

INTEGRATED PLANNING PROCESS REVISED FY93 PROJECTIONS

The purpose of this document is to clarify expectations for the Integrated Planning Process (IPP) during FY93. The following paragraphs document the project direction and provide specific information and projections concerning the Interim Integrated Roadmap deliverable. The focus for this particular undertaking is the FY93 project activities supporting the Interim Integrated Roadmap deliverable and represents the best available estimates.

Based upon current IPP project objectives, the Interim Integrated Roadmap will be presented by project elements, representing various aspects of the IPP. The elements are the numbered items following this section and each element's narrative is broken down as follows:

- A Purpose of the element
- B Anticipated scope of the element for the FY93 Interim Integrated Roadmap
- C Description of the methodology to be followed for development of the element during FY93

The focus of the FY93 IPP effort will be on the development of the Interim Integrated Roadmap. The Rocky Flats Plant (RFP) recognizes the importance of also developing a formalized methodology for the IPP process. During FY93, a Lessons Learned Log will be maintained and, upon generation of the Interim Integrated Roadmap, the Lessons Learned Log will be used as input for documenting a standard methodology. This methodology will be in the form of RFP policies and procedures and will govern future developments for each of the process elements.

Each element of the FY93 Interim Integrated Roadmap is discussed below. In order to fix a status date for issues analysis, each element will be based on RFP status as of May 1, 1993. Exceptions to this cut-off date are explained in the descriptions that follow. A listing of the projected Interim Integrated Roadmap elements is provided in Table 1. The actual Table of Contents of the document may differ in sequence or arrangement from this listing.

1 Executive Summary

- A An Executive Summary will provide an overview of the contents of the Integrated Roadmap, highlighting major points
- B The FY93 Executive Summary will summarize the Interim Integrated Roadmap in concise terms Its content will be limited by immaturity of the program
- C The methodology employed to produce the Executive Summary will be standard technical writing techniques generally utilized in U S Department of Energy (DOE) planning documents

2 Description of Rocky Flats Site and Site Mission

- A The Description of Rocky Flats Site and Site Mission element, will provide a summary description of the RFP site as well as state the present site mission This element will serve as an introduction to the remainder of the document
- B The FY93 element will include a brief site description similar to that in the Transition Plan and the site mission statement based upon the mission statement specified in the DOE/RFO Draft Strategic Plan (dated December 1, 1992) The impending transfer of landlord responsibilities will be reflected in the mission statement
- C Standard technical writing techniques will be used to produce this element and the Site Mission Statement will be reviewed and approved by the RFP Strategic Planning Executive Steering Committee

3 Description of Facilities

- A The purpose of the Description of Facilities element is to provide an overview of facility characterization and facility status from the project perspective and to provide information for input into the System Engineering Analysis (SEA) element (Section 10) This information will be incorporated into process logics and the material balance efforts of the SEA
- B The FY93 element will include a Facility Characterization and Inventory report which will list information from approximately nine

buildings These buildings include 130, T130A, 334, 444, 551, 771, 774, 779 and 865 These buildings were selected because they are representative of the other buildings on site and they can be used to extrapolate the data needed for additional buildings in the Facility Characterization and Inventory element They include a plutonium operations building, a plutonium lab, a plutonium processing building, a uranium building, an office building, and a support building Additional buildings will be included as time permits The information in this report will include

- Building diagrams
- Nature and extent of contamination based on historical process knowledge
- Chemical waste inventories (major material categories only)
- Capital equipment inventories
- Special nuclear material information (portions will be classified and included in a classified appendix)

Facility Characterization and Inventory will be based upon historical process knowledge and will not represent characterization from a Resource Conservation Recovery Act (RCRA) perspective

Extrapolation of the facility characterization of these nine buildings will be made for major types of remaining RFP facilities Also, information gathered during FY93 will be baseline information that will be used as a starting point for future IPP facility characterization and inventory efforts

- C Facility Characterization and Inventory information for FY93 will be based upon the best available information to-date and approximations based upon standard engineering practices will be used where actual information is not available The availability of funding for future characterization will impact the methodology ultimately utilized Characterization will present information as a snapshot in time, not necessarily reflecting real-time response to changes

4 Site Goals And Objectives

- A The purpose of the Site Goals and Objectives element is to ensure that top down program guidance and strategic planning efforts are identified, consolidated, and incorporated into the plant's integrated planning process in order to properly focus and direct plant activities
- B The FY93 element will be drawn from the available Defense Programs (DP), Environmental Management (EM), and DOE/RFO Strategic Plans, the RFP Transition Plan, RFP Cost-Plus-Award-Fee documents, and

EG&G's Management Control System Program Guidance Summaries During FY93, sitewide planning documents will also be gathered, and a document hierarchy will be constructed. This effort will feed the Issue Identification and Analysis element (Section 8), that will in turn lead to the development of Site Goals and Objectives.

- C The methodology for generating this element will be technical compilation and consolidation of planning documents known and available to the project as of May 1, 1993.

5 Regulatory Analysis

- A The purpose of the Regulatory Analysis element is to provide a comprehensive listing of sitewide regulatory requirements, interagency agreements, DOE orders, and permits, and to identify the associated compliance status for the plant.
- B The FY93 Regulatory Analysis will list the currently applicable regulatory requirements, interagency agreements, DOE orders, and permits. It will not be possible to provide a comprehensive regulatory analysis that may be applicable to any or all potential endstate scenarios due in part to the interim nature of the endstate scenarios used in the FY93 deliverable. This effort will be a first attempt at analyzing DP regulatory aspects. This analysis will be less substantial than the analysis of EM aspects, which will be based upon the existing Roadmap information. The analysis of DOE order compliance will be based upon the nine major safety-related orders. In addition, a review and top level screening efforts will be conducted for approximately 50 other major DOE orders. These orders were selected based upon guidance from DOE/RFO Office of Performance Assessment. Key information will be included concerning compliance with these orders as it is available and pertinent to this project. Requirements delivered from the Defense Nuclear Facility Safety board action will also be included on a top level basis as appropriate.
- C The methodology for Regulatory Analysis will resemble that performed under traditional roadmapping for EM aspects. This methodology will be extended and adapted to perform an integrated sitewide analysis encompassing the DP functions and projected endstates.

6 Assumptions

- A The purpose of the Assumptions element is to identify, compile, categorize, and organize existing regulatory, programmatic and site-specific assumptions to serve as a resource for sitewide integrated

planning efforts. The Assumptions element forms a frame of reference and a planning basis for IPP development activities. Assumptions allow planners to proceed when uncertainties associated with their planning efforts exist.

- B The FY93 Assumption element will be generated from summary level planning documents and will include the generic assumptions provided in the Roadmap Methodology guidance. New assumptions will be generated subsequent to May 1, 1993 only where it is determined to be necessary to fill information gaps. Other modifications to existing assumptions necessitated by changing conditions during the Issue Analysis phase will be presented in an appendix for informational purposes. This type of modification, however, will not be incorporated into the Interim Integrated Roadmap for FY93. Stakeholder involvement is anticipated to require modification of this element as indicated by comments received for the Low-Level/Low-Level Mixed Waste Roadmap.
- C The methodology for Assumptions generation will resemble that utilized for existing roadmaps, however, the input documentation will be derived on a comprehensive, plantwide basis wherever possible.

7 Committed Milestones

- A The purpose of the Committed Milestones element is to identify RFP commitments and associated milestones to DOE/HQ, applicable federal and state agencies, and other involved organizations or entities. These committed milestones will be used to develop a logical sequence of activities necessary to meet agreements and legal commitments to state and local governments, as well as federal agencies.
- B The FY93 element will list summary-level commitments and associated milestones, including only those designated in external-to-the-site compliance agreements, audits, and assessments.
- C The methodology for generating the Committed Milestones element will be to use data gathering, technical screening, and graphical presentation techniques.

8 Issues Identification and Analysis

- A The purpose of the Issues Identification and Analysis element is to identify and analyze deficiencies and roadblocks that preclude RFP from achieving its mission, goals, and objectives. A systematic review of data generated throughout the IPP, including integration of RFP planning documents, as well as assessments based on management

intuition will be performed to identify issues. An iterative issue cause analysis process will be used to analyze issues and identify actions necessary to resolve these issues.

- B The FY93 element will be limited in scope and will include the identification and analysis of summary-level, plantwide issues. Issue identification will be ongoing throughout the project, however, issues identified in documents produced after May 1, 1993 will not necessarily be incorporated into the FY93 Interim Integrated Roadmap. Issue cause analysis activities will be limited to a few top-level issues which are sitewide or program-wide in nature. At least one issue will be included to address the need to validate top level assumptions and to develop related contingencies as appropriate in FY94 and subsequent IPP activities.
- C The methodology used for this element will be based upon the Roadmap Methodology Guidance Document.

9 Process Logics Development

- A The purpose of the Process Logics element of the Integrated Roadmap is to identify and model process information gathered as part of the Systems Engineering Analysis element (Section 10). The logic diagrams are the building blocks used to define the processes and technologies that will be needed to take existing inventories to the endstates defined in the Future Land and Facility Use Alternative element (Section 12). The logic diagrams will aid in identifying areas where technology voids exist.
- B The FY93 element will identify major processes, major material category flows, and general project sequencing. This element will be based upon static material balances and will present limited depth and detail concerning the relationships between processing steps, residuals of major material categories, and the bounding and intermediate test case scenarios. Information from Science and Technology needs will also be incorporated. Alternatives resulting from major decision points will be identified within the process logics. Application of this development process may also generate additional issues. The FY93 depth of detail will be based upon existing, available facility characterizations and will become more robust in future years as information becomes available.
- C The methodology for this element will be built upon the Draft Project Management Plan, the information contained in the IPP Draft Needs and Requirements Document and the approach described in the Systems Engineering Analysis Project Management Plan, all modified

as appropriate due to the evolving nature of the project, and current DOE/RFO direction

10 Systems Engineering Analysis

- A The purpose of the Systems Engineering Analysis element is to quantitatively analyze the material movement at RFP for both present and proposed programs as well as provide a tool for sitewide evaluation of strategies for the disposition of the material inventory at RFP
- B The FY93 element will be limited to a static material balance provided without any time-phased dependencies. This element will identify and describe the relationships between major material categories, such as Transuranic (TRU) waste, TRU-Mixed Waste, Low-Level Waste (LLW), Low-Level Mixed Waste (LLMW), residues, mixed residues, facilities, and equipment. It will be based upon the bounding and the intermediate test cases only. Residual contamination levels in buildings, soil, or groundwater relative to endstates will not be addressed. This static balance is in contrast to a dynamic material balance, which will be capable of testing a much wider range of hypothetical cases. The dynamic material balance is under development and will not be available for FY93 analysis.
- C The methodology for this element will be built upon the Draft Project Management Plan, the information contained in the IPP Draft Needs and Requirements Document and the approach described in the Systems Engineering Analysis Project Management Plan, all modified as appropriate due to the evolving nature of the project, and current DOE/RFO direction.

11 Integrated Risk Assessment Methodologies

- A Integrated Risk Management for FY93 has been divided into two elements which are the Integrated Risk Assessment discussed in this section and the Decision Support element described in section 12. The Integrated Risk Assessment Methodologies element will provide information to decision tools under development within the Decision Support element. In FY93, the Integrated Risk Assessment will support the aspect of this development process dealing with the inventory of radioactive and hazardous materials at RFP as defined by the set of scenarios generated in Section 13 (Future Land and Facility Use Alternatives). This element will develop a mechanism to address the risks to the public, workers, and the environment associated with the endstate scenarios generated.

- B During FY93, a preliminary Integrated Risk Assessment Methodology will be produced. The methodology will outline future risk assessment and risk analysis efforts. A usable decision making tool and analytical results from its use, will not be produced in FY93.
- C The FY93 methodology will be produced with input from EG&G and DOE personnel, as well as the RFP University Consortium, which consists of resident experts from local colleges and universities.

12 Decision Support

- A The Decision Support element defines decision-making management systems and protocols, and provides the structure and tools necessary to serve decision-makers in managing risk and selecting options and strategies to be carried out for the Rocky Flats Plant. A decision-making methodology will be developed to define the framework for decision-making activities which will take all data generated by the SEA and other IPP components support, and allow an evaluation of this data against sitewide criteria in order to develop management implementation plans.

This element will identify the institutional pathways and procedures that facilitate implementation of decisions. Also, any institutional, organizational and procedural barriers to decision making need to be identified and removed, if possible. The system which is developed will need to ensure that decisions are integrated across all Plant activities.

- B The FY93 element will initiate development of a decision support system. In addition, the FY93 element will develop the preliminary methodology for a decision-making framework which specifies criteria and values upon which decisions will be made; identifies major decisions, decision-makers and time or budget constraints, identifies decision-making tools, uses information from the IPP and provides information to the IPP so that this information can be used to contribute to site guidance, and includes public participation. In FY93, actual decision making will occur external to the Integrated Planning Process. No stakeholder buy-in to this process is anticipated to be completed in FY93. In FY94, the Community Stakeholder Group (CSG) will be available to provide input to the development of this element.
- C The Decision Support for the FY93 effort will include identifying the framework that will be used to make decisions, how the framework will be developed, and which tasks within the Project will need to interface with the Decision Support element.

13 Future Land and Facility Use Alternatives

- A The purpose of the Future Land and Facility Use Alternatives element of the Integrated Roadmap is to assist in development of the endstate scenarios selected for the RFP
- B The FY93 Future Land and Facility Use Alternatives element will be limited to a description of three test case scenarios, which include minimal cleanup and pristine site bounding scenarios as well as an intermediate test case. It is anticipated that the intermediate test case will be selected with a significant level of public participation and input. This information will be presented in summary form and a comparative evaluation of these scenarios will be conducted using a listing of planning provisions and various types of land development options. A constraints analysis and comparison of planning provisions and land development types will also take place in FY93. Regulatory issues will be identified for the provisions and land development options will be considered.
- C The methodology for this element will be based upon available strategic guidance, such as the EM, DP, and DOE/RFO Draft Strategic Plans, and on input from the public involvement process. FY93 land analysis work will involve compiling baseline information regarding land uses at RFP and constructing a Land Use Manual. This Land Use Manual will be included as a reference for the Interim Integrated Roadmap and will contain back-up data associated with the Land Use Analysis.

14 Science and Technology Needs

- A The purpose of the Science and Technology Needs element is to identify appropriate alternative and baseline technologies and operating characteristics necessary for RFP to transition to its new mission, including site cleanup and final disposition. Technology needs are identified through operational or programmatic problems that currently have no known or incomplete technical solutions. These could include simply identifying improvements to existing technologies or developing new technologies.
- B The FY93 element will identify, in an overview fashion, the baseline science and technology needs associated with the major material categories outlined in the FY93 Process Logic Diagrams. The effort is divided into three phases for FY93.

Phase 1 provides support to the Systems Engineering Analysis model by (1) reviewing and modifying, as needed, the process logic diagrams

for each major waste form and (2) identifying appropriate baseline technologies and operating characteristics for each technology activity for the process logic diagrams

Phase 2 will prepare the Appendix to the Interim Integrated Roadmap Document. This Appendix will contain the summary from the review of the logic diagrams and identification of baseline technologies and will identify any top level science and technology issues

Phase 3 will identify uses and needs for decision approaches for technology selection and ranking as well as technology problem ranking. This will allow the Rocky Flats site to make technically defensible technology decisions that are also acceptable to all stakeholders. This effort will be integrated into the Decision Support System

- C The Science and Technology Needs for FY93 will be identified for each FY93 Logic Diagram. This effort will encompass an iterative and interactive process between the Logic Development element (Section 9), Systems Engineering Analysis element (Section 10), and Future Land and Facility Use Alternatives element (Section 13)

15 Public Involvement

- A The purpose of public involvement is to ensure that the community has the opportunity to understand, participate in, and provide input to the development of elements in the IPP. It is hoped that with extensive and continuous public involvement, the IPP will become an effective planning tool that increases public awareness of and public confidence in the ability of DOE to fulfill the new mission of RFP and provide an effective means to integrate public concerns into its formulation
- B During FY93, public involvement will be designed and convened by the Rocky Flats Local Impacts Initiative (Initiative), in cooperation with the Colorado Council on Rocky Flats (Council) and other existing groups. The DOE/RFO Office of Communications and EG&G Rocky Flats, Inc. Community Relations office will work closely with the Initiative and the Council to manage the public involvement process. This process will be documented, along with lessons learned and projected mechanisms for public involvement in the second and third years of the project. Some decision methods, classified information pathways and procedures and the roles of DOE, EG&G, the CSG and the Initiative will be increasingly defined. Ground rules for interaction will not be developed until the CSG is formally convened. Specific input from the general public regarding Rocky Flats planned activities

will not be included in the FY93 deliverable

- C. The decision by DOE to invite a community group, the Initiative, to conduct public involvement requires clear expectations and accountability among the Initiative, DOE, EG&G, and the public. It will be essential that the CSG have independence from DOE/EG&G, access to IPP project staff and information, and accountability to the public. While these arrangements will become much more defined during FY93 it is important to note that due to the innovative nature of IPP, definition of roles and expectations among the Initiative, the Council, the CSG, the general public, DOE and EG&G is really a developmental and cooperative process.

Optional FY93 Elements

Additional elements will eventually support a mature Integrated Roadmap and are scheduled to begin in FY93. These elements are described below.

Additional Stakeholder Involvement - Other stakeholders beside those mentioned in Section 14 (Public Involvement) will want to provide input into the IPP. This group potentially includes regulators (primarily Colorado Department of Health and the U.S. Environmental Protection Agency) and other groups such as the Technical Advisory Group, Union Tripartite, DOE complex-wide Group, Pilot Joint Management Group, Economic Development Office, and University Consortia. The initial work on a plan to describe the relationships and input mechanisms for these additional stakeholders will begin development in FY93 and continue into FY94. This plan may be combined with the Public Involvement Plan if it is determined to be appropriate.

Economic Analysis - An economic analysis element will be key to evaluating strategic alternatives developed by a mature IPP. This analysis will provide fiscal information as well as life cycle costs associated with the multiple alternatives for RFP use and its associated land use. The analysis will be flexible to allow for incorporation of operating and handling costs with the evaluation of various land-use options, including the intrinsic and aesthetic nature of the existing facilities and wildlife. Some very preliminary work on developing a methodology for this element will be initiated in FY93 in preparation for FY94 activities.

Upon completion of the FY93 Interim Integrated Roadmap document, focus will shift to the development of the Integrated Planning Process. Two additional major steps which will be required for FY94 activities include the issuance of a Program Implementation Guidance document and an RFP Strategic Plan. The Program Guidance document which is necessary to tie and integrate the IPP activities with Work Package and ADS development,

will be provided to supplement and support existing Program Guidance Summary documents generated within the MCS system. The RFP Strategic Plan, which is anticipated to be undertaken by the Strategic Planning Executive Steering Committee, will form the top level guidance and direction for the development of the next Integrated Roadmap document, and will support the ongoing maturation of IPP. In addition, the Strategic Planning Executive Steering Committee will need to address incorporation and integration of IPP into the actual RFP decision-making activities. At the end of the pilot project, the IPP will have established a comprehensive, integrated and advanced planning methodology for planning and decision-making purposes.

Development of the Integrated Planning Process is a three-year effort. The Interim Integrated Roadmap as described above represents the first preliminary external deliverable of this three-year pilot project. Expectations for this deliverable from an RFP perspective have been detailed here in an effort to ensure that the document to be delivered will meet DOE/HQ requirements and needs as closely as possible.

Table 1 - FY93 Interim Integrated Roadmap Elements

1	Executive Summary
2	Description of the Rocky Flats Site & Site Mission
3	Description of Facilities
4	Site Goals & Objectives
5	Regulatory Analysis
6	Assumptions (Regulatory, Programmatic, & Site Specific)
7	Committed Milestones
8	Issues Identification & Analysis
9	Process Logics Development
10	Systems Engineering Analysis
11	Potential Integrated Risk Assessment Methodologies
12	Decision Support
13	Future Site & Facility Use Alternatives (Three Test Cases)
14	Science & Technology Needs
15	Public Involvement
*	Additional Stakeholders' Involvement
*	Economic Analysis

**Optional FY93 Elements*