

# DOE

# NEWS

NEWS MEDIA CONTACT:  
Catherine Kaliniak, 202/586-5806

FOR IMMEDIATE RELEASE  
August 11, 1989

## DEPARTMENT OF ENERGY SAFETY ASSESSMENT TEAM FINDS NO EVIDENCE OF CRITICALITY AT ROCKY FLATS

Secretary of Energy James D. Watkins announced today that an Independent Criticality Safety Assessment Team has concluded that no evidence could be found that would support allegations that an accidental nuclear chain reaction, or criticality, ever occurred at the Department of Energy's (DOE) Rocky Flats Plant near Denver, Colorado.

The Team, appointed by Secretary Watkins and comprised of experts from outside DOE and Rockwell International, concluded that there is no public safety threat from accidental criticality in current operations of the plant. The Team completed its onsite investigation of plutonium accumulation and the associated potential for an accidental nuclear criticality, and today briefed DOE's Rocky Flats Office and the Colorado Department of Health and the Office of Governor Roy Romer.

"The Criticality Safety Team is to be commended for the thoroughness and dedication that they have put into their work at Rocky Flats," said Secretary Watkins. "We welcome their recommendations and will work toward implementation as quickly as practical."

(MORE)

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Based on the evidence examined to date at the Plant, including measurement of radioactive cesium and strontium in the soil and water, records of past operations, criticality procedural infractions, plant renovations, fires, and radiation exposures, the Team reported that it strongly supports a conclusion that an accidental criticality has never occurred at Rocky Flats, despite allegations to the contrary reported in the past.

The Team also reported that plutonium was found in situations that require immediate attention and certain safety practices need prompt correction. Other necessary improvements include:

- o More careful attention to preventing and mitigating the consequences of human error,
- o Improved monitoring of process lines and ventilation ducts, and
- o Improved safety analysis techniques.

In addition, the Team's formal report, to be presented to the Department and the State of Colorado by September 30, will suggest a number of improvements to be made over the long-term to achieve safety excellence plantwide. These include such areas as:

- o Design improvements in criticality safety in the process lines,
- o Assessment of the potential for an accidental criticality caused by an earthquake or fire, and
- o Use of risk assessment techniques for improving the design and operations of process lines and the storage of plutonium residues.

The 11-member team, established in conjunction with the June 16, 1989, DOE-Colorado agreement in principle concerning Rocky Flats, is led by Dr. Roger J. Mattson, a mechanical engineer with 25 years of experience in the field of nuclear safety. He is Vice President of SCIENTECH, Inc., in Washington, D.C., and formerly served as Director of Reactor Systems Safety for the Nuclear Regulatory Commission. The team includes one member appointed by Governor Romer -- Dr. Thomas B. Borak, Professor of Radiation Physics at Colorado State University in Fort Collins. The Team also includes

(MORE)

(3)

nationally-renowned experts in fields such as radiation protection, nuclear measurements, chemical processing, accident analysis, nuclear facility design, criticality safety, and plutonium technology.

In addressing public concerns, the Team's efforts were specifically focused on current methods used to control the safety of fissionable materials in the Rocky Flats Plant's production operations, to measure the quantity and location of plutonium in ventilation duct work and in storage containers, and to control materials and residues within the Rocky Flats Plant to avoid conditions that could lead to inadvertent criticality.

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# Direct Line, x5555

## *Charges in gathering information for the Tiger Team evaluation*

**Question:** I've been instructed by my management to gather information for the Tiger Team evaluation. I've been told to charge this to what I have been working on and not to overhead. Shouldn't EG&G have set up a work package for the efforts to collect this information and had the work package approved by DOE? Some general direction to plant employees would be helpful.

**Response (B. J. Hanni):** An inherent element of contract management between EG&G and DOE is responding to DOE requests, audits and reviews. The gathering of information for the Tiger Team review is consistent with the contract management element. What is critical is that the information being gathered should be correlated to where the work is being charged, from a work breakdown structure (WBS) perspective. If you suspect this is not the case, please contact Wayne Zahn, x7456, or Bruce Hanni, x2209, for assistance in resolving your concerns. We appreciate your attention to this issue.

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## *Disposal of surgeon's gloves*

**Question:** When disposing of surgeon's gloves as low-level or low-level mixed waste, the IDC that is used changes from building to building and generator to generator. The Waste Guidance Group needs to issue clear, concise written instruction on the correct IDC to be used plantwide.

**Response (T. G. Hedahl):** When disposing of surgeon's gloves as low-level or low-level mixed waste, the Item Description Code (IDC) is determined by such factors as Protect Area (PA) or non-PA and wet or dry. Refer to WO-4034, Section 7.0 and Attachments for guidance. Another source of information will be WO-1100 or 1101, depending upon where in the plant you may work.

## *Unauthorized parking of vehicles*

**Question:** More and more people are parking their motor vehicles in the dirt along the railroad track south of Building 460. This creates a traffic hazard for people driving east and west on the paved road. A second hazard is created by this practice as the pedestrians dash across the road where there are no marked crosswalks. Why is this allowed? Has anyone from the Traffic Safety organization even noticed this unauthorized parking? Please post "No Parking" signs along the railroad track and give tickets to those who insist on parking there.

**Response (J. R. Riley):** Vehicles are not allowed to park in the area in question because of Department of Transportation regulations regarding railroad tracks. A building announcement was made in regard to this and all vehicles parked in that area were posted with a letter warning them not to use the area next to the railroad tracks for parking. Vehicles discovered parked next to the railroad tracks in the future are subject to a vehicle tow warning or actual tow from the area.

# DOE

# NEWS

NEWS MEDIA CONTACT:  
Beth Brainard, 303/966-5993

FOR IMMEDIATE RELEASE  
July 24, 1990

## ROCKY FLATS ANNOUNCES RESPONSE PLAN TO TIGER TEAM REPORT

The U. S. Department of Energy (DOE) has prepared an action plan to respond to and correct deficiencies reported in a Special Assignment Environmental Team assessment of the agency's Rocky Flats Plant (RFP). The environmental assessment was conducted between June 6, 1989 and July 21, 1989. The plan outlines the course of action which DOE will follow to resolve basic management system deficiencies noted in the assessment and which is needed to bring the facility into compliance with all applicable state and federal environmental requirements, as well as internal DOE/RFP management directives relating to environmental issues.

The mission of the Rocky Flats Plant is to produce nuclear components, non-nuclear assemblies and hardware for weapons. Established in 1953, the plant concentrates on metal production and chemical processing and emphasizes production-related research. Production activities at RFP include fabrication of plutonium and uranium alloy parts, fabrication and assembly of conventional metal components, operation of foundries and recovery of plutonium. The plant supports research and development for the recovery of plutonium residues for the weapons complex. In support of weapons design laboratories, RFP maintains extensive laboratories with development models for concept feasibility studies.

The RFP Action Plan includes three sections:

- Discussion of the background, purpose and scope of the Corrective Action Plan.
- Identification of the principal parties and their role in implementing the Plan.
- Summary of the findings, discussion of root causes and funding relationships, planned actions and schedules for implementing corrective actions.

(MORE)

Since the Special Assignment Team assessment was completed, RFP has undergone a change in operating contractor from Rockwell International, to EG&G who took over plant operations on January 1, 1990. EG&G has made substantial changes in the management approach at the facility since becoming the operating contractor.

New executive personnel have been appointed in top management positions to revitalize and improve operations at the plant. Waste Management and Environmental Protection/Restoration functions have been consolidated under a single Associate General Manager. Line organizations have been structured to focus attention and activities of key technical disciplines on major problem areas, including restoration, waste minimization and compliance with the National Environmental Policy Act (NEPA). Rigorous auditing, quality assurance and quality control, and self-appraisal programs have been implemented. The planning process for waste and environmental programs has been formalized through the preparation of five-year planning documents, which will be updated annually. EG&G has also initiated a master planning process with the objective of transforming RFP into a model of operational excellence in three years.

Cost estimates to complete actions to correct deficiencies at RFP total approximately \$150 million over a five-year period. Funding to accomplish the actions will be sought through the DOE five-year plan or through Defense Programs base plant funds. EG&G is now submitting plans for DOE funding consideration. Funding source(s) and amounts will be subject to final negotiations with DOE on work scope and schedule.

Of the 93 actions for which EG&G is responsible, two have been combined into a single action, leaving 92 actions. As of June 5, 1990, 28 have been completed. Eight have been submitted to DOE to verify closure. Work is proceeding on the remaining actions. Projected schedules indicate that approximately 55 actions will be completed by the end of calendar year (CY) 1990, 15 will be done by CY 1991, 3 more in CY 1992, 3 in CY 1993, and 1 in CY 1995. Fifteen actions do not as yet have completion dates defined. These latter are lower priority construction projects that require scoping and funding.

Copies of the complete RFP Action Plan will be available for reference at the DOE Headquarters Freedom of Information Reading Room, Forrestal Building Room 1E-190, telephone 202/586-6020; in the reading room at the Front Range Community College, and in the public reading room at DOE's Albuquerque Operations Office.

**PRESS BRIEFING**  
**CORRECTIVE ACTION PLANS FOR ROCKY FLATS**  
Tuesday, JULY 24, 1:30 p.m.

GOOD AFTERNOON. I'M BOB NELSON AND I AM THE MANAGER FOR THE DEPARTMENT OF ENERGY'S ROCKY FLATS OFFICE. THIS AFTERNOON, YOU HAVE BEEN PROVIDED AN EXECUTIVE SUMMARY OF THE CORRECTIVE ACTION PLANS FOR THE DEPARTMENT OF ENERGY TIGER TEAM ASSESSMENTS CONDUCTED AT THE ROCKY FLATS PLANT. THESE WERE APPROVED BY SECRETARY WATKINS MONDAY, 23 JULY. TODAY WE WILL PROVIDE YOU A SUMMARY BRIEFING ON ROCKY FLATS' SEGMENT OF THE PLAN.

SECRETARY WATKINS MADE IT CLEAR UPON HIS APPOINTMENT THAT HEALTH AND SAFETY OF THE AMERICAN PEOPLE, AND WELFARE OF THE ENVIRONMENT WOULD BE A NUMBER ONE PRIORITY FOR OPERATIONS OF THE FACILITIES WITHIN THE DEPARTMENT OF ENERGY. TO ENSURE THIS, HE INSTITUTED, AS ONE OF SEVERAL MEASURES, THE FORMATION OF AN ORGANIZATION TO EVALUATE EACH FACILITY ON THEIR OPERATIONS AND PRACTICES. THIS ORGANIZATION, KNOWN AS A "TIGER TEAM", CONDUCTED AN ASSESSMENT OF ENVIRONMENTAL CONDITIONS AT THE ROCKY FLATS PLANT BEGINNING JUNE 6, 1989, AND CONCLUDING JULY 21, 1989.

THE TIGER TEAM CONSISTED OF SEVERAL SUB-TEAMS OF EXPERTS DEVOTED TO PARTICULAR AREAS, SUCH AS WASTE MANAGEMENT; AIR, SURFACE WATER, AND GROUND WATER ACTIVITY; RADIATION HAZARDS; AND QUALITY ASSURANCE. THE RESULTS OF THEIR ASSESSMENT WERE CATEGORIZED IN COMPLIANCE, AND BEST-MANAGEMENT-PRACTICE FINDINGS WITH RECOMMENDATIONS FOR SOLUTIONS. SUBSEQUENT TO THE ASSESSMENT, EACH FACILITY PROVIDED A CORRECTIVE ACTION PLAN (WHICH YOU NOW HAVE IN HAND), WHICH SPECIFICALLY ADDRESSES HOW EACH FINDING WILL BE CORRECTED ALONG WITH MILESTONES DETAILING THE STEPS BEING CONDUCTED AND THE CURRENT STATUS AS OF THIS REPORT. IN ADDITION, EACH FINDING HAS BEEN ASSIGNED A PRIORITY AND ESTIMATE OF FUNDING REQUIRED BY FISCAL YEAR TO ACCOMPLISH THE CORRECTIVE ACTIONS. THE DEPARTMENT OF ENERGY OFFICE OF DEFENSE PROGRAMS AND OFFICE OF ENVIRONMENTAL RESTORATION AND WASTE MANAGEMENT HAS REVIEWED THE PLANS AND WITH THE CONCURRENCE OF THE OFFICE OF ENVIRONMENT, SAFETY AND HEALTH, THE SECRETARY HAS APPROVED THEM.

AT THIS TIME, I'D LIKE TO INTRODUCE DAVE SIMONSON, THE DEPUTY MANAGER OF THE DOE RFO OFFICE, AS HE HAS BEEN TASKED WITH FOLLOWING THIS ACTIVITY FOR THE FACILITY.



**DAVE SIMONSON**

THANK YOU. IT IS IMPORTANT TO EMPHASIZE THAT NO SITUATION WAS FOUND THAT POSED AN IMMINENT THREAT TO PUBLIC HEALTH OR THE ENVIRONMENT, AND THAT THE DEPARTMENT HAS NOT WAITED, HOWEVER, FOR APPROVAL OF THE PLAN TO PROCEED WITH MANY OF THE CORRECTIVE ACTIONS. THE COST TO CARRY OUT ALL CORRECTIVE ACTIONS IS APPROXIMATELY \$150 MILLION DOLLARS OVER A 5-YEAR PERIOD. MORE SPECIFICALLY:

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THERE WERE 52 ENVIRONMENTAL COMPLIANCE FINDINGS AND 43 BEST MANAGEMENT PRACTICE FINDINGS. THE MAJOR FACTORS CONTRIBUTING TO THE FINDINGS WERE:

- A. LACK OF A SINGLE CENTRAL ENVIRONMENTAL MANAGEMENT ORGANIZATION AT ROCKY FLATS.
- B. LACK OF FUNDING TO IMPLEMENT PROPOSED CHANGES TO DEPARTMENT OF ENERGY ORDERS AND OTHER ENVIRONMENTAL REGULATIONS IN A TIMELY MANNER.
- C. LACK OF AN OVERALL ENVIRONMENTAL MANAGEMENT PLAN INTEGRATED INTO THE PLANT OVERALL MANAGEMENT PLAN.

ACTIONS HAVE ALREADY BEEN TAKEN TO ADDRESS THESE MAJOR FACTORS.

SINCE THE ASSESSMENTS, THE ROCKY FLATS PLANT HAS UNDERGONE A CHANGE IN OPERATING CONTRACTOR FROM ROCKWELL INTERNATIONAL, THE OPERATING CONTRACTOR AT THE TIME OF THE ASSESSMENT, TO EG&G WHO TOOK OVER PLANT OPERATIONS ON JANUARY 1, 1990.

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EG&G HAS MADE SUBSTANTIVE CHANGES IN THE MANAGEMENT STRUCTURE SINCE BECOMING THE OPERATING CONTRACTOR. NEW TECHNICALLY QUALIFIED PERSONNEL HAVE BEEN APPOINTED IN TOP MANAGEMENT POSITIONS TO REVITALIZE AND IMPROVE OPERATIONS AT THE PLANT. WASTE MANAGEMENT AND ENVIRONMENTAL PROTECTION/RESTORATION FUNCTIONS HAVE BEEN CONSOLIDATED UNDER A SINGLE ASSOCIATE GENERAL MANAGER. LINE ORGANIZATIONS HAVE BEEN STRUCTURED TO FOCUS ATTENTION AND ACTIVITIES OF KEY TECHNICAL DISCIPLINES ON MAJOR PROBLEM AREAS, E.G., RESTORATION, WASTE MINIMIZATION, NEPA COMPLIANCE. A POLICY OF VERBATIM COMPLIANCE HAS BEEN INSTITUTED AND IS STRICTLY ENFORCED. RIGOROUS AUDITING, QUALITY ASSURANCE AND QUALITY CONTROL, AND SELF-APPRAISAL PROGRAMS HAVE BEEN IMPLEMENTED. 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. ADDITIONAL FUNDS HAVE BEEN REQUESTED TO SUPPORT PROGRAMS IDENTIFIED IN THE FIVE-YEAR PLAN. EG&G HAS ALSO INITIATED A MASTER PLANNING PROCESS.

OF THE ORIGINAL 95 FINDINGS, TWO WERE COMBINED INTO A SINGLE ACTION LEAVING 94 FINDINGS, AND TWO OF THESE WERE THE RESPONSIBILITY OF HEADQUARTERS. 55 WILL BE COMPLETED BY THE END OF THIS CALENDAR YEAR. OF THESE, 28 HAVE BEEN COMPLETED BY EG&G AND ARE BEING VALIDATED BY DOE. 15 WILL BE COMPLETED BY THE END OF CALENDAR YEAR 91, 3 MORE IN CALENDAR YEAR 92, 3 IN CALENDAR YEAR 93, AND 1 IN CALENDAR YEAR 95. 15 OTHERS (NOT OF HIGH PRIORITY) ARE PROJECTS WHICH NEED ADDITIONAL ENGINEERING ANALYSIS TO PRODUCE VALID COST ESTIMATES FOR BUDGET PURPOSES. FOR EXAMPLE, THERE IS AN ABOVE GROUND TANK NEAR BUILDING 774 WHICH DOES NOT HAVE A SECONDARY CONTAINMENT. THE TANK IS NOT IN SERVICE AND WILL BE DECOMMISSIONED AND DECONTAMINATED.

MANY OF THESE FINDINGS AND RESPONSES TO THEM HAVE BEEN INCORPORATED INTO AGREEMENTS WITH THE STATE AND EPA.

EXAMPLES OF FINDINGS WHICH ARE OF HIGHER PRIORITY ARE:

1. (SW/BMP-3) RFP DID NOT HAVE AN ADEQUATE PROTOCOL TO EXPEDITE ANALYSIS AND CONFIRM THE SOURCE OF AN UNPLANNED POLLUTANT RELEASE TO THE SEWAGE PLANT. AN ANALYTICAL SCREENING PROTOCOL HAS BEEN DEVELOPED INCLUDING QUALITATIVE SCREENING PROCEDURES FOR METALS, ORGANICS AND RADIOACTIVE CONSTITUENTS. PROVISIONS HAVE ALSO BEEN MADE FOR PRIORITY OF HANDLING SAMPLES TAKEN DURING EMERGENCIES.
  
2. (RAD/AF-02) THE EXISTING QUALITY CONTROL PRACTICES ASSOCIATED WITH THE ANALYSIS FOR THE CLASSIFICATION AND CHARACTERIZATION OF RADIOACTIVE WASTES WERE NOT SUFFICIENT TO FULLY DEMONSTRATE THE VALIDITY OF THE ANALYTICAL DATA. AN NDA ACCURACY VERIFICATION PROGRAM HAS BEEN DEVELOPED AND IS IN THE PROCESS OF BEING IMPLEMENTED.
  
3. (WM/AF-1) STORAGE OF CONTAINERS OF HAZARDOUS WASTE AT BUILDING 334 DID NOT CONFORM WITH RCRA REGULATIONS LIMITING QUANTITIES OF WASTE IN SATELLITE ACCUMULATION AREAS TO 55-GALLONS AND REMOVAL OF THE DRUM WITHIN 3 DAYS. REMOVAL OF EXCESS DRUMS WAS ACCOMPLISHED, SOPs WERE

REVISED, INCREASED THE FREQUENCY OF RCRA AUDITS,  
AND ENHANCED WASTE CUSTODIAN TRAINING.

OF THE \$150 MILLION DOLLARS ESTIMATED TO BE REQUIRED  
OVER 5 YEARS TO MAKE ALL CORRECTIONS, THE FISCAL  
YEAR 1990 COST IS APPROXIMATELY \$37 MILLION DOLLARS  
AND IS FULLY FUNDED. THE ESTIMATED FUNDING PROFILE  
WILL CORRECT HISTORICAL SHORTFALLS THAT HAVE  
CONTRIBUTED TO ROOT CAUSES. ULTIMATE FUNDING TO  
ACCOMPLISH THE ACTIONS WILL BE PROVIDED THROUGHOUT  
THE DOE ENVIRONMENTAL RESTORATION AND WASTE  
MANAGEMENT FIVE-YEAR PLAN OR THROUGH DEFENSE  
PROGRAMS BUDGET FOR BASE PLANT FUNDS.

### SUMMARY

WE BELIEVE THE CORRECTIVE ACTION PLANS YOU NOW HAVE  
FULLY ADDRESS THE ENVIRONMENTAL FINDINGS AND ROOT  
CAUSES IDENTIFIED IN THE TIGER TEAM ASSESSMENTS AND  
WE ARE COMMITTED TO FOLLOW THROUGH WITH THE  
IMPLEMENTATION OF THESE CORRECTIVE ACTIONS AS  
EXPEDITIOUSLY AS POSSIBLE. THIS IS A RESULT OF  
SECRETARY WATKINS' DIRECTIVE THAT CONCERNS FOR THE  
ENVIRONMENT AND SAFETY AND HEALTH BE GIVEN EQUAL  
PRIORITY WITH THE OTHER MISSIONS OF THE DEPARTMENT.

## EXECUTIVE SUMMARY

On June 6, 1989, at the request of the Secretary of Energy, Admiral James D. Watkins (U.S. Navy, Retired), a Special Assignment Team initiated an independent evaluation of operations and practices at the Rocky Flats Plant (RFP). The assessment lasted through July 21, 1989. The Special Assignment Team issued a report entitled "Assessment of Environmental Conditions at the Rocky Flats Plant, Golden, Colorado; August 1989."

There were 52 environmental audit findings and 43 best management practices (BMPs). Environmental audit findings must be corrected while BMPs may be employed based on professional judgement, common sense and available resources. EG&G has made a best effort attempt to treat the BMPs with the same degree of importance as audit findings, and corrective actions were prepared for all 43 BMPs.

The major factors contributing to the audit findings and BMPs noted in the assessment report were:

- ◆ 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/CERCLA Programs) reported to the Plutonium Recovery organization).
- ◆ Lack of funding to implement proposed changes to DOE orders and other environmental regulations in a timely manner.
- ◆ Lack of an overall environmental management plan integrated into the plant overall management plan.

Since the assessment, the Rocky Flats Plant has undergone a change in operating contractor from Rockwell International, the operating contractor at the time of assessment, to EG&G who took over plant operations on January 1, 1990.

EG&G has made substantive changes in the management structure since becoming the operating contractor. New technically qualified personnel have been appointed in top management positions to revitalize and improve operations at the plant. Waste Management and Environmental Protection/Restoration functions have been consolidated under a single Associate General Manager. Line organizations have been structured to focus attention and activities of key technical disciplines on major problem areas, e.g., restoration, waste minimization, NEPA compliance. A policy of verbatim compliance has been instituted and is strictly enforced. Rigorous auditing, quality assurance and quality control, and self-appraisal programs have been implemented. 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. Additional funds have been requested to support programs identified in the five-year plan.

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. The first four areas respond to

RFP-wide root causes identified by EG&G in December, 1989. The fifth represents upgrades in equipment that are needed to achieve plant performance objectives.

Cost estimates to complete actions to correct deficiencies identified by the Special Assignment Environmental Team total approximately \$150M over a five-year period. Cost estimates necessary to accomplish the actions will be identified in the DOE Five-Year Plan or through Defense Programs' budget for base plant funds.

EG&G is actively submitting plans for DOE funding consideration. Funding source(s) and amounts will be subject to final negotiations with DOE on work scope and schedule. Previous budget limitations that have contributed to the environmental conditions at the Rocky Flats Plant will be rectified by the implementation of this Plan. The Secretary has emphasized his commitment to completion of the corrective actions in the Plan and has given high priority to environment, safety, and health remediations in numerous directives and policy changes that he has made during the last year.

If there are discrepancies between the resource estimates identified to carry out this action plan and the validated cost estimates identified in the Department's updated Environmental Restoration and Waste Management Five-Year Plan, then the cost estimates in the validated Five-Year Plan shall supercede the resource estimates in this Action Plan.

Beyond FY 1991, budget requests will be based on validated costs identified in the updated Five-Year Plan, or new or revised agreements with the regulatory bodies.

Of the 93 actions for which EG&G is responsible, two have been combined into a single action, leaving 92 actions. As of June 5, 1990, 28 have been completed. Eight have been submitted to DOE/RFO to verify closure. Work is proceeding on the remaining actions. Projected schedules indicate that approximately 55 actions will be completed by the end of calendar year (CY) 1990, 15 will be done by CY 1991, 3 more in CY 1992, 3 in CY 1993, and 1 in CY 1995. Fifteen actions do not as yet have completion dates defined. These latter are lower priority construction projects that require scoping and funding.

The two actions for which DOE/RFO has responsibility have already been addressed by Department-wide guidance that was provided in Secretary of Energy Notice (SEN) 15-90, dated February 5, 1990.

## **1.0 INTRODUCTION**

### **1.1 Background**

On June 6, 1989, the Secretary of Energy, Admiral James D. Watkins (U.S. Navy Retired) requested that a Special Assignment Team initiate an independent assessment of operations and practices at the Rocky Flats Plant (RFP). The assessment was an on-site independent review of the RFP environmental, safety and health programs and was designed to evaluate compliance with applicable federal, state, and local regulations; permit requirements; agreements, orders and consent decrees; and DOE orders. In addition to assessing compliance, the Team examined RFP operations for conformance with applicable "best" and "accepted" industrial practices to evaluate the adequacy of the plant's management programs.

The assessment was conducted June 6 through July 21, 1989. The Special Assignment Team was divided into four smaller teams to perform the various aspects of the evaluation. These were concerned with 1) Management and Operations, 2) Safety, 3) Environment, and 4) Legal Matters. This document is in response to the Special Assignment Team Report "Assessment of Environmental Conditions at the Rocky Flats Plant; Golden, Colorado; August 1989".

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### **1.2 Purpose and Scope of the Action Plan**

The purpose of the Action Plan is to provide a formal, written response to each of the findings cited in the Special Assignment Environmental Team Assessment Report. The Action Plan includes descriptions of the actions to be taken by the site to satisfy the findings, with schedules and milestones, associated costs, and parties responsible for implementing the Action Plan. This plan has been prepared in accordance with DOE-recommended format.

### **1.3 Organization and Content of the Action Plan**

The Action Plan includes three (3) sections. Section 1 provides the background of the Special Assignment Environmental Team Assessment and the purpose and scope of the Corrective Action Plan, which has been prepared in response to the Special Assignment Environmental Assessment Report. Section 2 identifies the principle parties and their role for implementing the plan. Section 3 summarizes the findings, discusses root causes and funding relationships, and presents planned actions and schedules for implementing the actions.



#### 1.4 Priority Guidelines for Corrective Actions

Planned actions for correcting deficiencies identified by the Special Assignment Environmental Team Assessment are prioritized according to the definitions approved by the Under Secretary, Department of Energy. The priorities of corrective actions are presented in the Summary Table. The purpose and definitions of the priorities are as follows:

##### DOE PRIORITIZATION SYSTEM FOR TIGER TEAM ACTION PLAN ACTIVITIES

This prioritization system is designed specifically to facilitate prioritization of Tiger Team action plan activities. It is separate but is intended to be consistent with the prioritization protocols used in programmatic planning and budgeting.

##### PRIORITY 1

Action that is necessary to prevent significant risk to the public, worker health and safety, or the environment, whether or not it is required by statute or DOE Orders.

##### PRIORITY 2

Action that is necessary to meet statutes or DOE Orders, although lack of action would not result in a significant risk to the public, worker health or safety, or the environment.

##### PRIORITY 3

Action that is consistent with Best Management Practices.

##### PRIORITY 4

Practice that is not required by law, regulation, or agreement, but would be desirable to accomplish.

**SUMMARY TABLE  
ACTION PLAN PRIORITIES AND ESTIMATED EXPENDITURES  
(\$K)**

BLANK SPACES IN FISCAL YEAR COLUMNS  
INDICATE NO ESTIMATED FUNDING NEEDED

FUNDING JOB	TYPE	TITLE OF FINDING	PRIORITY	PLANNED SOURCE	FY90	FY91	FY92	FY93	TOTAL STATUS**
AIR/AF-01	AF	MONITORING OF EXHAUST VENTS FOR BERYLLIUM	1	AGS 109	100				100 0
AIR/AF-02	AF	EFFLUENT AIR MONITORING PROGRAM	1	AGS 82A	1000				1000 0
AIR/AF-03	AF	INDICATIVE AMBIENT AIR MONITORING PROGRAMS	2	BASE 3017	320	400	400		1140 0
AIR/AF-04	AF	AIR POLLUTANT EMISSION NOTICES	1	AGS 100	1500				1500 0
AIR/AF-05	AF	VOC LOADS FOR GASES FEED TANKS	2	AGS 3242A	50				50 0
AIR/AF-06	AF	MINERALIZATION OF SOLVENT USE	2	AGS 3242B	200				200 0
AIR/AF-07	AF	DISCHARGE MONITORING REPORT DEFICIENCIES	2	BASE 5018	25				25 0
AIR/AF-08	AF	KEEP FOR CERTIFIED OPERATORS AT REMEDIATION TREATMENT PLANT	2	DP	200	610	610		1410 0
AIR/AF-09	AF	UNPERMITTED DISCHARGES FROM EAST AND WEST CATCH	2	DP	50				50 0
AIR/AF-10	AF	GA-SURFACE WATER SAMPLE COLLECTION LOGGING/DOCUMENT	2	AGS 1233	100				100 0
AIR/AF-11	AF	REMOVE TREATMENT PLANT DEFICIENCIES	1	AGS 3250	2232	4317			10849 0
AIR/AF-12	AF	WORK ORDER LAB TIME	2	DP	100				100 0
AIR/AF-13	AF	DEFICIENCIES AT THE SPRAY IRRIGATION SITE	1	BASE 5018	25				25 0
AIR/AF-14	AF	DEFICIENCIES IN DRAFT EMP/SPEC PLAN	3	BASE 5018	25				25 0
AIR/AF-15	AF	LACK OF FLOW MEASUREMENT AT T-1 POND	3	BASE 5004	2000				2000 0
AIR/AF-16	AF	POLLUTANT RELEASE TO REMEDIATION TREATMENT PLANT	1	BASE 5018	75				75 0
AIR/AF-17	AF	FOLLOWING TOWER BLOWDOWN AT BUILDING 72A	3	DP	35				35 0
AIR/AF-18	AF	COOLING TOWER BLOWDOWN AT BUILDING 72A	3	BASE 5018	16				16 0
AIR/AF-19	AF	DMH INSPECTION REPAIRS	3	DP	200				200 0
AIR/AF-20	AF	LABORATORY OPERATIONS	3	DP	4700	400			5100 0
AIR/AF-21	AF	SOIL & GW CONTAMINATION AT INACTIVE WASTE SITES	1	AGS 1001A AGS 1002A	1200				1200 0
AIR/AF-22	AF	LACK OF ADEQUATE UNDESIRABLE BACKGROUND MONITORING WELLS	1	AGS 1001A					SEE CAL/AF-01
AIR/AF-23	AF	GW MONITORING WELLS OF UNKNOWN CONTRIBUTION	2	AGS 1012	10	700			1410 0
AIR/AF-24	AF	LACK OF COMP. ORGANIZED ON DATA DATABASE	2	AGS 1233	835	312			1147 0
AIR/AF-25	AF	DEFICIENCIES IN GW SAMPLING PROCEDURES	2	AGS 1233	500				500 0
AIR/AF-26	AF	LACK OF ADEQUATE GA/GC OF WORK PRODUCTS	2	AGS 1233	1600	1850	1850		4300 0
AIR/AF-27	AF	DETACHED IN WELL FILTER CONSTRUCTION	2	AGS 1233	10				10 0
AIR/AF-28	AF	BUILDING 23F PATHELLE ACCUMULATION AREAS	1	AGS 01	50	10	10		70 0
AIR/AF-29	AF	UPPER RADIODACTIVITY LIMIT FOR NON-RADIOACTIVE WASTE	1	AGS 3177	60				60 0
AIR/AF-30	AF	CONTAINER LABELING - TO BAY AREAS	1	AGS 01	20	10	10		40 0

\* AGS = EN ACTIVITY DATA SHEET \*\* 0 = OPEN OR ONGOING  
 BASE = PAB - 90-03 C = CLOSED  
 DP = PAB - 90-03

**SUMMARY TABLE  
ACTION PLAN PRIORITIES AND ESTIMATED EXPENDITURES  
(\$K)**

BLANK SPACES IN FISCAL YEAR COLUMN  
INDICATE NO EXPENDITURE FUNDING NEEDED

FUNDING ID#	TITLE ITEM OR LINE ITEM	PRIORITY	PLAN# SOURCE	FY90	FY91	FY92	FY93	FY94	TOTAL	STATUS*
WA/WP-04	AF BUILDING FOR ASHLE SPACE	1	AOS 01	15					15	0
WA/WP-05	AF MIXED WASTE SUBJECT TO LAND DISPOSAL RESTRICTIONS	1	AOS 3177 AOS 3143	3200	4500				7700	0
WA/WP-06	AF RESIDUE/WASTE 1980 CLASSIFICATION	1	AOS 3169	100					100	0
WA/WP-07	AF HAZARDOUS WASTE FACILITY INSPECTIONS	1	AOS 3148	50					50	0
WA/WP-08	AF VACUUM FILTER SLUDGE AND CONCRETE	2	AOS 3143							SEE WA/WP-03
WA/WP-09	AF SALT-CRUST, CEMENTED COMPOSITE CHIPS, & ROASTER CRUST	2	AOS 3143							SEE WA/WP-03
WA/WP-10	AF DEFICIENCIES IN TDU & TRU MIXED WASTE	1	AOS 3369 AOS 3177	700	700	700			2100	0
WA/WP-01	SWP MANAGEMENT APPROACH TO ENVIRONMENTAL PROGRAMS	2	AOS 3177	3000	3500	3500			10000	0
WA/WP-02	SWP WASTE MINIMIZATION PROGRAM	2	AOS 3242A	200					200	0
WA/WP-03	SWP DEFICIENCIES IN WASTE STREAM CHARACTERIZATION STUDY	2	AOS 3177							SEE WA/WP-03
WA/WP-04	SWP CONCRETE & SALT-CRUST SOLIDIFICATION/STORAGE DEFICIENCY	2	AOS 3252A							10000
WA/WP-05	SWP BERA STORAGE AREA & CARBO CONTAINER STORAGE BT70/341	1	AOS 3177	1400					1400	0
WA/WP-06	SWP DEFICIENCIES AT THE B561 CONTAINER STORAGE PAD AREA	3	DP	30					30	0
WA/WP-07	SWP BERA PARTS & DISTRIBUTION	1	AOS 31	10					10	0
WA/WP-08	SWP REGULATES MATERIAL PROCUREMENT CONTROL	1	AOS 3177	100	400				500	0
WA/WP-09	SWP HAZARDOUS WASTE TANK OVERFILL CONTROLS & ALARMS	1	AOS 3259			600			600	0
WA/WP-10	SWP MANAGEMENT ASSESSMENTS FOR LONG-TERM PLANNING	2	AOS 3177 AOS 3252A							SEE WA/WP-01
WA/WP-11	SWP MANAGEMENT OF RESIDUE	1	DP	200	500	2000	40000		43200	0
WA/WP-12	SWP LANDFILL CAPACITY CONSTRAINTS	1	AOS 3153	312	1436	1844			3592	0
WA/WP-13	SWP STANDING WATER IN BUILDING 664	3	DP	20					20	0
WA/WP-01	AF CALCULATION & REPORTING OF RADIATION DOSE ASSESSMENT	2	BASE 3013	75	75	75			225	0
WA/WP-02	AF DE CHECKS, RADIATION CLASSIFICATION/CHARACTERIZATION	2	DP	100					100	0
WA/WP-03	AF RAGS PRACTICES FOR RADIOCHEMISTRY ANALYSES - BIES	2	DP	300	90				390	0

\* AOS = AN ACTIVITY DATA SHEET    DP = OPEN OR ONGOING  
 WA/WP = PLAN - WA-03                    0 = CLOSED  
 DP = PLAN - 22-03

**SUMMARY TABLE  
ACTION PLAN PRIORITIES AND ESTIMATED EXPENDITURES  
(\$K)**

BLANK SPACES IN FISCAL YEAR COLUMN  
INDICATE NO ESTIMATED FUNDING NEEDED

FINDING ID#	TYPE	TITLE OF FINDING	PRIORITY	PLANNED SOURCE	FY92	FY93	FY94	TOTAL	STATUS**
NR/AF-04	AF	QA DEFICIENCIES IN THE CHEMISTRY STANDARDS LAB - 3051	2	OP	50			50	C
NR/AF-05	AF	QA/QC PRACTICES FOR RADIOCHEMISTRY ANALYSES - 3051	2	OP	100	50		150	C
NR/AF-01	MP	CONTROL OF PMS PAD AREA	2	ADS 1233	20		SEE CM/AF-01	20	C
NR/AF-02	MP	CHARACTERIZATION OF SOIL CONTAMINATION	1	ADS 1802A				0	N/A
NR/AF-03	MP	STAGING AREAS FOR THE SHIPMENT OF RADIOACTIVE WASTE	1	ADS 3168				0	
TCM/AF-01	AF	STORAGE OF RESIDUES & FISHING IN BUILDING 367	1	OP	15			15	C
TCM/AF-02	AF	BUILDING 665 PCB TREATMENT	1	OP	20	200		220	C
TCM/AF-03	AF	PROPER LABELS ON PCB WASTE TRANSPORT VEHICLES	2	OP	10			10	C
TCM/AF-04	AF	UNDERGROUND STORAGE TANKS UNDERGROUN SPILL/OVERFLOW CHKL	1	ADS 51	15			15	C
TCM/AF-05	AF	STORAGE DATES ON PCB WASTE DRUMS	1	ADS 51	19			19	C
TCM/AF-06	AF	SECONDARY CONTAINMENT AT PCB WASTE STORAGE FACILITY BLDG	1	ADS 81			SEE TRC/AF-03		
TCM/AF-07	AF	ADDITIONAL COVER IN THE ACTIVE LANDFILL	1	OP	15	30		45	C
TCM/AF-08	AF	PCB SPILL CLEANUP	1	ADS 81	10			10	C
TCM/AF-09	AF	ANALUA PCB REPORT	1	ADS 81	50			50	C
TCM/AF-01	MP	CONTAINMENT FOR PORTABLE ABOVE-GROUND STORAGE TANKS	1	OP	10	300		310	C
TCM/AF-02	MP	PCB HANDLING & SPILL REMEDIATION	3	OP	70			70	C
TCM/AF-03	MP	LACK OF PROPER LABELING OF ADS AT BUILDING 991	3	OP	2			2	C
TCM/AF-04	MP	SECONDARY CONTAINMENT FOR 6551 CHEMICAL STORAGE AREA	1	OP	10			10	C
TCM/AF-05	MP	SECONDARY CONTAINMENT FOR PERMANENT MAT AT 0774	2	ADS 1251B			400	400	C
TCM/AF-06	MP	STORAGE OF CHEMICAL MATERIALS IN 8331	1	OP	10			10	C
ON/AF-01	AF	LABORATORY QA PROGRAM/PRACTICES BLDG. 661 - GEN. LAB	2	OP			SEE RAD/AF-04		
ON/AF-02	AF	LABORATORY QA PROGRAM/PRACTICES BLDG. 123 - USE LAB	2	OP			SEE RAD/AF-03		
ON/AF-01	MP	DATA MGMT SYSTEM FOR ENVIRONMENTAL MONITORING 0400	3	OP	100	50		150	C
ON/AF-02	MP	TRANSITION OF UPDATED LABORATORY PROCEDURES	3	OP				0	C
US/AF-01	AF	COMPLIANCE RELATIONS PLAN FOR RP CORRECTIVE ACTION PLAN	2	ADS 1233	420	210		630	C
US/AF-02	AF	MIN-ENTRIES 1E SARA, TITLE 111, SECTION 313 REPORTS	2	BASE 5813	50			50	C
US/AF-03	AF	ADMINISTRATIVE RECORDS FOR ENVIRONMENTAL RESTORATION PM	2	ADS 1233	203			203	C
US/AF-04	AF	ADMINISTRATIVE RECORDS FOR ENVIRONMENTAL RESTORATION PM	2	ADS 1233	200			200	C
US/AF-05	AF	REMEDIAL INVESTIGATION/FEASIBILITY STUDY WORK PLAN	2	ADS 1233	500			500	C

A ADS = IS ACTIVITY DATA SHEET    AA 0 = OPEN OR CLOSING  
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