

QUARTERLY STATUS REPORT  
RFCA IMPLEMENTATION  
ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE  
SECOND QUARTER FISCAL YEAR 1997

1.0 INTRODUCTION

Pursuant to paragraph 263 of the Rocky Flats Cleanup Agreement (RFCA or Agreement), this quarterly status report presents the progress toward implementation of activities covered under the Agreement. The RFCA is a legally binding agreement between the Department of Energy (DOE), the Environmental Protection Agency (EPA), and the Colorado Department of Public Health and Environment (CDPHE) to accomplish required cleanup of radionuclide and hazardous substance contamination at and from the Rocky Flats Environmental Technology Site (RFETS or Site).

This report describes activities that occurred from January 1997 through March 1997 (referred to as the second quarter of fiscal year [FY]97) and future planned activities. The sections of this report are organized into the following topics: (1) Introduction; (2) Site-wide Activities; (3) Implementation of the RFCA; (4) Water Management; (5) Waste Management; (6) Environmental Restoration; (7) Special Nuclear Material Management; (8) Decontamination & Decommissioning (D&D); and (9) List of Approved Decision Documents

2.0 Site-wide Activities

During the second quarter of FY97, several site-wide activities continued or were implemented. These activities include: (1) the Ten Year Plan; (2) actinide migration evaluation; and (3) watershed improvements.

2.1 The Ten Year Plan

On June 20, 1996, DOE Assistant Secretary of Environmental Management Al Alm issued a memorandum to all DOE, EM sites directing them to prepare an initial Ten Year Plan which describes how much cleanup could be accomplished if the sites were given a specified level of funding. On July 30, 1996, Rocky Flats submitted its initial plan to Assistant Secretary Alm and the Rocky Flats stakeholders for review and comment.

During the second quarter of FY97, Rocky Flats submitted Revision 2 of the draft Ten Year Plan to Assistant Secretary Alm. This revision was submitted on February 28, 1997. Several key modifications required by DOE in this version of the Ten Year Plan which were not included in the July 30, 1996 version are as follows: (1) the plan is developed for both case 1 (Low) and case 2 (High) funding targets specified by DOE, Headquarters; (2) escalation is included in the cost estimates; and (3) privatization funds, which are additional above funding target dollars, are included for specific projects in FY98 and FY99.

ADMIN RECORD

A-SW-002370

In addition to the required modifications, Rocky Flats included the following in their submittal of Revision 2 of the draft Ten Year Plan: (1) prepared a case 3 based on an additional \$50M above case 2 (High) funding targets to demonstrate the advantage of investing in earlier Site closure at a reduced total life-cycle cost; (2) prepared a case 4 based on case 2 (High) funding targets and the elimination of constructing a new plutonium storage facility and all Plutonium shipped offsite by 2005; and (3) included a self-imposed reduction in infrastructure, general technical services, and program management support services of about 5% per year.

Other activities performed in the second quarter of FY97 which supported the Ten Year Plan efforts included: (1) developed several additional cases with various funding targets, RFCA milestones, and schedules; and (2) identified activities in the Ten Year Plan which warrant further investigation to see if additional cost reductions and schedule compressions can be achieved.

The final Ten Year Plan is tentatively scheduled for submission to DOE, Headquarters on or about August 15, 1997. Rocky Flats' final Ten Year Plan will include a number of significant improvements over the previous two versions (July, 1996 and February, 1997). Specifically, the final version will include (for all cases, if more than one is evaluated): (1) integration of the bottoms-up, life-cycle baseline with the Ten Year Plan, which will result in improved costs and schedules, (2) inclusion of the recently negotiated RFCA milestones for FY98 and FY99 (currently, only one case, Case 5, incorporates the recently negotiated milestones); and (3) inclusion of information resulting from the plutonium residue program rebaselining currently underway.

## 2.2 Actinide Migration Evaluation

On March 31, and April 1, 1997, meetings were held to discuss the FY96 results of the Actinide Migration Panel and to begin work scoping and prioritization for FY97. These meetings were attended by Dr. Bruce Honeyman of the Colorado School of Mines, Dr. David Janecky of Los Alamos National Laboratory, DOE, Kaiser Hill Company, L. L. C. (Kaiser-Hill or KH), Rocky Mountain Remediation Services L. L. C. (RMRS), CDPHE, and EPA. In addition, on March 31, 1997, a meeting was held with stakeholders to discuss the FY96 results and to request input into the FY97 work goals and priorities. The meeting results include major prioritized work goals and priorities for FY97. The proposed path forward (goals and priorities) is currently being reviewed by the agencies.

## 2.3 Watershed Improvements

Approximately 9,600 square yards (86,400 square feet) of exposed dirt were treated during March 1997 with TopSoil soil sealant for erosion control to prevent potential contaminant transport. This included the following areas:

- 8,800 square yards (79,200 square feet) of exposed dirt east of the Solar Ponds (in the Protected Area) in the North Walnut Creek drainage.
- 800 square yards (7,200 square feet) of exposed dirt northeast of Building 991 (in the Protected Area) in the South Walnut Creek drainage.

Activities planned for the remainder of FY97 include treating approximately 14,100 square yards (126,900 square feet) of exposed dirt with TopSoil soil sealant in the following locations:

- near the 903 Pad in the Woman Creek drainage;
- near Building 707 in the South Walnut Creek drainage;
- near Building 779 in the North Walnut Creek drainage; and
- near Building 663 in the South Walnut Creek drainage.

These areas were selected due to elevated levels of plutonium in soil, sediment, surface water samples and HPGe surveys.

### 3.0 Implementation of the RFCA

Activities associated with the implementation of RFCA during the second quarter of FY97 include: (1) the Colorado Water Quality Control Commission's final decision; (2) the National Pollutant Discharge Elimination System permit; (3) the Integrated Monitoring Plan; (4) the Integrated Site-wide Baseline and the selection of the FY97 milestones and target activities; (5) continued preparation of the Implementation Guidance Document; (6) implementation of the RFCA training plan; (7) corrections to the administrative record; (8) data automation; and (9) RFCA implementation related activities of significance. These RFCA implementation activities are discussed below.

#### 3.1 Colorado Water Quality Control Commission (CWQCC)

Attachment 5 of the RFCA proposed changes to the surface water and ground water classifications and standards for RFETS. These changes required approval by the CWQCC. The formal rulemaking hearing was held December 10, 1996 with final deliberations taking place on January 13, 1997. The CWQCC unanimously approved all of the changes outlined in Attachment 5, with one additional modification. Originally, all changes were to go into effect immediately following CWQCC action. The City of Broomfield requested, and the parties agreed, to delay the effective date for any changes in the Walnut Creek drainage until January 1, 1998. The Commission approved. Changes to Woman Creek standards, site-specific ground water standards, and statewide standards for plutonium and americium became effective March 3, 1997. Changes to Walnut Creek standards are scheduled to take effect January 1, 1998. Based on the final decision of the CWQCC, Attachment 5 of the RFCA will need to be revised. The revised Attachment 5 will be released with the RFCA errata/amendment sheets.

#### 3.2 National Pollutant Discharge Elimination System (NPDES) Permit

Attachment 5 of the RFCA states that once the changes to the water quality standards have been made, EPA will issue a new NPDES permit within six months of CWQCC action. During the second quarter of FY97, EPA held two meetings (January 30, and February 20, 1997) with the technical staffs of CDPHE, DOE, KH, and RMRS to discuss the permit. An additional meeting was held between EPA and CDPHE in March.

#### 3.3 Integrated Monitoring Plan (IMP)

During 1996, RFETS developed data quality objective's (DQO) for surface water, ground water, air, and ecological monitoring, and revised monitoring programs accordingly. The results of the DQO process are described in draft media-specific IMP sections. During the first and second quarters of FY97, draft plans were reviewed by members of the IMP Working Group, including EPA and CDPHE personnel, and comments were addressed in revisions. Copies of the IMP, which incorporates each media-specific plan, were submitted to the Rocky Flat's Citizen Advisory Board's monitoring-review contractor during the week of March 10, 1997 and to the DOE Rocky Flats Field Office (RFFO) on March 20, 1997. KH

expects to incorporate review comments during May 1997 and issue the IMP during early June 1997.

### 3.4 Integrated Site-wide Baseline (ISB) / Milestones and Target Activities (M&TA)

Work on the ISB continues with the projected completion of a draft life-cycle ISB by early third quarter of FY97. The parties finalized the Milestones and Target Activities in late March after substantial discussions. The M&TAs cover FY97, 98, and 99 and include several outyear major activities. The draft life-cycle ISB will incorporate the final M&TAs.

### 3.5 Implementation Guidance Document (IGD)

The RFCA describes the IGD as a guidance document that the Parties agree DOE will use in preparing work documents for activities regulated by the Agreement. During the second quarter of FY97, the Working Group met on numerous occasions and commented on the draft IGD prepared by the Kaiser-Hill team. Currently a few issues remain, e. g., the application of action levels to individual data points, including defining the area of concern, closeout reports, and DOE concerns about Section 4. A final IGD is anticipated by early third quarter FY97.

### 3.6 RFCA Training Plan Implementation

Training on planning/budgeting/ISB occurred on January 22, 1997, with all parties attending. Other training has been delayed. The RFCA coordinators intend to discuss needs and proceed with training as appropriate and modify the Training Plan as necessary.

### 3.7 Administrative Record

DOE is in the process of transitioning the current seventeen administrative records into those required under RFCA. This process will include the addition of the industrial area and buffer zone operable units and a separate administrative record for each removal action, including decommissioning work.

### 3.8 Data Automation

Data automation plans have been discussed at the RFETS Information Exchange meetings. During the second quarter of FY97, the Site placed the most recent quarterly report for environmental monitoring on the Site's Intranet as a test case. Use of the intranet has been successful and the data for air, surface water and ground water is being placed on DOE's homepage on the Internet. Future updates on data exchange will be included as milestone updates, as necessary.

### 3.9 RFCA Implementation Related Activities of Significance

Significant efforts occurred during the second quarter of FY97 on activities related to RFCA implementation including: (1) draft consent orders; (2) review of the Resource Conservation and Recovery Act (RCRA) permit; and (3) efforts for off-site shipments of low level/low level mixed (LL/LLM) waste.

Draft consent orders on Chemical Wastes, Tanks, and Idle Equipment were prepared by CDPHE. Significant progress toward agreements has been made by CDPHE, DOE, and KH. The agreements will lay out the plan to assure RCRA compliance in these three areas of significant legacy waste problems.

The RCRA permit renewal process is almost complete as the permit went out for public review and comment during the quarter. The permit represents a major improvement over the existing permit through its clarity, organization, and coverage.

KH and DOE have initiated procurement efforts to obtain an additional option for off-site LL/LLM waste treatment and disposal. The purpose of the procurement is to lower the cost and increase the options and reliability of RFETS' LL/LLM waste management options by increasing competition and locating a site in Colorado.

#### 4.0 WATER MANAGEMENT

Water management activities during the second quarter of FY97 include: (1) surface water management; (2) surface water monitoring; (3) ground water monitoring; and (4) Interceptor Trench System.

##### 4.1 Surface Water Management

During the second quarter of FY97, the Site completed the following pond water transfers and discharges:

- Pond A-3 activity included two routine outlet valve direct discharges to pond A-4 totaling 6.99 Mgal. The first discharge of 2.76 Mgal occurred during the period of January 27-31, 1997. The second discharge of 4.23 Mgal occurred during the period of March 10-14, 1997.

- Pond A-4 activity included one routine outlet valve direct discharge to North Walnut Creek utilizing the new upstream water quality gate valve. The discharge of 11.94 Mgal occurred during the period of February 20 through March 2, 1997. Water quality samples were collected and analyzed, and all approvals obtained prior to the discharge. The City of Broomfield diverted the A-4 discharge around Great Western Reservoir via the Broomfield Diversion Ditch.

- Pond B-5 activity included two routine pumped transfers to pond A-4 totaling 24.69 Mgal. The first transfer of 12.56 Mgal occurred during the period of January 15-29, 1997. The second transfer of 12.13 Mgal occurred during the period of March 3-13, 1997.

- Pond C-2 activity included one pumped discharge to Woman Creek utilizing the reconfigured C-2 discharge pipeline. The discharge of 7.25 Mgal occurred during the period of January 23-28, 1997. Water quality samples were collected and analyzed, and all approvals obtained prior to the discharge. The Mower Ditch headgate was temporarily blocked to direct the discharge to the new Woman Creek Reservoir as requested by the City of Westminster.

##### 4.2 Surface Water Monitoring

During the second quarter of FY97, 31 automated samples were collected and submitted for analysis. No RFCAs standards or action levels were exceeded by 30-day moving averages of the analytical results returned from labs to date.

Water quality probes were deployed at gaging stations GS01, GS02, GS03, GS10, GS11, SW027, and SW093. Initially, only periodic water quality data was collected with these probes due to winter freezing conditions. Beginning in March 1997, data collection became more continuous. Probes will be deployed at gaging stations SW022 and SW091 in April 1997. Real-time data transmission and alarm protocols for all probes will be complete in April 1997, and continuous data will be available on the Surface Water Environmental Telemetry System at that time.

#### 4.3 Ground Water Monitoring

The 1996 Third Quarter RFCA Ground Water Monitoring Report included analyses on most volatile organic compounds and nitrates; however, less than half of the metals and radionuclide analyses were available for inclusion. Traditionally, the metal and radionuclide analyses not included in the current report is reported in the following quarter's report. In a letter from CDPHE to DOE of March 25, 1997, Mr Tarlton indicated that a proposal has been made to include the RFCA Ground Water Monitoring Report in the public Quarterly Exchange of Information Meetings. The next meeting is scheduled for May 27, 1997. This additional time would allow more data to be reported in a more timely fashion rather than catching up half of the third quarter data in the April 3, 1997 report and waiting until the July report for most of the fourth quarter data. Consequently, the 1996 Fourth Quarter RFCA Ground Water Monitoring Report will not be submitted until May 27, 1997.

#### 4.4 Interceptor Trench System (ITS)

The Kaiser-Hill team is continuing to research treatment alternatives to the ITS water. Currently, KH is seeking funding to conduct an alternatives analysis on treatment alternatives.

#### 5.0 Waste Management Milestones

The FY97 Milestones include five for waste management: (1) Construct/modify and operate B440 for storage of wastes (LL and/or TRU) by 9/30/97; (2) (a) Ship 18% of current pondcrete/saltcrete inventory off-site by 9/30/97; or (b) ship 7.8% of current pondcrete/saltcrete inventory offsite and submit a permit application for additional onsite storage of pondcrete/saltcrete by 9/30/97; (3) Ship 608 cubic meters of LL offsite by 9/30/97; (4) Remove 60% of all containerized wastes (except residues; per the October 1, 1996 inventory) from all buildings in the PA (excluding the 750 Pad and B991) by 9/30/97; and (5) Certify 350 drums of TRU/TRM to WIPPWAC by 9/30/97. The scope of these projects, including the second quarters accomplishments, is listed below.

##### 5.1 Construct/modify and operate B440 for storage of wastes (LL and/or TRU) by 9/30/97

[FY97 Milestone M1]

During the second quarter of FY97 the modifications to B440 were completed and the Operational Readiness Review was initiated in anticipation of initiation of operations. Activities planned for the third quarter of FY97 include the completion of the Operational Readiness Review and the initiation of storage operations.

##### 5.2 (a) Ship 18% of current pondcrete/saltcrete inventory off-site by 9/30/97; or (b) ship 7.8% of current pondcrete/saltcrete inventory offsite and submit a permit application for additional onsite storage of pondcrete/saltcrete by 9/30/97

[FY97 Milestone M2]

The baseline inventory is 13,500 m<sup>3</sup>. No shipments were made during January or February 1997. During March, 305 m<sup>3</sup> was shipped, bringing the total shipped during FY97 to 644 m<sup>3</sup> (5%). During the second quarter of FY97, activities continued for the acquisition of commercial treatment/disposal services, including: (1) vendor provided written responses to outstanding issues related to proposal; and (2) procurement package submitted for DOE approval. Activities planned for the third quarter of FY97 include the shipment of 250 m<sup>3</sup>, bringing the total shipped during FY97 to 849 m<sup>3</sup> (6%) and the awarding of the contract for commercial treatment/disposal services.

5.3 Ship 608 cubic meters of LL offsite by 9/30/97  
[FY97 Milestone M3]

During January 1997, 42.3 m<sup>3</sup> were shipped; during February 1997, 110.8 m<sup>3</sup> were shipped. During March, 38 m<sup>3</sup> was shipped, bringing the total shipped during FY97 to 354 m<sup>3</sup>. Activities planned for the third quarter of FY97 include the shipment of 150 m<sup>3</sup>, bringing the total shipped during FY97 to 504 m<sup>3</sup>.

5.4 Remove 60% of all containerized wastes (except residues; per the October 1, 1996 inventory) from all buildings in the PA (excluding the 750 Pad and B991) by 9/30/97  
[FY97 Milestone M4]

The baseline inventory is 1,220 m<sup>3</sup>. During the second quarter of FY97, 290 m<sup>3</sup> was relocated, bringing the total relocated during FY97 to 360 m<sup>3</sup> (30%). Activities planned for the third quarter include the early completion of the milestone.

5.5 Certify 350 drums of TRU/TRM to WIPPWAC by 9/30/97  
[FY97 Milestone M5]

Disposal of waste from RFETS to WIPP is dependent on establishment of a certified program and processing of waste through the steps of the program. In FY97, RFETS is establishing our program with a CAO/WIPP audit scheduled in early June to assess systems for characterization and certification of waste, building and transmitting data packages, operation of the TRUPACT II loading facility, and quality assurance. Also in FY97, RFETS is processing waste through the characterization and certification systems, including Real-Time Radiography (RTR), Visual Inspection, Non-Destructive Assay (NDA), Headspace Gas Sampling, and pre-certification. In that past audits and evaluations have not revealed any deficiencies in RTR, visual inspection, or headspace gas sampling, these actions are being started ahead of the audit in June.

During the second quarter of FY97, the site:

- Initiated and completed the venting/aspirating of 117 additional TRU/TRM drums;
- Completed Real Time Radiography (RTR) on 347 drums;
- Completed revision of the Rocky Flats TRU Waste Management Plan; and

- Completed the initial draft of a TRU Waste Inventory Work-Off and Shipping Plan.

Activities planned for the third quarter include:

- Complete headspace gas sampling on 265 drums;
- Complete RTR on 183 drums; and
- Initiate acid contaminated leaded rubber glove washing.

## 6.0 Environmental Restoration

The FY97 Milestones include three for environmental restoration: (1) Submit final draft Operable Unit (OU) 3 Corrective Action Decision/Record of Decision (CAD/ROD) to CDPHE/EPA by 4/15/97; (2) Complete Phase I of Trench T-1 (IHSS 108, Buffer Zone OU [BZ OU]) accelerated cleanup and submit Proposed Action Memorandum (PAM) or Interim Measures/ Interim Remedial Action (IM/IRA) by 9/30/97; and (3) Complete source removal and soil treatment at Mound by 9/30/97 (IHSS 113, BZ OU). In addition, the site is continuing efforts to close OUs that are not currently associated with a milestone. The scope of these projects, including the second quarters accomplishments, is listed below.

### 6.1 FY97 Milestone Progress

#### 6.1.1 Submit Final draft OU3 CAD/ROD to CDPHE/EPA by 4/15/97 [FY97 Milestone M6]

The DOE, RFFO transmitted the draft OU3 CAD/ROD to EPA and CDPHE for comment on February 4, 1997; agency comments were received and incorporated. DOE, RFFO has received authorization from DOE Headquarters to sign the CAD/ROD and transmit it for signature by the regulators. Transmittal of the CAD/ROD for signature will take place to support the RFCA milestone for this activity by April 15, 1997.

#### 6.1.2 Complete Phase I of Trench T-1 accelerated cleanup and submit PAM or IM/IRA by 9/30/97 (IHSS 108, BZ OU) [FY97 Milestone M7]

In preparation for the remediation of Trench T-1, a burial site of depleted uranium and waste oil, a sizable effort has been scoped to include final evaluation/characterization of existing data and treatment options and preparation of the PAM (or IM/IRA) for submittal to DOE. This Phase I step is necessary in support of final (Phase II) remediation. Due to the pyrophoric nature of the buried material and its anticipated condition from being buried for over 40 years, thorough planning is prudent and is the basis for segmenting this effort into phases.

The planning process development from the first quarter FY97 continued into the second quarter through the use of an activity-based management planning tool. Subject matter experts, project workforce, and DOE team members have developed very detailed flow charts of all proposed work activities for the remediation of Trench T-1. A treatment alternatives analysis was performed by the team concluding treatment of u-chips by stabilization/encapsulation. This effort will continue into the third quarter.

#### 6.1.3 Complete source removal and soil treatment at Mound by 9/30/97 (IHSS 113, BZ OU) [FY97 Milestone M8]

Volatile organic compounds in the subsurface has contributed contamination to the ground water and surface water of South Walnut Creek. The drums and debris once buried in the

Mound have long-since been removed, but a relatively small area (approximately 15 feet by 20 feet) remains as an ongoing source. The scope of the project includes source removal through excavation followed by treatment of the excavated material using low temperature thermal desorption. The soil will be replaced back into the excavation if it meets all appropriate concentrations.

Activities during the second quarter of FY97 included authorizing documentation development, final site preparation, and commencement of excavation. Prior to the start of field work, a thorough readiness evaluation was performed demonstrating all corrective actions and lessons learned from the T3/T4 remediation in FY96.

## 6.2 OPERABLE UNITS (OU)

The OU consolidation under RFCA established the Buffer Zone and Industrial Area OU's, and left OU's 1, 3, and 7 intact. Operable Units 5 and 6 remain in place with some minor modifications. The following actions were completed for each OU during the second quarter of FY97.

### 6.2.1 OU 1

Final signature of the OU1 CAD/ROD took place on March 12, 1997. The DOE, RFFO was successful in securing \$4.2 million from the Congressionally-authorized Closure Projects Fund, most of which will be used for the remediation of IHSS 119.1, the only IHSS in OU1 that will be remediated. DOE and its contractors met with EPA and CDPHE in late March to discuss project approach and documentation for the IHSS 119.1 remediation. This project is expected to be completed in calendar year 1997.

### 6.2.2 OU 3

The submittal of the final draft OU3 CAD/ROD to CDPHE/EPA by April 15, 1997 is RFCA milestone M6. For a status update on the milestone, see section 6.1.1.

### 6.2.3 OU 5

The DOE/RFFO is currently evaluating options for proceeding with OU5 in light of the fact that four areas within the OU contain depleted uranium in subsurface soils in excess of the RFCA Soil Action Level. EPA and CDPHE have asked that these soils be excavated, consistent with the RFCA Action Level Framework. The DOE/RFFO is developing preliminary estimates for these excavations, and is considering combining these projects with other projects in the Woman Creek drainage, such as the 903 Pad remediation/ Some of the contaminated areas are within or near habitat for the Preble's Meadow Jumping Mouse.

### 6.2.4 OU 6

DOE/RFFO staff reviewed background information for OU6 in preparation for finalizing the RFI/RI Report and preparing the Proposed Plan. DOE/RFFO expects to ask for final RFI/RI Report approval and to draft the OU6 proposed plan during the next quarterly reporting period.

### 6.2.5 OU 7

The passive seep collection system continues to operate with no changes since last quarter. A meeting was held on March 31, 1997, to discuss the vinyl chloride in the seep leachate and to request removing it as an applicable or relevant and appropriate requirement. Actions

discussed at the meeting included: collect new samples over the next quarter; assess and evaluate the data; and provide the present and historical costs of the granular activated carbon system. Additional details are provided in the quarterly report for the "Consolidated Water Treatment Facility and OU & Passive Seep Interception and Treatment System."

#### 6.2.6 Buffer Zone OU

##### 6.2.6.1 Mound Plume

To support the remediation of the Mound Plume, a design program was initiated near SW059 in the Buffer Zone during the second quarter of FY97 to delineate bedrock topography and the groundwater profile in preparation of the installation of a passive groundwater treatment system.

##### 6.2.6.2 Preparation of the IM/IRA for the 903 Pad and Lip Area (IHSSs 112/155, BZ OU)

The FY97 scope for the 903 Pad Area includes revising the remediation approach and drafting a new IM/IRA given the objectives of RFCA which were not available when the existing draft IM/IRA was submitted to the agencies in 1995. The remediation project will be divided into phases—one for the pad and subsurface volatile organics and one for surface radiological contamination. These phases are expected to be completed over a two-year period when funding becomes available. A data usability evaluation and alternatives analysis were undertaken in the second quarter of FY97 to acknowledge waste minimization initiatives while designing a remediation program to achieve project objectives.

#### 6.2.7 Industrial Area OU (IA OU)

No D&D or characterization work occurred in the IA in the second quarter of FY97 that impacted the current understanding of the IA OU. The IA IM/IRA Annual Report was completed and submitted to DOE in March 1997.

### 7.0 Special Nuclear Material Management Target Activities

The FY97 Target Activities include five for special nuclear material (SNM) management: (1) Identify corrective actions for the plutonium and the HEU vulnerabilities by 9/30/97; (2) Complete pipe component development for residue packing by 6/30/97; (3) Install and operate EU decon system by 9/30/97; (4) Thermally stabilize 90% of the plutonium oxide generated during the year by 9/30/97; and (5) Ship 25 SNM shipments offsite by 9/30/97. The scope of these projects, including the second quarters accomplishments, is listed below.

#### 7.1 Identify corrective actions for the plutonium and the HEU vulnerabilities by 9/30/97 [FY97 Target Activity T-1]

Corrective actions have been submitted by KH to DOE for all of the HEU and plutonium vulnerabilities. Closure for two of the HEU vulnerabilities and 43 plutonium vulnerabilities have been submitted to DOE. Approval has been received from DOE to close one of the HEU vulnerabilities and 36 of the plutonium vulnerabilities. These vulnerabilities were closed according to closure categories as defined by DOE Headquarters.

Activities planned for the third quarter of FY97 include:

- Expect to receive approval of the corrective actions from DOE/RFFO for the HEU and plutonium vulnerabilities;

- Expect to obtain closure for the submitted vulnerabilities;
- Plan to submit 15 plutonium vulnerabilities for closure to DOE/RFFO; and
- Plan to submit 5 HEU vulnerabilities for closure to DOE/RFFO.

Progress is being made faster than expected due to DOE Headquarters defining various closure categories for vulnerabilities in the first quarter of FY97. Also, closure methodology was developed with DOE/RFFO in the first quarter of FY97 which defined format and content of closure documents.

7.2 Complete pipe component development for residue packing by 6/30/97  
[FY97 Target Activity T-2]

The pipe component has been approved by the Nuclear Regulatory Commission for use with the WIPP TRU Pact. This target was closed February 25, 1997.

7.3 Install and operate EU decon system by 9/30/97  
[FY97 Target Activity T-3]

The decon system has been installed in Bldg 707, and operator training began with the system in non-contaminated mode. Funding was obtained for the additional scope of having to install an 8-inch ventilation pipe vs the 6-inch already installed. The additional scope improved worker safety.

Activities planned for the third quarter of FY97 include:

- Complete the management review for the EU decon system to start-up contaminated operations;
- Define with Oak Ridge the acceptable level of methodology for determining plutonium contamination on the components to be sent to them; and
- Complete process-prove-in runs with contaminated EU components.

7.4 Thermally stabilize 90% of the plutonium oxide generated during the year by 9/30/97  
[FY97 Target Activity T-4]

Oxide is being stabilized as it is generated. The site will continue to generate and stabilize oxide during the fiscal year.

7.5 Ship 25 SNM shipments offsite by 9/30/97  
[FY97 Target Activity T-5]

Nine shipments have been completed to date:

- 4 EU shipments to Oak Ridge
- 1 Criticality Parts Shipment
- 2 Aries shipments to LLNL
- 2 WR pit shipments to Pantex

Plans for the third quarter of FY97 include continuing to make shipments to various sites within the weapons complex.

7.6 FY98 Target Activities

FY98-T1 Remove Cat I and II material from room 152 (not hold-up) in B776/777.

FY98-T2 Remove solid Cat I and II material (not hold-up) from Bldg771 and 776/777.

During the FY97 target negotiations, it was discussed that RFETS would pursue funding in FY97 for removing Cat I and II material from Bldg 776/777 room 152; and also funding to remove Cat I and II material from Bldg 771. Funding has been identified during the second quarter of FY97 for these two activities. Plans are being developed for performing these activities. In the next quarter moves from Bldg 776/777 should be occurring, and moves from Bldg 771 should begin. Next quarter we should be able to propose target dates for removal of material from Bldg 776/777 room 152 and B771.

## 8.0 Decontamination & Decommissioning

### 8.1 Decommissioning Program Plan

The draft Decommissioning Program Plan (DPP) submitted to DOE for review and comment on December 30, 1996, has been reviewed and comments received. Comments are being dispositioned. The final draft DPP, a product of the RFETS Facility Disposition Working Group, is scheduled to be submitted to the regulatory agencies on May 12, 1997 for approval and public comment. Based upon agreement between DOE, EPA, and CDPHE, the DPP will also incorporate the RFCA Standard Operating Protocol for D&D activities.

### 8.2 Decommissioning Operations Plan for 779 Cluster

The draft Decommissioning Operations Plan (DOP), submitted to DOE for review and comment in January 1997, has also been reviewed and comments received. The comments are being reviewed and dispositioned. The final draft DOP, a product of the RFETS Facility Disposition Working Group, is scheduled to be submitted to the regulatory agencies on May 12, 1997 for approval and public comment.

### 8.3 Building Radiation Closure Standards

A working group consisting of representatives from DOE, EPA, CDPHE, and the Kaiser-Hill team was formed in October 1996 to recommend building radiation closure standards. This working group will continue its efforts throughout FY97. During the second quarter, the working group focused on reaching agreement on the proper modeling system to use in analyzing the various flow paths, the selected flow path scenarios, and the management of the construction debris. Several issues have been identified and are being addressed for resolution by either the working group or the RFCA coordinators.

### 8.4 Third Quarter FY97 Activities

D&D activities for the next quarter will focus on issuing the final draft documents for both the DPP and the Bldg. 779 DOP by April 15, 1997. The target date for final review and approval of both documents is mid July 1997. In addition, the Building Radiation Closure Standards working group will continue its efforts.

## 9.0 List of Approved Decision Documents

During the second quarter of FY97 the following documents were approved: (1) Mound PAM, February 1997; (2) Mound SAP, February 1997; and (3) OU1 CAD/ROD, March 1997.

Pursuant to RFCA paragraph 122, DOE has updated the list of all approved documents, other approvals, and final resolutions of dispute contained in Attachment 12. The updated list is attached to this report. DOE will place a copy of the updated list in each of the Repositories.