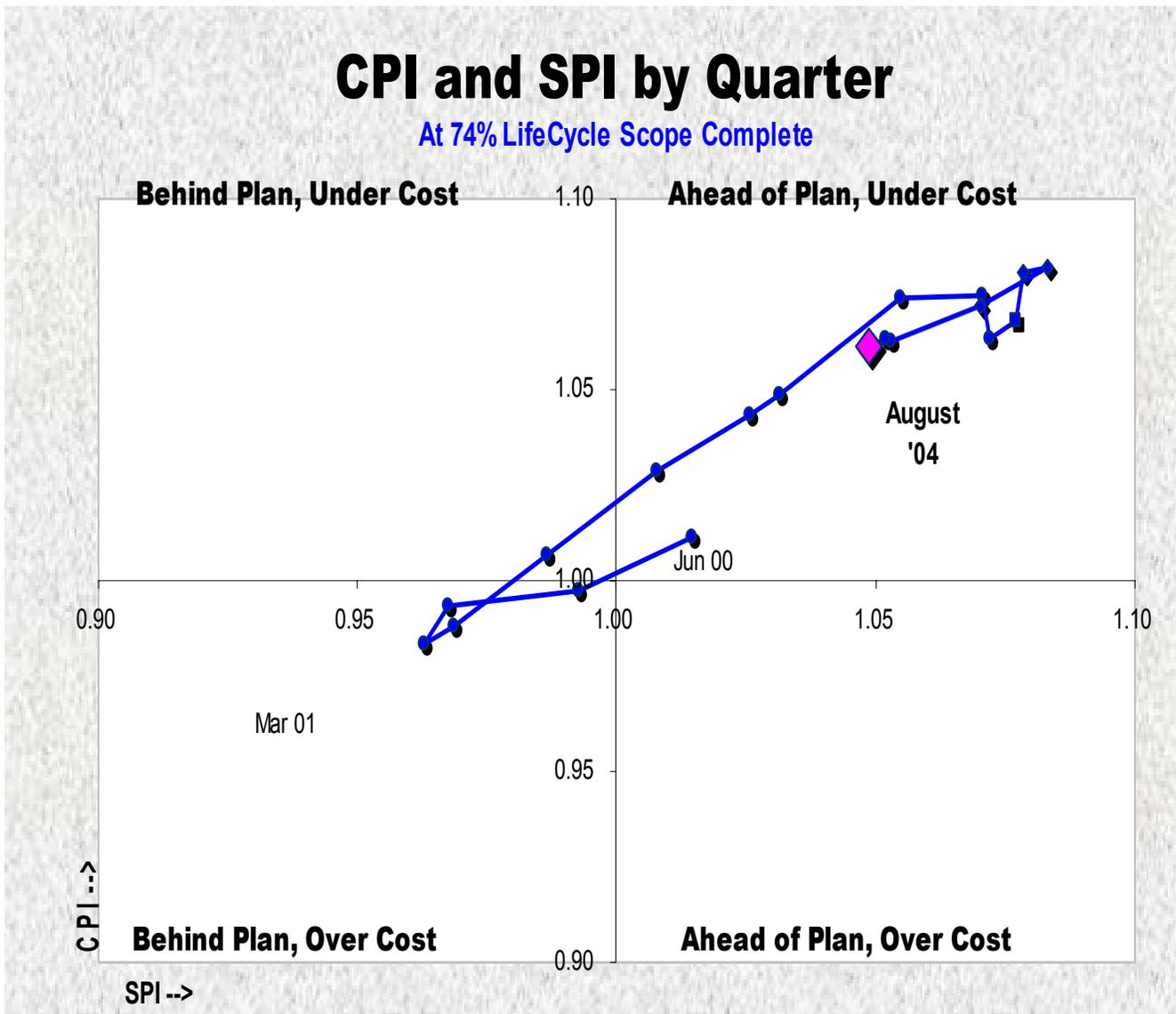


# ROCKY FLATS

# Monthly Project Report

**FY04**

**August, 2004**





# Monthly Project Report **Rocky Flats**

August 2004

## Executive Summary

### Contract Status

**TC:** 3.973B (Original: 3.963)

**TF:** \$340.8M (Original: \$340M)

**TCD:** 15 December 2006

### Penalty Assessment

A Fee Penalty was issued July 19, 2004 for \$100,000 related to electrical safety incidents. To date, five fee penalties have been issued under the terms of this contract with total penalties equaling \$610,000.

### Requests for Equitable Adjustments (REAs):

The National Emergency REA remains under HQ review.

### Pending REA's: ~ \$16.4M

~ \$16.4 million: National Emergency (2002 – 2003 Costs)



### Critical Path

The Critical Path continues to run through B371 D&D activities, followed by site grading. RFPO is monitoring the critical path and near critical path activities resulting from the contractor's accelerated schedule. The lack of a LLMW receiver site for certain wastes (between 10 and 100 nCi/g) activity is being monitored for potential impact to the critical path.



### GFS/I Performance

Most requirements have been and continue to be met. The key remaining issue is the identification of disposal sites for LLMW between 10 and 100 nCi/g activity.

After the Hanford ROD was issued in June 2004, Rocky Flats shipped 109 drums of LLMW (>10 nCi/gm) from the treatment/storage facility to Hanford. Subsequently, the State of Washington sued the DOE in July 2004 to prevent waste shipments to the Hanford Site. The DOE has voluntarily curtailed waste shipments to Hanford until after the court hearing in the fall of 2004. The Site continues to evaluate options for these and other "orphan" waste streams to remove all radioactive waste from the Site in support of the closure plan.



### Safety

### 2 Events of "Significant Concern" or Above

4 Site Noncompliance Tracking Reports

Offsite Hospitalizations: 0

Rad/Haz Transport Incidents: 1

Contaminations: 6

Lock-Out-Tag-Out Violations: 0

Other Events: 5

**Contaminations:** 1. B707 D&D worker received 2400 dpm skin contamination on right forearm while working in a SWB. 2. B371 RCT received 11,000 dpm skin contamination on chest while performing pre-job surveys. 3. B371 RCT detected 6300 dpm on finger after doffing at SOP. 4. Two B371 D&D workers skin contaminated (9200 & 400 dpm) during floor shaving. 5. Two B371 D&D workers skin contaminated (1,200,000 & 4400 dpm) during piping removal. 6. RCT received contamination on skin and hair (2500 & 1500 dpm) while surveying cargo container.

**Transportation:** 1. Dunnage SWB returned to RFPO from WIPP with filters & TIDs installed.

**Other:** 1. B371 worker cut an electrical wire for supply fan nicked while removing conduit 2. Electrician cuts conduit containing active telephone line 3. Energized 480 volt line in B371 was cut during abandoned conduit removal 4. A worker in B444 inadvertently cut an energized low voltage (<50V) conductor. 5. Death of over 150 swallows at the sewer plant. Cause of death not listed. UFS&WF investigator involved.

**Events of Significant Concern or Above:** Two Electrical Near-Misses in B371 cutting and removing conduit.

# Monthly Project Report **Rocky Flats**

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## Cost Performance



### Cost

Cost Variance +6%, +\$177M

*LIFECYCLE: 74% of scope completed; 70% of target cost expended*

The Cost Variance on the Project remains significantly positive, with about \$177 million in cost savings accumulated since the beginning of the contract. Cost variance for contractual activities improved \$8M this month, remaining at a positive 6% variance against the baseline plan. Positive cost variances continue to be concentrated in PBD E, Industrial and Site Services Project, and PBD G, the Environmental Remediation Project where accelerated D&D and IHSS remediation are resulting in significant cost savings. The majority of the negative variance is located in the 371, 707, and Material Stewardship Sub-projects.

In the 371 Project, currently contributing to the deterioration of the cost variance is the productivity in the building's highly contaminated dismantlement sets (Canyons and Central Storage Vault). This month, it cost \$10M to do \$4.5M worth of decommissioning work. Activities in this PBD continue to dominate the critical path.

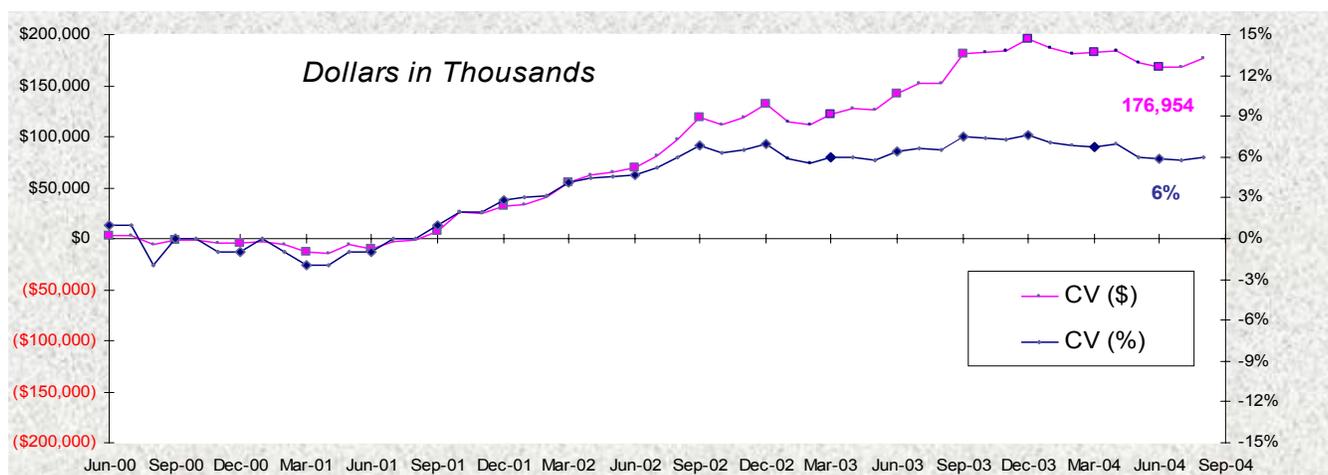
There was an \$8M positive CV gain in the 776 Project due to an adjustment for under claimed decommissioning Earned Value identified this month during a thorough management review.

### Cost Performance by PBD\*:

Project Description	BCWP	ACWP	CV (\$)	CV (%)
1A 371 Complex Project	348,972	428,172	(79,200)	-23%
1B 707 Complex Project	210,592	227,578	(16,986)	-8%
1C B771/774 Closure Project	229,605	240,431	(10,826)	-5%
1D B776/777 Closure Project	215,674	203,851	11,823	5%
1E Industrial and Site Services Project	613,087	461,806	151,281	25%
1F Material Stewardship Project	634,103	657,408	(23,305)	-4%
1G Remediation Project	159,941	80,858	79,083	49%
1H Engr., Environ, Safety & Quality	180,636	161,776	18,860	10%
1J Support Project	365,768	319,545	46,224	13%
<b>Project Totals</b>	<b>2,958,379</b>	<b>2,781,425</b>	<b>176,954</b>	<b>6%</b>

Includes *all target* fund sources: EY06, FS30, EW09, GG08, NN61 and YN01 (EW05 was recast to EY06 and FS 40 recast to FS30 beginning in FY04)

### Cumulative Cost Variance Over Time



**NOTE:** Currently, the closure project has accumulated \$21M in non-target Site Closure (EY06) and Safeguards and Security (FS30) costs. These non-target costs are generally the result of technical direction and may eventually be considered as part of potential Requests for Equitable Adjustment, and / or will impact cost variance.

# Monthly Project Report **Rocky Flats**

August 2004

## Schedule Performance

DEFINITIONS OF ROCKY FLATS' SCHEDULE PERFORMANCE INDICATORS CAN BE FOUND IN THE GLOSSARY AT THE BACK OF THIS REPORT.



### Comparative Schedule Performance

The project-level positive schedule variances reflect the contractor's continued success at accelerating workscope. The majority of accelerated activities have been in the demolition of facilities in the industrial area (PBD E), and IHSS remediations in PBD G, not on the critical path. The current critical path remains dominated by activities in Building 371 (PBD A) followed by site grading (PBD G).

Most schedule variance metrics have remained constant during August. The cumulative variances remain positive, with slight gains this month in both the PWA and Metric milestones SV in building 776/777 Closure Project.

Project		SV <sub>TRAD</sub>	SV <sub>PWA</sub> *	SV <sub>MM</sub>	SV <sub>P3</sub> +/- Days**
1A	371 Complex Project	2%	2%	4%	241
1B	707 Complex Project	4%	11%	9%	236
1C	B771/774 Closure Project	1%	-7%	-1%	-65
1D	B776/777 Closure Project	10%	34%	21%	375
1E	Industrial and Site Services Project	12%	3123%	28%	243
1F	Material Stewardship Project	2%	97%	8%	243
1G	Environmental Remediation	22%	150%	24%	241
<b>Total Project:</b>		<b>5%</b>	<b>65%</b>	<b>14%</b>	<b>241</b>

\*These are K-H reported values. RFPO validates and reports on PWA performance quarterly, in the Total Project Report

\*\*KH's Accelerated Working Plan



### P3 Completion

The *K-H generated* Estimated Completion Dates (using P<sup>3</sup> project scheduling software), are represented below.

The critical path continues to run through B371 D&D and site grading activities. RFPO is monitoring progress, logic ties and adjustments, and will continue using the original Target Date, December 15, 2006 as the estimated completion date.

PBD	Activity Description	Baseline Early Finish	Stated Early Finish
A	B371	11-Oct-06	28-Oct-05
B	B707	13-Mar-06	6-Apr-05
C	B771/774	18-Aug-04	18-Nov-04
D	B776/777	27-Oct-06	6-May-05
E	Industrial Sites	11-Oct-06	16-Sep-05
F	Material Stew.	14-Dec-06	17-Nov-05
G	ER	14-Dec-06	22-Nov-05
<b>Total Project</b>		<b>14-Dec-06</b>	<b>22-Nov-05</b>

# Monthly Project Report Rocky Flats

August 2004



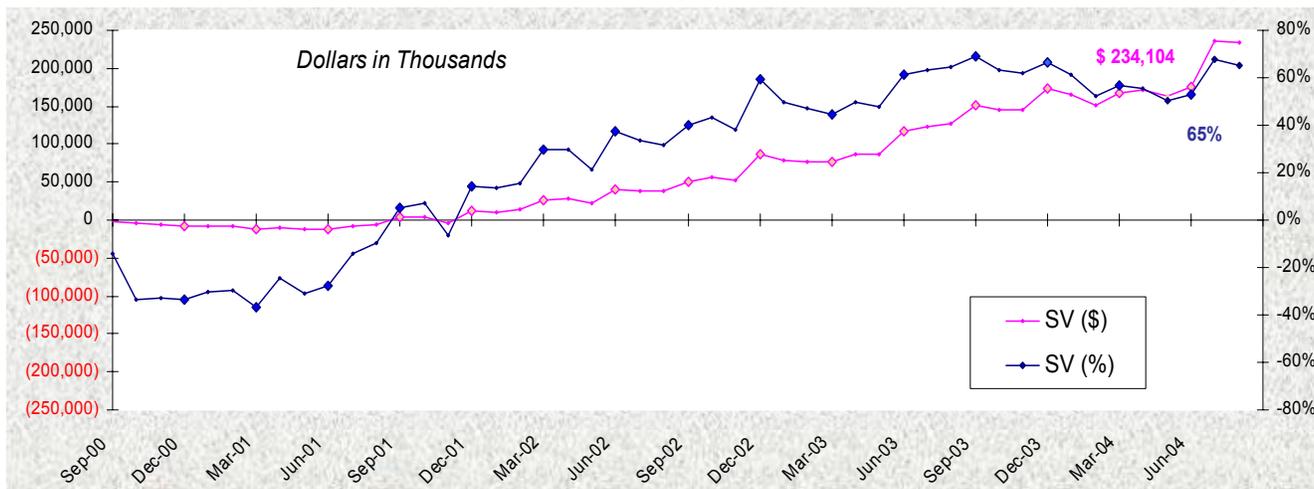
## Predetermined Work Activities

SV<sub>PWA</sub> (+\$234M, +65%)\*

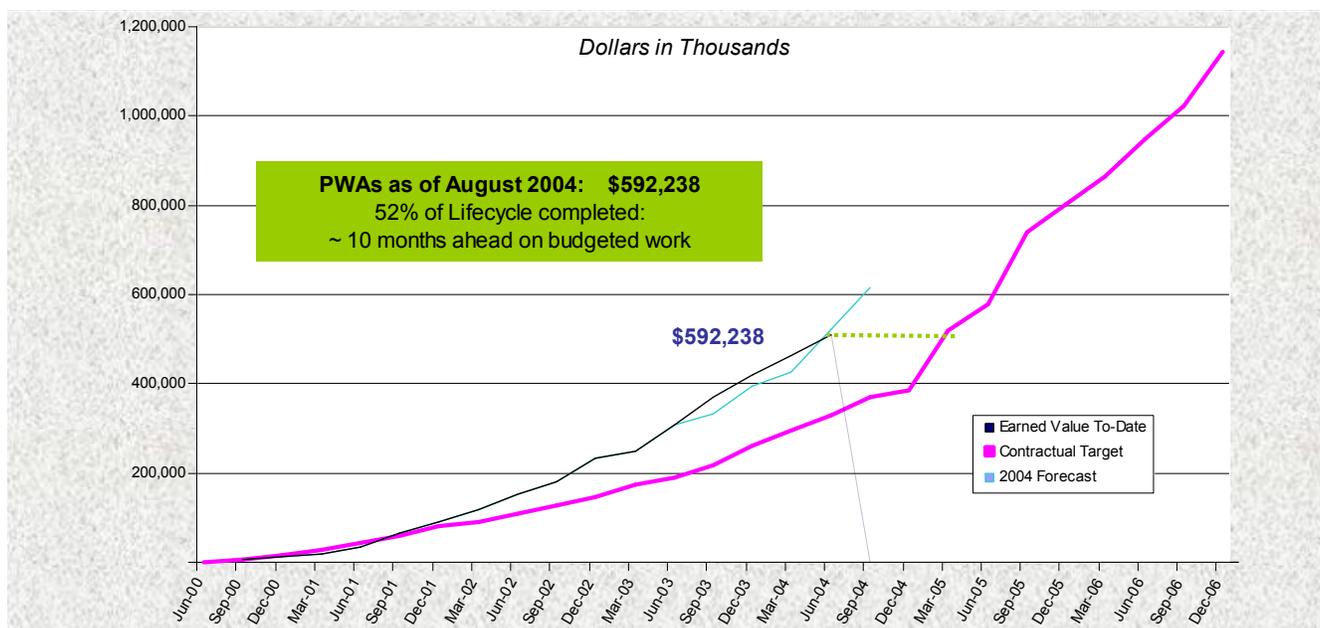
About \$10M in critical closure scope was scheduled during the month of August; about \$9M was completed. The PWA schedule variance remains highly positive, and shows that the contractor has completed 65% more critical closure work than their baseline estimate. The current BCWS for PWAs is \$358M with a lifecycle BCWS of \$1.145B. At the end of August 2004, 67% of the baseline duration had elapsed (55 out of 82.5 months), 31% of the PWA scope was scheduled for completion, and 52% (\$592M) of the PWA scope is complete.

All the sub-projects continue to maintain a positive PWA schedule variance except for the B771/774 project which did see a loss this month of SV from -\$5M to -\$6M.

*\*These are K-H reported values. RFPO validates and reports on PWA performance quarterly, in the Total Project Report*



## PWA Schedule: Actual against Baseline Projection



# Monthly Project Report **Rocky Flats**

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Project Metric	Contract Lifecycle Planned	CPB Planned to end of FY	FY Plan (AWA)	Actuals to Date	FY Actuals	Actuals for Month	LC Completion (CPB)	FY Completion (CPB)
Low Level Waste Disposed (m <sup>3</sup> )	184,475	116,662	54,000	223,588	123,987	7,270	121%	Exceeded Plan to-date
Low Level Mixed Waste Disposed (m <sup>3</sup> )	44,614	10,911	3,500	35,218	8,843	76	79%	Exceeded Plan to-date
TRU Waste Disposed (m <sup>3</sup> )	12,355	9,688	4,600	12,048	3,834	222	98%	Exceeded Plan to-date
B371 Project Work Sets	60	33	26	35	13	1	58%	Exceeded Plan to-date
B707 Project Work Sets	99	72	16	82	14	1	83%	Exceeded Plan to-date
B771 Project Work Sets	106	106	35	96	25	6	91%	91%
B776 Project Work Sets	82	72	8	78	3	0	95%	Exceeded Plan to-date
Facilities Demolished	290	141	61	171	40	3	59%	Exceeded Plan to-date
Nuclear Facilities Decommissioned	6	2		1	0	0	17%	*50%
Radioactive Facilities Decommissioned	54	14		25	10	0	46%	Exceeded Plan to-date
Industrial Facilities Decommissioned	317	197		232	30	3	73%	Exceeded Plan to-date
Environmental PWAs Completed	65	19	8	34	11	0	52%	Exceeded Plan to-date
Environmental Remediation Sites Completed	360	182	24	266	75	0	74%	Exceeded Plan to-date
Gloveboxes removed	1,324		277	1,344	253	4	102%	97%

\* B771 planned 4<sup>th</sup> Quarter FY04

# Key Definitions / Terms

## **Rocky Flats' schedule performance indicators:**

All indicators (except P3) use the standard formula  $SV=BCWP-BCWS$  and are measured in dollars, not time. Performance is measured against the Life-Cycle Baseline as presented in June 2000 with minimal adjustments approved through our rigorous Change Control Process. The indicators defined below differ mainly in which budgeted costs are included in the analysis.

**Traditional Schedule Variance ( $SV_{TRAD}$ ):** This indicator addresses schedule performance compared to plan for the entire project contracted with Kaiser-Hill. It includes all "Target" costs as defined by the contract (EW05, EW09 (formerly EW02), FS40, GG08, YN01, and NN61). It does NOT include budgeted costs for things like performance fee, technology deployment, and program (RFFO) funds. A positive variance means that, compared to the original plan, more work was accomplished than planned. A negative variance means that less work has been accomplished than planned.

**Modified Milestone Schedule Variance ( $SV_{MM}$ ):** This schedule performance indicator is designed to focus on all the 'real' work at the site. It removes level-of-effort activities from the analysis, but adds the Technology Deployment budget. Again, the variance indicates that more work or less work was accomplished than planned.

**Predetermined Work Activities Schedule Variance ( $SV_{PWA}$ ):** In order to best assure that the government is awarding performance fee for the accomplishment and acceleration of the most important work at Rocky Flats, our contract with Kaiser-Hill includes a list and schedule of ~900 "Predetermined Work Activities" against which performance is measured and provisional fee is paid. Generally,  $SV_{PWA}$  calculations allow for earning value only when an activity is 100% complete (all or none), unless the activity is a quantity-based measure. These activities represent critical work necessary to the timely closure of the Site, and performance is measured against the baseline schedule set out at the beginning of the contract. Although the contractor is free to realign specific work activities as they see fit, the dollar amount of work accomplished against these critical activities is expected to remain on plan to facilitate timely closure of the site.

**Primavera Project Planner Schedule Variance ( $SV_{P3}$ ):** In contrast with the previous indicators, the P3 schedule variance is measured in units of time (days). The Primavera project scheduling software computes the longest (critical) path through the contractual work on the Project and arrives at the Stated Early Finish, (a.k.a. Estimated Completion Date). Variance is measured against the Baseline Early Finish as established in June 2000.

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**Orphans – Low Level Mixed Waste Orphans.** Wastes which must be removed from the Site but for which no disposal / treatment path has been identified and/or approved.

**D&D – Deactivation and Decommissioning.** Deactivation: the process of placing a "building" in a safe and stable condition. Decommissioning: All activities that occur after deactivation. Includes decontamination and dismantlement /demolition.

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**PBD A – 371 Complex Project.** Remaining D&D. Building demolition by October 11, 2006.

**PBD B – 707 Complex Project.** Remaining D&D. Building demolition by March 1, 2006.

**PBD C – 771 Complex Project.** Remaining D&D. Building demolition by August 4, 2004.

**PBD D – 776 Complex Project.** Remaining D&D. Building demolition by October 27, 2005. Removal of the slab/foundation by 4/26/06 and project completion by 10/31/06.

**PBD E – Industrial / Site Services Project.** The industrial and site services portion of the RISS Project, and other bldg D&D.

**PBD F – Material Stewardship Project.** Technical program direction and operational support for commodities, engineered services, procurement, traffic & transportation, and disposition of waste.

**PBD G – Remediation Project.** The Environmental Restoration (ER) Program is included in the RISS Project. The overall scope is to cleanup IHSSs, PACs, UBCs, and ground water plumes through accelerated actions under CERCLA and RFCA.

**PBD H – Engineering, Environmental, Safety, Quality, and Health.** Infrastructure. Includes; project management, assessment, oversight, regulatory compliance and monitoring, waste certification, technical training, Nuclear Safety and Licensing, Criticality Safety, Fire Protection, Engineering, Safety/Work Control, and Radiological Protection.

**PBD J – Support Project.** General Counsel & Audit (GC&A), Strategic Planning & Integration, Administration, and the K-H Executive Office.