McGraw, EPA	10/29/92
D-H-86	None indicated	Quality Action Team Action Plan	None indicated	None indicated
D-H-87	None indicated	Ground Rules for Quality Action Team	None indicated	None indicated
D-H-88	AMTER:WF/HR:01486	Letter re: Delivery of Interagency Agreement Documents	A. Paule, RFO, to J. O. Zane, EG&G	3/25/93
D-H-89	93-RF-4708	Letter re: Delivery of Interagency Agreement Documents (01486)	R. Benedetti, EG&G, to J. K. Hartman, RFO	4/15/93
D-H-90	93-RF-3513	Letter re: FY 93 Work Packages for Industrial Area Operable Units	R. Benedetti, EG&G, to J. K. Hartman, RFO	3/19/93
D-H-91	ERD:BKT:02420	Letter re: FY 93 Work Packages for Operable Units 8, 9, 10 and 12	J. Hartman, RFO, to R. Benedetti, EG&G	3/15/93
D-H-92	93-RF-3334	Letter re: Evaluation of Potential Bald Eagle Impacts in RFP Environmental Evaluations under Comprehensive Environmental....	R. Benedetti, EG&G, to A. H. Paule, RFO	3/24/93
D-H-93	ERD:BKT:01466	Letter re: Evaluation of Potential Bald Eagle Impacts in RFP Environmental Evaluations under CERCLA, RCRA, and the IAG	R. Nelson, RFO, to James O. Zane, EG&G	2/12/93

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Ref. No.	Document #	Title/Description	Document Author/ Issuing Org.	Revision/ Issue Date
D-H-94	93-RF-4057	Letter re: Operable Unit No. 1 (881 Hillside) Surface Water Monitoring Stations	W. Busby, EG&G, to R. J. Schassburger, RFO	4/1/93
D-H-95	ERD:PS:01685	Letter re: OU1 IM/IRA Surface Water Monitoring Stations and Quarterly Report	J. Hartman, RFO, to R. Benedetti, EG&G	2/12/93
D-H-96	93-RF-3881	Letter re: Interim Measure/Interim Remedial Action Scoping Process for Surface Water Management	R. Benedetti, EG&G, to A. H. Paule, RFO	4/2/93
D-H-97	ERD:NC:01399	Letter re: Interim Measure/Interim Remedial Action Scoping Process for Surface Water Management	J. Hartman, RFO, to H. P. Mann, EG&G	3/8/93
D-H-98	93-RF-4637	Letter re: Operable Unit No. 9 Fiscal Year 1993 Work Package	W. Busby, EG&G, to R. J. Schassburger, RFO	4/16/93
D-H-99	ERD:BKT:03933	Letter re: Operable Unit No. 9 Phase I RFI/RI	J. Hartman, RFO, to R. Benedetti, EG&G	4/5/93
D-H-100	93-RF-0700	Letter re: Digital Logger Files for Operable Unit NO. 1	M. Buddy, EG&G, to R.J. Schassburger, RFO	1/15/93
D-H-101	ERD:JLP:14694	Letter re: Computer Generated Logs for Operable Unit Investigations	J. Hartman, RFO, to R. Benedetti, EG&G	1/4/93
D-H-102	93-RF-2382	Letter re: Submittal of Responsiveness Summaries and Updated Text and Figures for the Final Phase I RFI/RI Work Plan for Operable Unit No. 8 - 700 Areas	W. Busby, EG&G, to R. J. Schassburger, RFO	2/25/93
D-H-103	ERD:BKT:00857	Letter re: EPA/ISCH Comments on OU 8 Final Phase I RFI/RI Workplan and Baseline Risk Assessments in RFP Industrial Area	J. Hartman, RFO, to R. Benedetti, EG&G	1/27/93
D-H-104	AMEM:AED:3995	Letter re: Redlegation of Signature Authority	J. Hartman, RFO, to F. R. Lockhart, ERD/RFO	4/3/92
D-H-105	None indicated	Letter re: Revised Office of Environmental Restorations Baseline Guidance	R. Whitfield, DOE, HQ, to Distribution	11/8/91
D-H-106	ERD:FRL:1366	Letter re: Environmental Restoration FY92 Budget	D. Simonson, RFO, to R. P. Whitfield, EM-40	2/26/91
D-H-107	None indicated	Letter re: Rocky Flats Pondcrete Funding	R. Whitfield, EM-40, to P. Grimm, EM-2	4/12/91
D-H-108	ERD:HDR:6175	Letter re: FY92 President's Budget Impacts	D. Simonson, RFO, to Ralph Lightner, Division of Southwestern Programs, EM-45	8/7/91
D-H-109	ERD:HR:6387	Letter re: Proposed 10 Percent Reduction to FY92 President's Budget	D. Simonson, RFO, to Ralph Lightner, Division of Southwestern Programs, EM-45 HQ	8/14/91

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Ref. No.	Document #	Title/Description	Document Author/ Issuing Org.	Revision/ Issue Date
D-H-110	None indicated	The Rebuttal to Potential Funding Shortfalls in Rocky Flats Plant FY 1992 EM Budget	None indicated	None indicated
D-H-111	None indicated	Potential Funding Shortfalls in Rocky Flats Plant FY 1992 EM Budget	None indicated	9/9/91
D-H-112	None indicated	ER Budget Allocation for FY 92 is not Sufficient to Meet the Requirements of the IAG	None indicated	9/11/91
D-H-113	None indicated	IAG Budget Briefing Paper	None indicated	None indicated
D-H-114	91-DOE-8351	Letter re: Listing of costs by Operable Unit for both assessment and remediation	D. P. Simonson, RFO, to M. Heestmark, EPA	10/1/91
D-H-115	None indicated	QAD Environmental Audit Topic List	M. Castagneri, RFO	4/15/93
D-H-116	None indicated	Presentation - FY-92 Funding for Environmental Restoration at Rocky Flats Plant	EG&G	None indicated
D-H-117	None indicated	Environmental Restoration Program - FY92 Preliminary Funding Allocation for Funding Scenarios of \$61.3M, \$72.3M and \$84.5M (Pondcrete Not Included)	EG&G	None indicated
D-H-118	None indicated	Letter re: Infrastructure Status	Debbie Weber, EG&G, to Andrea Heintzelman, Progress Assessment Team	4/22/92
D-H-119	PACE:DWS-02072	Letter re: RFP Infrastructure	R. Nelson, RFO, to Those on Attached List	2/19/93
D-H-120	RFO-93-003	Rocky Flats DOE Manager's Weekly Meeting - re: Implementation of Infrastructure at Rocky Flats Plant	DOE	1/25/93
D-H-121	None indicated	Presentation on Infrastructure Management (DRAFT)	William S. Bennett, EG&G	4/13/93
D-H-122	None indicated	Presentation on Infrastructure Management (DRAFT)	J. Davis, EG&G	4/16/93
D-H-123	DAW-002-93	Letter re: Possible Rocky Flats Plant Infrastructure Control Systems for Review	D. Weber, EG&G to Distribution EG&G	4/6/93
D-H-124	None indicated	Possible Control Systems (Attachment B) to above letter.	D. Weber, EG&G	4/22/93
D-H-125	None indicated	Letter re: Policy Review Requested	D. Weber, EG&G to Distribution EG&G	4/22/93
D-H-126	None indicated	EG&G Rocky Flats, Inc. "Plant Infrastructure" Policy Attachment to above letter	D. Weber, EG&G to Distribution EG&G	4/22/93

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Ref. No.	Document #	Title/Description	Document Author/ Issuing Org.	Revision/ Issue Date
D-H-127	None indicated	Draft Infrastructure Integrated Plan	EG&G	4/22/93
D-H-128	None indicated	Draft Infrastructure Working Group List	EG&G	4/22/93
D-H-129	None indicated	Letter re: Assessment of the Environmental Restoration Project at Rocky Flats Plant	None indicated	8/89
D-H-130	None indicated	Letter re: OU 2 Phase II RFI/RI Report Extension Request	M. Hestmark, EPA, and G. Boughman of CDH	3/16/93
D-H-131	None indicated	Program Assessment Report on the Rocky Flats Environmental Restoration Major Systems Acquisition Project	Office of Southwestern Area Programs EM-45	6/5/92
D-H-132	None indicated	Letter re: Draft - Department of Energy Position on Rocky Flats Environmental Restoration Project Schedule Milestone Difficulties	R. Whitfield, DOE, to Acting Manager Rocky Flats Office	None indicated
D-H-133	None indicated	Letter re: Rocky Flats Environmental Restoration Project Implementation Plan	R. Lightner, Office of Southwestern Area Programs, to Acting Manager, Rocky Flats Office and J. Hartman RFO	4/28/93
D-H-134	None indicated	Letter re: Rocky Flats Environmental Restoration Project Management and Cost Control System Implementation Plan	R. Lightner, Office of Southwestern Area Programs, to R. N. Nelson and J. Hartman, RFO	12/11/92
D-H-135	None indicated	Letter re: Corrective Actions to Improve DOE/EG&G Management of Solar Evaporation Ponds (SEP) Project	L. Duffy, DOE/HQ, to Acting Manager of DOE Rocky Flats Office	12/1/92
D-H-136	None indicated	Letter re: Rocky Flats Environmental Restoration Program Scope, Schedule and Cost Working Group Action Plan	R. Lightner, Office of Southwestern Area Programs, to J. Hartman, RFO	4/30/92
D-H-137	None indicated	Letter re: Plan for Transferring Surplus Facilities from DP to EM	L. Duffy and R. A. Claytor, DOE/HQ, to the Secretary through: Under Secretary	11/2/92
D-H-138	None indicated	Letter re: Programmatic Guidance for the Rocky Flats Site	R. Claytor and L. P. Duffy, DOE/HQ, to Acting Manager of DOE Rocky Flats Office	4/14/92
D-H-139	None indicated	Strategic Plan	U. S. Department of Energy, Office of Environmental Restoration	11/92

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D-H-140	None indicated	MPR EM-40 Management Policies and Requirements - Environmental Restoration and Waste Management - Environmental Restoration Program - Rev. 1	EM-40	3/92
D-H-141	None indicated	Letter re: EM-40 Management Policies and Requirements Document, Revision 1	R. Whitfield, DOE-HQ, to Distribution	2/4/92
D-H-142	None indicated	MP - EM-40 Management Plan - Environmental Restoration Program	EM-40	3/92
D-H-143	DE-AC34-90RF62344	Organizational Charts and Position Description for Overall Site Organization and ES&H Programs	EG&G	3/93
D-H-144	93-RF-2637	Rocky Flats Plant Environmental Compliance Program Description	RF	3/5/93
D-H-145	DOE/EH-0107	Assessment of Environmental Conditions at the Rocky Flats Plant	DOE-HQ	8/89
D-H-146	QAD:MAC:00129	Environmental Restoration/Environmental Protection Quality Assurance Program Evaluation	R. Nelson, RFO to J. Zane, EG&G Rocky Flats	1/28/93
D-H-147	None indicated	Formal External Lines of Communication	R. Schaeberger, RFO	5/25/93
D-H-148	9HWM-FF	Letter - M. Heestmark, EPA and G. Baughman, CDH to F. Lockhart re: Reported delays in Starting fieldwork for OU4, OU5, OU6, OU9, OU2	EPA and CDH	6/19/92
D-H-149	8HWM-FF	Letter - M. Heestmark, EPA and G. Baughman, CDH to F. Lockhart re: Disturbed that RFO is unable to meet most schedule commitments	EPA and CDH	8/10/92
D-H-150	92-DOE-7047	Letter - J. Hartman, RFO to M. Heestmark, EPA and G. Baughman, CDH re: regarding delays in start of field work for approved RFI/RI work plans	RFO	7/2/92
D-H-151	None indicated	Letter - T. McCall, Jr. EPA and J. McGraw, EPA to T. Veeth, RFO re: Appreciation for August 16 (26) meeting . . . unconvinced of need to renegotiate IAG milestones	EPA	10/1/92
D-H-152	Guide No. 1.0, Rev.0	Work Plan Development Guide (Draft)	EG&G Rocky Flats	None indicated

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Ref. No.	Document #	Title/Description	Document Author/ Issuing Org.	Revision/ Issue Date
D-H-153	92-DOE-11364	Letter - J. Hartman, RFO to M. Hestmark, EPA and G. Baughman, CDH re: OU2 RFI/RI Bedrock Investigation Delays	RFO	10/14/92
D-H-154	None indicated	Quarterly Update, HRR	EG&G Rocky Flats	4/30/93
D-H-155	None indicated	Quarterly Update HRR	EG&G Rocky Flats	1/29/93
D-H-156	None indicated	Draft Phase III RFI/RI Report for OU1	G. Baughman, CDH	1/29/93
D-H-157	None indicated	Letter - G. Baughman, CDH and M. Hestmark, EPA to F. Lockhart, RFO re: Phase II RFI/RI Work Plan (Bedrock), Draft Final, June 1991	CDH and EPA	8/19/91
D-H-158	93-DOE-03530	Letter - A. Paule, RFO to M. Hestmark, EPA and G. Baughman, CDH re: Request for extension for IAG Table 6 Milestone RFI/RI for OU1	RFO	3/19/93
D-H-159	93-DOE-02632	Letter - J. Nelson, RFO to M. Hestmark, EPA and G. Baughman, CDH re: Request for 9 month extension of OU2 Draft Final RFI/RI Report	RFO	2/26/93
D-H-160	None indicated	Final Phase II RFI/RI Work Plan, OU2	EG&G Rocky Flats	4/12/90
D-H-161	None indicated	Administrative Record File Index, OU2	EG&G Rocky Flats	5/3/93
D-H-162	93-QA-L1-002	Environmental Restoration/Environmental Protection QA Program November 6-December 18, 1992	EG&G Rocky Flats	12/21/92
C. Lewis - Surface Water Program Management				
D-I-1	21000-SPCC/BMP	SPCC/BMP Plan	EG&G	9/92
D-I-2	None indicated	21000-SPCC/BMP: Document Control Distribution for SPCC/BMP	R. Fiehwig, EG&G	5/19/93
D-I-3	None indicated	Letter to C. Lewis and J. Patterson re: Chemical Inventory/Excess Chemicals at RFP	M. Seitz, EM	5/20/93
D-I-4	FFCA-CWA-90-1	NPDES Permit Number CO-0001333 EPA Compliance Agreement	DOE/EPA	None indicated
D-I-5	None indicated	Listing of Procedures Applicable to Environmental Protection Management	EG&G	None indicated

LIST OF SITE DOCUMENTS REVIEWED BY THE PROGRESS ASSESSMENT TEAM

Ref. No.	Document #	Title/Description	Document Author/ Issuing Org.	Revision/ Issue Date
D-I-6	1-48000-DM-001, 1-48000-QAR-001	Document Control / Records Procedures	EG&G	5/92
D-I-7	STD No. SM-137	Standard for Inspection of Tanks or Piping Systems, Pressure Vessels and Safety/Relief Devices	EG&G	11/17/92
D-I-8	STD No. SM-136	Standard for Tanks Containing Regulated Substances	Rockwell International	3/31/89
D-I-9	1-21000-EMR-SW.001	Requirement for Control and Disposition of Incidental Waters	EG&G	Rev. O, None indicated
D-I-10	None indicated	WWTP Operational Order No. 3: Hazardous/ Toxic Material Release into the Sanitary Sewage System	EG&G	11/13/91
D-I-11	None indicated	Corrective Action Plan in Response to the 1989 Assessment	EG&G	7/20/90
D-I-12	DOE/EH-0107	Assessment of Environmental Conditions at the Rocky Flats Plant	DOE EH	8/89
D-I-13	None indicated	PATS Entry Form for Environmental Concerns	EG&G	None indicated
D-I-14	1-64000-EP-01.00	Rocky Flats Plant Emergency Plan (Draft)	EG&G	Rev. O, 6/30/93
D-I-15	93-RF-0279	Drill Report for 1993 Quarterly Site Drill 93-LS-001	EG&G	12/11/92
D-I-16	None indicated	PATS - Tiger Team Plan Status Report	EG&G	4/15/93
D-I-17	None indicated	File of Record: Hydrochloric Acid Spill Responses	R. Kopplin, EG&G	12/21/92
D-I-18	None indicated	Rocky Flats Interagency Agreement	RFO	1/22/91
D-I-19	None indicated	Letter - J. McGraw, EPA to J. Hartman, RFO re: NPDES Permit CO - 0001333	EPA	6/26/92
D-I-20	None indicated	Letter - G. Baughman, CDH to F. Lockhart, RFO re: Request for Approval to Spray Evaporate Excess Water in the Landfill Pond and Water Management IM/IRA	CDH	10/15/92
D-I-21	None indicated	Letter - G. Baughman, CDH to F. Lockhart, RFO re: Water Management IM/IRA for A-Series Ponds, B- Series Ponds, Pond C-2, and the Landfill Pond	CDH	10/22/92
D-I-22	92-DOE-12906	Letter - to G. Baughman, CDH and M. Hestmark, EPA from J. Hartman, RFO re: IM/IRA for A-Series Ponds	RFO	11/9/92

LIST OF SITE DOCUMENTS REVIEWED BY THE PROGRESS ASSESSMENT TEAM

Ref. No.	Document #	Title/Description	Document Author/ Issuing Org.	Revision/ Issue Date
D-I-23	92-DOE-13575	Letter - to G. Baughman, CDH and M. Hestmark, EPA from J. Hartman, RFO re: Meeting about IM/IRA for A-Series Ponds	RFO	11/23/92
D-I-24	None indicated	Surface Water Management Plan (Draft)	RFO	7/22/92
D-I-25	None indicated	Letter - L. Moore, RMPC to T. McCall, EPA re: Keystone recommendations	L. Moore, Rocky Mountain Peace Center	5/14/93
D-I-26	None indicated	Letter - J. Tempel, Rocky Flats Cleanup Commission to D. Skaggs, US Rep re: Standley Lake Diversion Ditch	J. Temple, Rocky Flats Cleanup Commission	5/3/93
D-I-27	None indicated	Rocky Flats Surface Water Management Project - Grant to the Cities of Broomfield, Westminster for Offsite Activities (Option B)	J. Ciocco, EM-453.1	9/24/92
D-I-28	93-DOE-02561	Letter - J. Hartman, RFO to M. Hestmark, EPA and G. Baughman, CDH re: Draft outline for IM/IRA	J. Hartman, RFO	3/11/93
D-I-29	None indicated	Memorandum - T. Vaeth, RFO to L. Duffy, EM re: Water Management Programs for Area Communities (Option B)	T. Vaeth, RFO	6/16/91
D-I-31	None indicated	Memorandum - B. Fraser, EPA to M. Van Der Puy, RFO re: Comments on Draft Outline for the Ponds IM/IRA	B. Fraser, EPA	3/18/93
D-I-32	None indicated	Memorandum - J. Schieffelin, CDH to G. Hill, RFO re: Pond Water Management IM/IRA - Comments to Draft Table of Contents	J. Schieffelin, CDH	None indicated
D-I-33	None indicated	Rocky Flats Plant Environmental Restoration FY93 Mid-Year Status Review	RFO	4/26/93
D-I-34	None indicated	Interim Pond Water Management Plan	S. Pettis, EG&G	4/14/93
D-I-35	None indicated	Report of the Chronic Acid Incident Investigation at Rocky Flats	DOE AL	8/89
D-I-36	None indicated	Reconstruction of Historical Rocky Flats Operations & Identification of Release Points	ChemRisk and CDH	8/92
D-I-37	None indicated	7/91 Paint Spill to STP Report	EG&G	7/2/91

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Ref. No.	Document #	Title/Description	Document Author/ Issuing Org.	Revision/ Issue Date
D-I-38	None indicated	NPDES DMRS 6/91 - 3/93	EG&G	5/21/93
D-I-39	None indicated	Bldg. 995 Maintenance Record, "Historic Master Summary Report" 1/91 - 5/93	EG&G	5/18/93
D-I-40	None indicated	Progress Assessment Assistance White Paper	EG&G	3/29/93
D-I-41	None indicated	Maintenance Work Package - Bldg. 995 pH Meter Replacement May 18, 1993	EG&G	5/18/93
D-I-42	None indicated	FFCA - Chronic Acid Incident Plan and Implementation Schedule	EG&G	11/90
D-I-43	None indicated	Interim Report of the Federal Facilities Environmental Restoration Dialogue Committee	Federal Facilities Environmental Restoration Dialogue Committee	2/93
D. Neal - Waste Characterization Program				
D-J-1	None indicated	Assessment of Environmental Conditions at the Rocky Flats Plant	DOE	8/89
D-J-2	None indicated	Corrective Action Plan	DOE	7/20/90
D-J-3	None indicated	Report to Congress, Rocky Flats Transition Plan	DOE	7/92
D-J-4	None indicated	Rocky Flats Plant Environmental and Waste Management Program Descriptions	EG&G	4/94
D-J-5	None indicated	DOE 5820.2A Compliance Assessment	EG&G	4/26/93
D-J-6	None indicated	DOE 5400.1 Compliance Assessment	EG&G	4/26/93
D-J-7	None indicated	NTS Audit Results	DOE NV	1990-1992
D-J-8	Audit No. 02-89	Quality Assurance Audit Waste Management	W. Kirby, Rockwell	12/20/89
D-J-9	None indicated	Rocky Flats Plant Waste Surveillance Operating Standards Manual	EG&G	1/21/93
D-J-10	None indicated	Various Surveillances/memos Concerning RCRA Issues at the Old Laundry Facility	EG&G	1991-1992
D-J-11	None indicated	Waste Surveillance RCRA Inspection Report Container Storage Area 569-59	K. Harris, EG&G	3/9/93
D-J-12	None indicated	Waste Surveillance RCRA Inspection Report Container Storage Unit 371-90.9	B. Brooks, EG&G	2/15/93

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Ref. No.	Document #	Title/Description	Document Author/ Issuing Org.	Revision/ Issue Date
D-J-13	None indicated	Waste Surveillance RCRA Inspection Report, Container Storage Unit 371-90.1	J. Ross, EG&G	1/15/93
D-J-14	None indicated	Waste Surveillance RCRA Inspection Report Container Storage Unit 884-13	J. Ross, EG&G	4/22/92
D-J-15	None indicated	Waste Surveillance RCRA Inspection Report Container Storage/Treatment Unit 884-13	J. Ross, EG&G	12/22/92
D-J-16	1-10000-HWR	Rocky Flats Plant Hazardous Waste Requirements manual	EG&G	4/6/93
D-J-17	None indicated	State RCRA Permit for Rocky Flats Plant	CDH	10/30/91
D-J-18	91-07-31-01	Draft Amended Compliance Order (Mixed Residue)	CDH	4/23/92
D-J-19	Docket No. RCRA (3008) VIII-89-25	Federal Facility Compliance Agreement (Land Disposal Restricted Waste)	DOE/EPA	5/11/91
D-J-20	1-10000-TUM 02.03	Training Requirements and Qualification	EG&G	Rev. 2, 3/8/93
D-J-21	1-10000-TUM 02.05	Evaluation of Training Courses	EG&G	Rev. 0, 2/4/91
D-J-22	90-RF-6070	Mixed Residues Compliance Plan	EG&G	9/28/90
D-J-23	90-RF-1359	Phase I Residue Characterization Plan	EG&G	3/30/90
D-J-24	1-10000-MWM	Medical/Infectious Waste Management Plan	EG&G	Rev. 0, 11/20/92
D-J-25	1-10000-EWQA	Sanitary Waste Management Plan	EG&G	Rev. 0, 8/15/92
D-J-26	None indicated	RFO Oversight Plans for Environmental Management and Waste Management	RFO	FY92
D-J-27	None indicated	Waste Stream and Residue Identification and Characterization, Building 460	Wastren	1/7/93, V 3.2
D-J-28	None indicated	RFO Waste Operations Branch Surveillances	RFO	5/21/93
D-J-29	WMED:JJR:11573	Assignment of Waste Programs Branch Personnel to Waste Characterization Projects	RFO	11/92
D-J-30	None indicated	Proposed Backlog Residue Analytical Plan	RFO	3/27/92
D-J-31	None indicated	Solid Radioactive Waste Generator Training and Qualification Program Update	EG&G	2/2/93
D-J-32	CDB-002-93	Evaluation of Waste Programs Training Programs	EG&G	1/14/93

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Ref. No.	Document #	Title/Description	Document Author/ Issuing Org.	Revision/ Issue Date
D-J-33	None indicated	Annual Mixed Residue Reduction Report	RFO	11/13/92
D-J-34	None indicated	Backlog Residue Hazardous Waste Determination Status Report	RFO	2/25/92
D-J-35	WSG-115-93	Waste Reject Summary Graphs - March, 1993	EG&G	4/16/93
D-J-36	None indicated	WSRIC Sampling and Analysis Summary for Building 460	Wastren	2/5/93
D-J-37	None indicated	Work Package Number 32302 - Analytical Methods Development/Implementation	EG&G	9/11/92
D-J-38	None indicated	Work Package Number 62304 - DP Sampling and Analysis	EG&G	7/29/92
D-J-39	None indicated	Work Package Number 62106 - Waste Stream and Residue Identification and Characterization	EG&G	7/25/92
D-J-40	WO-1102	Waste/Residue Traveler Instructions	EG&G	5/22/92, Rev.1
D-J-41	None indicated	Various EG&G Oversight Procedures	EG&G	1991-1992
D-J-42	None indicated	Training Users Manual	EG&G	2/4/91
D-J-43	None indicated	RFO Oversight of Waste Characterization	RFO	5/21/93
D-J-44	1-50000-ADM-15.01	Control of Nonconforming Items	EG&G	3/24/92, Rev.2
D-J-45	5-22230-WO-4402	Supercompaction and Repackaging Facility (SARF) Soft Waste Entry/Processing	EG&G	2/18/93, Rev.2
D-J-46	1-10000-EWQA	Waste Stream and Residue Identification and Characterization Quality Assurance Project Plan	Wastren	11/9/92
D-J-47	None indicated	Waste Stream and Residue Identification and Characterization, Building 559	Wastren	4/20/93
D-J-48	1-10000-EWQA, Section 1.2	Transuranic (TRU) Waste Management Plan	EG&G	3/8/92
D-J-49	1-10000-EWQA, Section 1.1	Low Level Waste Management Plan	EG&G	5/1/92
D-J-50	1-10000-EWQA, Section 1.5	TSCA (Toxic Substances Control Act) Management Plan	EG&G	2/1/93

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Ref. No.	Document #	Title/Description	Document Author/ Issuing Org.	Revision/ Issue Date
D-J-51	1-1000-EWQA	Waste Management Quality Assurance Program Plan	EG&G	9/4/91
J. Mellon - Environmental Quality Assurance				
D-K-1	Manual No. 5-21000-OPS	Environmental Management Department Operating Procedures	EG&G - EMD	Various
D-K-2	(GRRASP)	General Radiochemistry and Routine Analytical Services Protocol, Version 2.1	EG&G - EMD	7/2/91
D-K-3	Manual No. 3-21000-ADM	Environmental Management Administration Procedures Manual	EG&G - EMD	Various
D-K-4	QAPjP	Rocky Flats Site-wide Quality Assurance Project Plan for CERCLA RI/FS & RCRA FI/CMS Activities	EG&G	Various
D-K-5	3-21000-ALQAP	Analytical Laboratories Quality Assurance Plan	EG&G	Rev. A, 4/16/93
D-K-6	None indicated	Water Quality Parameters Data Validation Guidelines	Quantalex, Inc.	1/92
D-K-7	Appendix K	Quality Assurance Element	EG&G	Rev. 7, 3/11/93
D-K-8	L-6006-C	Chain of Custody General Laboratory	EG&G	3/4/92
D-K-9	RFP-ENV-90	US DOE/RFP Site Environmental Report for 1990	EG&G	1991
D-K-10	RFP-ENV-91	US DOE/RFP Site Environmental Report for 1991	EG&G	1992
D-K-11	TDS-312-93	Memorandum: ER Work Plan Process Review	K. Bentzen, EG&G - Records & Reporting, et al.	5/6/93
D-K-12	TDS-239-93	Memorandum: Guidance for Developing Work Plans, Technical Memoranda, and Study Plans (Draft)	T. Schmidt, EG&G, EQS	5/17/93
D-K-13	1-48000-QAR-001	Quality Assurance Records	RFP	Rev. O, 7/20/92
D-K-14	RFL5700.6	Subject: Quality Assurance	RFO	10/27/92
D-K-15	None indicated	Rocky Flats Plant Environmental Quality Assurance Requirements Hierarchy	RFO	4/22/93
D-K-16	ISP-10.10.001	Standards, Audits, & Assurance Verification Form - Reopen	EG&G SA&A	5/10/93
D-K-17	ISP-10.10.002	Standards, Audits, & Assurance Verification Form - Reopen	EG&G SA&A	5/10/93

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Ref. No.	Document #	Title/Description	Document Author/ Issuing Org.	Revision/ Issue Date
D-K-18	ISP-10.10.003	Standards, Audits, & Assurance Verification Form - Reopen	EG&G SA&A	5/10/93
D-K-19	ISP-10.10.004	Standards, Audits, & Assurance Verification Form - Reopen	EG&G SA&A	5/10/93
D-K-20	93-QA-L2-007	DOE RFO Evaluation Report - Environmental Radiochemistry Lab	RFO	2/93
D-K-21	93-QA-L2-010	DOE RFO Evaluation Report - Groundwater Sampling	RFO	3/93
D-K-22	93-QA-LI-002	Formal Audit: EG&G Rocky Flats Plant Environmental Restoration/Environmental Protection QA Program	DOE QAD	12/21/93
D-K-23	L-1000-M	Requirements for Formal Analytical Laboratories Procedures	R. Chichorz, EG&G	4/13/93
D-K-24	3-21000-ICM	Environmental Management Inspection Checklist Manual	EG&G	2/8/93
D-K-25	LL-1005-F	Analytical Laboratories Self-Appraisal Plan	M. Hume, EG&G	9/8/92
D-K-26	WSG-063-93	Environmental Sampling Assessment	W. Glover, EG&G	3/8/93
D-K-27	WSG-141-93	Environmental Management Field Standard Operating Procedures Assessment	W. Glover, EG&G	5/11/93
D-K-28	WSG-073-93	Environmental Restoration Occurrence Reporting Assessment	W. Glover, EG&G	3/12/93
D-K-29	WSG-087-93	Hazardous Waste Compliance & Self-Assessment Response/Action Plan, Item Number 4 Assessment	EG&G	3/25/93
J. Janda - Worker Safety and OSHA Program				
D-L-1	DOE/EH-0292	Report of the Oversight Assessment of the Operational Readiness Review of the Rocky Flats Plant Building 707	DOE/EH OA Team	12/92
D-L-2	None indicated	Reconstruction of Historical Rocky Flats Operations & Identification of Release Points	ChemRisk a Division of McLaren/Hart for the Colorado Department of Health	8/92
D-L-3	None indicated	Operational Occurrence Reports for calendar year(s) 1992 and 1993	EG&G	1992 and 1993

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Ref. No.	Document #	Title/Description	Document Author/ Issuing Org.	Revision/ Issue Date
D-L-4	None indicated	Assessment of Environmental Conditions at the Rocky Flats Plant, Golden, Colorado; August 1989	Special Assessment Team	8/89
D-L-5	None indicated	Action Plan for the Special Assessment Team findings contained in "Assessment of Environmental Conditions at the Rocky Flats Plant, Golden, Colorado; August 1989	EG&G	8/89
D-L-6	None indicated	Memorandum to the Secretary of Energy: Memorandum of Agreement (MOA) to begin transferring management responsibilities at Rocky Flats from Defense Programs (DP) to Environmental Restoration and Waste Management (EM)	EM-1 (W. Bixby, EM-60)	1/11/93
D-L-7	DOE/EM-0079	Report to Congress - Rocky Flats Transition Plan	DOE	7/92
D-L-8	DOE/EH-0081	Technical Safety Appraisal of the Rocky Flats Plant	EH	1/89
D-L-9	DOE/DP-0111T	Operational Readiness Review Rocky Flats Plant Building 707	DP	12/92
D-L-10	None indicated	Memorandum to James O. Zane: Clarification of Action Item Terminology	RFO	2/12/93
D-L-11	None indicated	Environmental Safety and Health Progress Assessment Briefing Book	RFO and EG&G/RFS	4/16/93
D-L-12	SHDP-003	Safety and Health Division Surveillance Procedure - SHDP-003: Establishes requirements for documentation of surveillances, tracking, and closure of concerns.	RFO	3/19/93
D-L-13	SHDP-001	Rocky Flats Plant M&O Contractor Safety and Health Oversight - SHDP-001: Establishes and details responsibilities for RFO oversight of M&O contractor safety and health programs.	RFO	3/25/93
D-L-14	None indicated	Draft: Safety and Health Oversight Instruction SHDP-001	RFO	None indicated
D-L-15	None indicated	Introduction to Line Control Safety and Health - Copy of material used for training line control safety and health	E. Houge, EG&G	None indicated
D-L-16	None indicated	Health and Safety Performance Indicators	EG&G	4/15/93

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Ref. No.	Document #	Title/Description	Document Author/ Issuing Org.	Revision/ Issue Date
D-L-17	None indicated	Rocky Flats Plant Instructor Guide and related training material for the Line Control Safety and Health Program	EG&G	2/5/93
D-L-18	None indicated	EH Site Representative Monthly Reports 1991-1992	EH-30	None indicated
D-L-19	RCC-020-93	Interoffice Correspondence to J. Riley from R. Cordova - Industrial Hygiene and Safety Top Priorities for Fiscal Year 1993	R. Cordova/EG&G	2/3/93
D-L-20	1-11000-ADM-16.10	Self-Evaluation Program	EG&G	2/22/93
D-L-21	OSI-025-93	Numerous examples of Occupational Safety Inspection Reports covering both general industry and construction safety and health issues	EG&G	3/93; 4/93; 10/92; 9/92;
D-L-22	None indicated	Examples of monthly Safety Meeting Kitle)	EG&G, Occupational Safety	3/93 and 4/93
D-L-23	None indicated	Examples of RFP Safety-Grams covering topics in both industrial hygiene and occupational safety	EG&G, Occupational Safety and Industrial Hygiene	8/17/92; 7/22/93; 3/1/93
D-L-24	None indicated	Progress Assessment Assistance White Paper	EG&G	3/29/93
D-L-25	1-15310-HSP-9.13	Hazard Assessment Inventory procedures	EG&G	12/21/92
D-L-26	None indicated	Line Control Safety Monitor's Handbook	E. Hogue, EG&G	1/92
D-L-27	1-15320-PD-01	EG&G Line Control Accident Prevention Plan - Draft A	EG&G	9/10/92
D-L-28	None indicated	Occupational Safety & Health Hazards/Deficiencies for 2/1/93 through 4/19/93	EG&G	4/19/93
D-L-29	HSP 24.01	Safety and Health Responsibilities for Construction Activities	EG&G	7/15/91
D-L-30	1-15320-HSP-24.01	Safety and Health Responsibilities for Subcontractor Work Activities - Draft A	EG&G	11/16/92
D-L-31	RCC-062-93	Interoffice Correspondence - Rocky Flats Plant Occupational Safety Performance - Safety and health injury and illness indicators for 1/93 to date	R. Cordova, EG&G	4/15/93
D-L-32	None indicated	Health and Safety Practices - Manual of EG&G required S&H safety practices	EG&G	None indicated

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Ref. No.	Document #	Title/Description	Document Author/ Issuing Org.	Revision/ Issue Date
D-L-33	None indicated	Policy Manual EG&G Rocky Flats, Inc. - Contains EG&G's basic safety and health policy statements	EG&G	None indicated
D-L-34	JHR-148-93	Interoffice Correspondence - Action Plan For Electrical Safety Issues - EG&G's action plan to ensure compliance with 29 CFR 1910 Subpart S	J. Riley, EG&G	3/23/93
D-L-35	None indicated	Employee Occupational Safety or Health Complaint System (A.K.A. 628e)	T. A. Lechman: RFO	8/31/89
D-L-36	RFI 5483.1	Draft - Occupation Safety or Health Complaints Program	RFO	None indicated
D-L-37	SHDP-010	Draft Surveillance Procedure - Building Assessment Procedure To Be Used for Safety and Health Assessment of Non-Resumption Building ONLY	RFO	2/10/93
D-L-38	SHDP-002	Draft - Self-Assessment Plan	RFO Safety and Health Division	10/1/92
D-L-39	None indicated	Line Control Safety Program Manual	E. Hogue, EG&G	1/92
D-L-40	None indicated	Numerous Safety Division Surveillance reports covering PPE; respiratory protection; confined space; trenching and excavations; hazard assessment; asbestos abatement; electrical safety	RFO	1/4/93; 2/20/92; 9/28/92; 10/20/92; 10/28/92; 1/28/92; 2/5/93; 12/4/92; 1/28/93; 2/5/93
D-L-41	None indicated	Individual Development Plans (IDPs) for RFO OS&H professionals	RFO	1/27/93
D-L-42	None indicated	Performance Appraisal Plans for RFO safety and industrial hygiene professionals	RFO	4/5/93
D-L-43	None indicated	Implementation of the RFO Strategic Plan	A. Pauley, RFO	3/26/93
D-L-44	SHDP-09	Draft - Training and Qualifications Procedure for the Safety & Health Division, RFO	RFO Safety & Health Division	4/21/93
D-L-45	None indicated	Department of Energy/Rocky Flats Office Confined Spaces Program	T.E. Grethel; DOE/RFO	2/26/93
D-L-46	None indicated	Nine Documents Related to Guidance Issues at the RFP Water Tower	EG&G and RFO	Various

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Ref. No.	Document #	Title/Description	Document Author/ Issuing Org.	Revision/ Issue Date
W. Futrell - Fire Protection Program				
D-M-1	J.I. OT6N9.CY	Fire Protection Survey Visit # 4	Factory Mutual Research Corp	12/90
D-M-2	None indicated	EG&G Fire Dept. Impairment Tracking	EG&G Fire Department	4/23/93
D-M-3	None indicated	EG&G Fire Dept. Self Assessment	EG&G Fire Department	4/20/93
D-M-4	None indicated	EG&G F.D. Prevention Division Self Assessment	EG&G Fire Department	4/11/93
D-M-5	9331933-31-159	Life Safety Study for EG&G Rocky Flats, Inc.	Professional Loss Control, Inc.	12/14/90
D-M-6	FP-6	Fire Protection Program Plan, Rev. 0	EG&G	3/15/91
D-M-7	None indicated	Order Compliance Matrix	EG&G	10/21/91
D-M-8	None indicated	Compliance Assessment Report	EG&G	12/2/91
D-M-9	92-RF-10196	Building 707 Readiness Report	EG&G	9/4/92
D-M-10	None indicated	Organizational Charts and Position Descriptions for Overall Site Management and ES&H Programs	EG&G	None indicated
D-M-11	4-72230-707-SPR-MB	Fire Protection Sprinkler System Bimonthly Surveillance	EG&G Fire Department	4/20/92
D-M-12	4-72230-707-SPR-M	Fire Protection Sprinkler System Monthly Surveillance	EG&G Fire Department	3/11/92
D-M-13	4-65200-707-SPRA-0	Fire Protection Sprinkler System 707A Operations	EG&G Fire Department	None indicated
D-M-14	4-65200-707-FPL1-0	Filter Plenum Suppression System Operations (Deluge Control Panel FFP-008)	EG&G Fire Department	1/11/93
D-M-15	4-65200-707-HAL-0	Module C-Fir Halon Suppression System Operation	EG&G Fire Department	10/20/92
D-M-16	4-72200-FDDC-002	Fire Department Document Control Process	EG&G Fire Department	5/13/92
D-M-17	4-72230-707-SPR-MBQ	Fire Protection Sprinkler System Quarterly Surveillance	EG&G Fire Department	4/20/92
D-M-18	4-65200-707-SPR-B-0	Fire Protection Sprinkler System 707B Operations	EG&G Fire Department	1/11/93
D-M-19	4-65200-711-DEL-MBA	Cooling Tower 711 Fire Protection Deluge Sprinkler System Surveillance	EG&G Fire Department	11/16/92
D-M-20	SOP 1321	Building Fire Protection Inspection and Testing	EG&G Fire Department	7/8/92
D-M-21	3-65000-SOP-616	Fire Department Calibrated Equipment Control Process	EG&G Fire Department	10/20/92

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Ref. No.	Document #	Title/Description	Document Author/ Issuing Org.	Revision/ Issue Date
D-M-22	4-65200-707-HAL-S	Halon Suppression/Heat Detection System Semiannual Surveillance	EG&G Fire Department	10/20/92
D-M-23	4-72230-559-HAL-S	Halon Suppression/Smoke Detection System Semiannual Surveillance	EG&G Fire Department	3/24/92
D-M-24	ARP-707-CB-D-211- 04890	Panel CB-D Alarm Response FU-26 Filter Plenum Fire Alarm	EG&G Building 707 Operations	7/29/91
D-M-25	ARP-707-CB-D-211- 04880	Panel CB-D Alarm Response IHC-101 Heat Detector Chamber Deluge Fire Spray On	EG&G Building 707 Operations	7/29/91
D-M-26	4-74442-A836-MT-14	Building 707 Fire Protection System Alarm Monthly Surveillance (GBO-031)	EG&G Alarms and Communications	1/21/92
D-M-27	4-74442-A836-AT-14	Building 707 Fire Protection System Annual Surveillance (GBO-031)	EG&G Alarms and Communications	5/01/92
D-M-28	4-31UOP-707-3.2	Bottled Flammable Gases Weekly Surveillance	EG&G Building 707 Plutonium Fabrications Operations	7/20/92
D-M-29	4-65200-707-VAL-0	Building 707 Fire Protection System Normal Valve Lineup	EG&G Fire Department	1/11/93
D-M-30	ARP-707-DACS-211- 00510	DACS Alarm Responses AC2-35 Inert SYS 2 SUP HDR Oxygen (HIGH)	EG&G Building 707 Plutonium Fabrications Operations	7/29/91
D-M-31	IOP-708-300	Building 708 Fire Protection System Operating Procedure	EG&G Fire Department	7/29/91
D-M-32	92-PSL-FP-419	Surveillance, Site-Wide Water Distribution System for Fire Protection	RFO	2/8/93
D-M-33	92-PSL-FP-418	Surveillance, Fire Prevention Walk-Through of Building 707	RFO	12/17/92
D-M-34	DOE/EM-0079	Report to Congress	DOE Environmental Management	7/92
D-M-35	None indicated	EG&G presentation slides "Transition Standards Identification Program, Update for EG&G Senior Management"	EG&G Standards and Policy	5/93
D-M-36	H5B-179-93	EG&G Engineering Operability Evaluation of Building 707 Fire Barrier System	EG&G	4/20/93

LIST OF SITE DOCUMENTS REVIEWED BY THE PROGRESS ASSESSMENT TEAM

Ref. No.	Document #	Title/Description	Document Author/ Issuing Org.	Revision/ Issue Date
D-M-37	None indicated	EG&G Corporate Operational Readiness Review, Building 707	EG&G Corporate	4/92
D-M-38	DCJ-092-91	Correspondence Conyec to Williams	D. Conyec, Jr., Captain Fire Prevention	9/6/91
D-M-39	BGC-011-91	Correspondence, Campbell to Williams	B. Campbell, Manager Fire Protection Engineering	5/21/91
D-M-40	None indicated	DOE Memorandum, Juroff to Grethyl	K. Juroff, DP-6.1	1/7/93
D-M-41	None indicated	DOE Memorandum, Juroff to Olinger	K. Juroff, DP-6.1	10/9/92
D-M-42	None indicated	DOE Memorandum, Barrett to Vaeth	L. Barrett, Director Rocky Flats Program Office	7/7/92
D-M-43	93-RF-4705	Correspondence, EG&G to Withenil	EG&G (Signature page not provided)	4/20/93
D-M-44	None indicated	Pre-Turnover Review of Rocky Flats Plant Bldgs. 371, 443, 559, 662, 788, 883, 889, 991, & 995 (Draft)	DOE Office of Facility Transition Management	4/93
D-M-45	None indicated	DOE Memorandum re: Comments to ES&H Draft Progress Assessment Report	DOE	5/25/93
B. Holder/L. Munson - Industrial Hygiene Program				
D-N-1	DOE/EH-0081	Technical Safety Appraisal of The Rocky Flats Plant	EH	1/89
D-N-2	DOE/EH-0021	Technical Safety Appraisal of Building 707 Rocky Flats Plant	EH	9/86
D-N-3	DOE/EH-0032	Technical Safety Appraisal of Building 771/774 Rocky Flats Plant	EH	1/87
D-N-4	DOE/EH-0061	Technical Safety Appraisal of Building 776/777 Rocky Flats Plant	EH	3/88
D-N-5	DOE/EH-0292	Report of the Oversight Assessment of the Operational Readiness Review of the Rocky Flats Plant Building 707	DOE/EH OA Team	12/92
D-N-6	Division Files 5790	Memorandum to James O. Zane; Clarification of Action Item Terminology	RFO	2/12/93

LIST OF SITE DOCUMENTS REVIEWED BY THE PROGRESS ASSESSMENT TEAM

Ref. No.	Document #	Title/Description	Document Author/ Issuing Org.	Revision/ Issue Date
D-N-7	HS-6	Industrial Health and Safety Program Plan Revision 0	EG&G	7/8/92
D-N-8	None indicated	Environmental Safety and Health Progress Assessment Briefing Book	RFO, EG&G	4/16/93
D-N-9	DDM-007-93	Memorandum to R. C. Cordova - BUILDING 771 STATUS	EG&G	4/15/93
D-N-10	OSB:JDE-01601 (EG&G 1938-RF-93)	Memorandum to Jack H. Riley - Incorporation of Health and Safety Considerations into Integrated Work Control Packages	RFO	4/28/93
D-N-11	93-RF-5087 (HPM-144- 93)	DRAFT letter to A. H. Paule - Egress Respirator Process Improvement Team Proposed Action Plan and Schedule of Completion	EG&G	5/18/93
D-N-12	Contract No. BA 56801PB, Version 0.0	Health & Safety Plan (Accident Prevention Safety Program Plan) Rocky Flats Plant Decontamination Facility Operation	Woodward-Clyde for EG&G	3/2/93
D-N-13	None indicated	Health & Safety Practices Manual:	EG&G	Orig. 10/15/89 - rev. through 4/19/93
D-N-14	None indicated	Operational Occurrence Reports for calendar year(s) 1992 and 1993	EG&G	1992 and 1993
D-N-15	None indicated	Assessment of Environmental Conditions at the Rocky Flats Plant, Golden, Colorado; August 1989	Special Assessment Team	8/89
D-N-16	None indicated	Action Plan for the Special Assessment Team findings contained in "Assessment of Environmental Conditions at the Rocky Flats Plant, Golden, Colorado; August 1989	EG&G	8/89
D-N-17	None indicated	Memorandum to the Secretary of Energy: Memorandum of Agreement (MOA) to begin transferring management responsibilities at Rocky Flats from Defense Programs (DP) to Environmental Restoration and Waste Management (EM)	EM-1 (W. Busby, EM-60)	1/11/93
D-N-18	DOE/EM-0079	Report to Congress - Rocky Flats Transition Plan	DOE	7/92

LIST OF SITE DOCUMENTS REVIEWED BY THE PROGRESS ASSESSMENT TEAM

Ref. No.	Document #	Title/Description	Document Author/ Issuing Org.	Revision/ Issue Date
D-N-19	SHDP-003	Safety and Health Division Surveillance Procedure-SHDP-003: Establishes requirements for documentation of surveillances, tracking, and closure of concerns.	RFO	3/19/93
D-N-20	SHDP-001	Rocky Flats Plant M&O Contractor Safety and Health Oversight - SHDP-001: Establishes and details responsibilities for RFO oversight of M&O contractor safety and health programs.	RFO	3/25/93
D-N-21	None indicated	Draft: Safety and Health Oversight Instruction - SHDP-001.	RFO	None indicated
D-N-22	None indicated	Industrial Hygiene Procedures Manual	Uccusafe, Inc. for EG&G	Rev., 4/22/93
D-N-23	RFP-ENV-91	Rocky Flats Plant Site Environmental Report for 1991	EG&G/RFP	1991
D-N-24	None indicated	Policy Manual, EG&G Rocky Flats, Inc.	EG&G/RFP	Orig Issue: 7/90, Rev. 2/15/93
D-N-25	None indicated	Memorandum to J. R. Majestic from D. M. Sassone, Chair, Radiological Task Force, Personal Protective Equipment Group. re: Emergency Egress Respirators.	EG&G	8/13/90
D-N-26	HPM-186-93	Memorandum to Distribution from H. P. Mann, General Manager. re: OSHA Compliance Program Improvements.	EG&G	5/10/93
D-N-27	93-RF-5001	External Letter, EG&G to Vern F. Witherill, Asst. Mgr. for Tech. Support, RFO. re: Clarification of RFO Surveillance 92-LMG-OSB-3.10-401, Identification of Confined Spaces (01039)-JHR-252-93.	EG&G, J. H. Riley-252-93	4/23/93
D-N-28	None indicated	DRAFT Line Control Safety Monitor's Handbook	EG&G	1/92
D-N-29	None indicated	Recordable Injuries/Illnesses, Lost Work Days by Cause, RFP Total 01/01/92 - 12/31/92	EG&G	5/14/93 - computer run date

LIST OF SITE DOCUMENTS REVIEWED BY THE PROGRESS ASSESSMENT TEAM

Ref. No.	Document #	Title/Description	Document Author/ Issuing Org.	Revision/ Issue Date
D-N-40	DOE/EH-0129	Draft Procedures for Conducting Technical Safety Appraisals	EH	2/91
D-N-41	None indicated	Level B Ensemble Premaire Respirator Schedule	EG&G	4/4/93
D-N-42	ML-044-92	Supplied Breathing Air Operations - M. Lauger, Memo to Distribution	EG&G	11/11/92
D-N-43	None indicated	Memo for Record - Supplied Breathing air Interruption	EG&G	12/7/92
D-N-44	None indicated	Letter from United Steel Workers of America to J. H. Riley, AGM, - re: Outstanding Issues Involving Supplied Breathing Air	United Steel Workers of America	12/16/92
D-N-45	OSB:EJB:00882	Letter from Robert M. Nelson, Jr. to James O. Zane - re: Building 559 Non-Compliance with Occupational Safety and Health Administration Respiratory Standards	RFO	3/1/93
D-N-46	93-TJL-IH-9.10.11-005	Safety Division Surveillance - Building 707, Respiratory Protection	RFO	2/5/93
D-N-47	93-TJL-IH-9.10.8-006	Safety Division Surveillance - Building 707, Respiratory Protection	RFO	1/28/93
D-N-48	93-TJL-IH-9.10.1-007	Safety Division Surveillance - Bldg. 707, Respiratory Protection	RFO	2/5/93
D-N-49	93-TJL-IH-14.10-008	Safety Division Surveillance - Bldg. 707 and RFP, Training-Confined Space	RFO	2/5/93
D-N-50	93-TJL-IH-5.110-009	Safety Division Surveillance - Bldg. 707, IH-5.0 Hazard Assessment	RFO	1/28/93
D-N-51	93-TJL-IH-5.110-010	Safety Division Surveillance - Bldg. 707, Hazard Assessment	RFO	1/28/93
D-N-52	92-TJL-IH-9.10.8-436	Safety Division Surveillance - Bldg. 707, Respiratory Protection	RFO	12/4/92
D-N-53	92-TJL-IH-9.10.8-436	Safety Division Surveillance - Bldg. 707, Respiratory Protection	RFO	12/4/92

LIST OF SITE DOCUMENTS REVIEWED BY THE PROGRESS ASSESSMENT TEAM

Ref. No.	Document #	Title/Description	Document Author/ Issuing Org.	Revision/ Issue Date
D-N-54	92-TJL-IH-9.10.8-437	Safety Division Surveillance - Bldg. 707/708, Respiratory Protection	RFO	12/21/92
D-N-55	KPF-198-92	K. P. Ferrara Memo to A. J. Holifield, re: Clarification of Breathing Air System Classification	EG&G	12/8/92
D-N-56	ML-044-92	M. Lauger Memo to Distribution re: Supplied Breathing Air Operations	EG&G	11/11/92
D-N-57	WGZ-184-92	W. Zurliene Memo to A. J. Holifield re: Radiation Protection Requirements for Supplied Breathing Air Work	EG&G	12/8/92
D-N-58	92-RF-221E	Z. O. Zane letter to Ted. Tegler, Union Co-Chairman, United Steelworkers of America re: Resolution of Issues Involving Supplied Breathing Air Operations	EG&G	12/19/92
D-N-59	00-707-82	Plutonium Production Operations Orders - Management Control of Breathing Air System	EG&G	12/18/92
D-N-60	OSB:GN:02358	Thomas E. Grethel Memo to Robert C. Cordova - re: EG&G letter, B. Clausen to J. Torma-Kraiewski, 92- RF-14867, Titled: "Identification of Confined Spaces- BCM-086-92", December 17, 1992	RFO	2/12/93
D-N-61	92-LMG-JSB-3.10-401	Safety Division Surveillance - Plant - Identification of Confined Spaces	RFO	10/20/92
D-N-62	93-LMG-OSB-01.30-2	Safety Division Surveillance - Bldg. 707, Incorporation of Health and Safety Considerations into IWCPe	RFO	1/13/93
D-N-63	92-LMG-OSB-1.20-400	Safety Division Surveillance - Plant, Review S&H Concerns Regarding New RF Mission	RFO	1/31/93
D-N-64	OSB:JTK:1964	Vern F. Withenil Memo to Joseph R. Majestic re: Transmittal of RFO Occupational Safety Branch (OSB) Amplification of OSB Surveillance Approach/Schedules for Building 707 Resumption Readiness	RFO	2/30/92

LIST OF SITE DOCUMENTS REVIEWED BY THE PROGRESS ASSESSMENT TEAM

Ref. No.	Document #	Title/Description	Document Author/ Issuing Org.	Revision/ Issue Date
D-N-65	OSB:JTK:14335	Robert M. Nelson Memo to J. O. Zane re: V. F. Witherill to Joseph R. Majestic, OSB:JTK:1964, titled "Transmittal of DOE/RFO Occupational Safety Branch (OSB) Amplification of OSB Surveillance Approach/Schedules for Building 707 Resumption Readiness", Dated February 20, 1992	RFO	None indicated
D-N-66	OSB:JTK:02180	Vern F. Witherill Memo to W. A. Kirby and J. H. Riley re: Building 707 Asbestos Program	RFO	2/23/93
D-N-67	OSB:JTK:12792	Robert M. Nelson, Jr. Memo to J. O. Zane re: Asbestos Management Program	RFO	12/7/92
D-N-68	93-RF-1446	J. O. Zane Memo to Robert M. Nelson re: Assessment and Status Report on Asbestos Management Plan	EG&G	2/4/93
D-N-69	92-RF-9560	M. R. Glaser Memo to Richard L. Craun re: Asbestos Management Plan	EG&G	8/14/92
D-N-70	None indicated	Rocky Flats DOE Manager's Weekly Meeting, Friday, March 19, 1993	EG&G	3/19/93
D-N-71	OSB:JDE:13634	Robert M. Nelson Memo to J. O. Zane re: WSI and EG&G Environment, Safety and Health Training Requirements	RFO	12/4/92
D-N-72	TDO:DYO:02938	George Cannode Memo to Arland Kuester re: WSI RFP Environmental, Safety, and Health Training Requirements	RFO	3/9/93
D-N-73	93-RF-3808	A. W. Kuester Memo to George R. Cannode re: ESI-RFP Environmental, Safety and Health Training Requirements	EG&G	3/29/93
D-N-74	WSI-PAD-RFP-93-5387	James L. Brown Letter to Janet Torma-Krajewski	Wackenhut	3/18/93
D-N-75	WSI-ESH-RFP-93-5213	J. L. Brown Letter to T. E. Grethel re: 29 CFR 1910.120 Hazardous Waste Site Training	Wackenhut	2/12/93
D-N-76	Work Plan OSB-01 through 11	Department of Energy Rocky Flats Office Safety & Health Division FY 1993 Work Plan Documentation	RFO	3/13/93
D-N-77	None indicated	OSHA Compliance Program Improvements (Letter)	H. P. Mann	5/10/93

LIST OF SITE DOCUMENTS REVIEWED BY THE PROGRESS ASSESSMENT TEAM

Ref. No.	Document #	Title/Description	Document Author/ Issuing Org.	Revision/ Issue Date
D-N-78	None indicated	Line Control Safety Program History and Implementation (Chart)	EG&G	5/93
D-N-79	None indicated	Letter: Management by Walking Around - WSG-147-93	W. S. Glover	5/12/93
D-N-80	None indicated	Maintenance Backlog Statistics for Entire Rocky Flats Plant	None indicated	5/19/93
D-N-81	OSB-JTK:05319	Industrial Hygiene services for Asbestos Abatement Projects to R.D. Copp, Associate General Manager Transition Management EG&G Rocky Flats, Inc. from Vern Witherhill, RFO	RFO	5/14/93
D-N-82	None indicated	Respiratory Protection Audit for Rockwell International	OCCUSAFE	7/30/89

Appendix H

Building Facility Inspections

BUILDING FACILITY INSPECTIONS

Date	Building/Facility	Name/Description	Purpose of Visit
4/20	T-690 A,B,E,J,K, and L	Trailers	Fire Threat to Steam Line
4/21	Building 334	Maintenance Shop	Verification of OSHA compliance
4/22	Building T117	Trailer Complex	Construction safety compliance
4/22	750 Pad	750 Pad	Inspect saltcrete storage, characterization
4/22	Building 374	Liquid Waste Treatment Facility	Interviews; inspect liquid mixed waste treatment processes, and saltcrete production and characterization
4/22	207 Solar Ponds	Solar Ponds	Characterization of Pond Sludge
4/22, 5/19	Building 566	Laundry	IH evaluation; verification of OSHA compliance
5/17	Building 218	Nitric Acid Tanks	Interviews; inspect tank
5/17	Building 707	Plutonium Operations	Respirator IH evaluations; interviews, check records, inspect tanks
4/22, 5/17, 5/19	Building 776	Manufacturing Bldg - Carpentry Shop	Inspect attic space; verification of OS&H compliance; inspect waste storage, supercompactor, ASRF, old fluidized bed incinerator
5/17, 5/19	Building 778	Lockeroom and Maintenance Shop	Observe non sprinkler area; verification of OS&H compliance
5/18	Building 664	Waste Characterization and Shipping	FM rec. closeout verification
5/18	B1 Dam	B1 Dam	Overview tour; construction safety compliance
5/18	A-4 Pond	A-4 Pond	Overview tour; construction safety compliance
5/18	PU&D Yard	Property Utilization and Disposal - Laydown Yard	Inspect storage facilities; construction safety compliance
5/18	Building 990	Equalization Basins	Review procedure compliance
5/18	Building 995	Sewage Treatment Plants	Records review; procedure compliance
5/18	A-4 WWTP	Pond Operations	Interviews, review pond configuration control, procedure compliance
5/19	OU2 Americium Zone	OU2 Americium Zone	Overview tour; construction safety compliance
5/19	OU2 Environmental Restoration Site	OU2 Environmental Restoration Site - Decon area	Overview tour; IH evaluation
5/19	Building 881	Maintenance Shop - Development and Support	Life Safety validation; verification of OS&H compliance
5/19	Building 559	Building 559	Inspect waste generation points and interview generator re: characterization
5/20	Building 460	Stainless Steel Production	Verification of OSHA compliance; inspect waste generation points and interview generators re: characterization

BUILDING FACILITY INSPECTIONS			
Date	Building/Facility	Name/Description	Purpose of Visit
5/20	EOC	Emergency Operations Center	Tour; interview duty officer
5/21	Building 771	Plutonium Recovery Facility Tour	IH evaluation

Appendix I

List of Acronyms

LIST OF ACRONYMS

Acronym/ Abbreviation	Definition
AGM	Associate General Manager
AMFO	Assistant Manager for Facility Operations
AMTER	Assistant Manager for Transition and Environmental Restoration
BMP	Best Management Practice
C/PI	Cost/Productivity Improvement
CDH	State of Colorado Department of Health
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CHWR	Colorado Hazardous Waste Regulations
DOE	U.S. Department of Energy
DP	Defense Programs
EG&G	EG&G Rocky Flats, Inc
EM	Environmental Restoration and Waste Management
ENV	Performance Objectives and Criteria for Conducting DOE Environmental Audits
EPA	U.S. Environmental Protection Agency
EPlan	Emergency Preparedness Plan
ER	Environmental Restoration
ERM	Environmental Restoration Management
ES&H	Environment, Safety, and Health
FFCA	Federal Facilities Compliance Agreement
IAG	Interagency Agreement
IHSS	Individual Hazardous Substance Sites
IIP	Integrated Infrastructure Plan
JTA	Job Task Analyses
LDR	Land Disposal Restrictions
M&O	Management and Operating (Contractor)
MCS	Management Control System
MSA	Major System Acquisition
MTS	Master Task Subcontract

LIST OF ACRONYMS

Acronym/ Abbreviation	Definition
NCR	Non-Conformance Reports
NOV	Notice of Violation
NPDES	National Pollutant Discharge Elimination System
NTS	Nevada Test Site
ORPS	Occurrence Reporting and Processing System
ORR	Operational Readiness Review
OS&H	Occupational Safety and Health
OSHA	Occupational Safety and Health Administration
OU	Operable Unit
PA	ES&H Management Performance Objectives and Criteria for Progress Assessments
PAO	Performance Assessment Office
PAOP	Performance Assessment Office Procedure
PAQAO	Performance Assessment and Quality Assurance Office
PATS	Plant Action Tracking System
PCBs	Polychlorinated Biphenyls
PIP	Program Implementation Plan
PITs	Process Improvement Teams
PSO	Program Secretarial Officer
QA	Quality Assurance
QAT	Quality Action Team
QSP	Qualification Standard Package
RCRA	Resource Conservation and Recovery Act
RFI/RI	RCRA Facility Investigation/Remedial Investigation
RFI	Rocky Flats Instruction
RFO	DOE Rocky Flats Office
RFOP	Rocky Flats Office Procedure
RFP	Rocky Flats Plant
S&A	Sampling and Analysis
SAA	Standards, Audits, and Assurance

LIST OF ACRONYMS

Acronym/ Abbreviation	Definition
SEN	Secretary of Energy Notice
SHD	Safety and Health Division
SMO	Sample Management Office
SOPs	Standard Operating Procedures
SPCC	Spill Prevention, Control, and Countermeasures
SS&S	Safety, Safeguards, and Security
STP	Sewage Treatment Plant
TIM	Training Implementation Matrix
TQM	Total Quality Management
TQMD	Total Quality Management Directorate
TSA	Performance Objectives and Criteria for Technical Safety Appraisals at DOE Facilities and Sites
TSCA	Toxic Substance Control Act
TUM	Training User's Manual
WEMS	Waste and Environmental Management System
WIPP	Waste Isolation Pilot Plant
WSRIC	Waste Stream and Residue Identification and Characterization

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