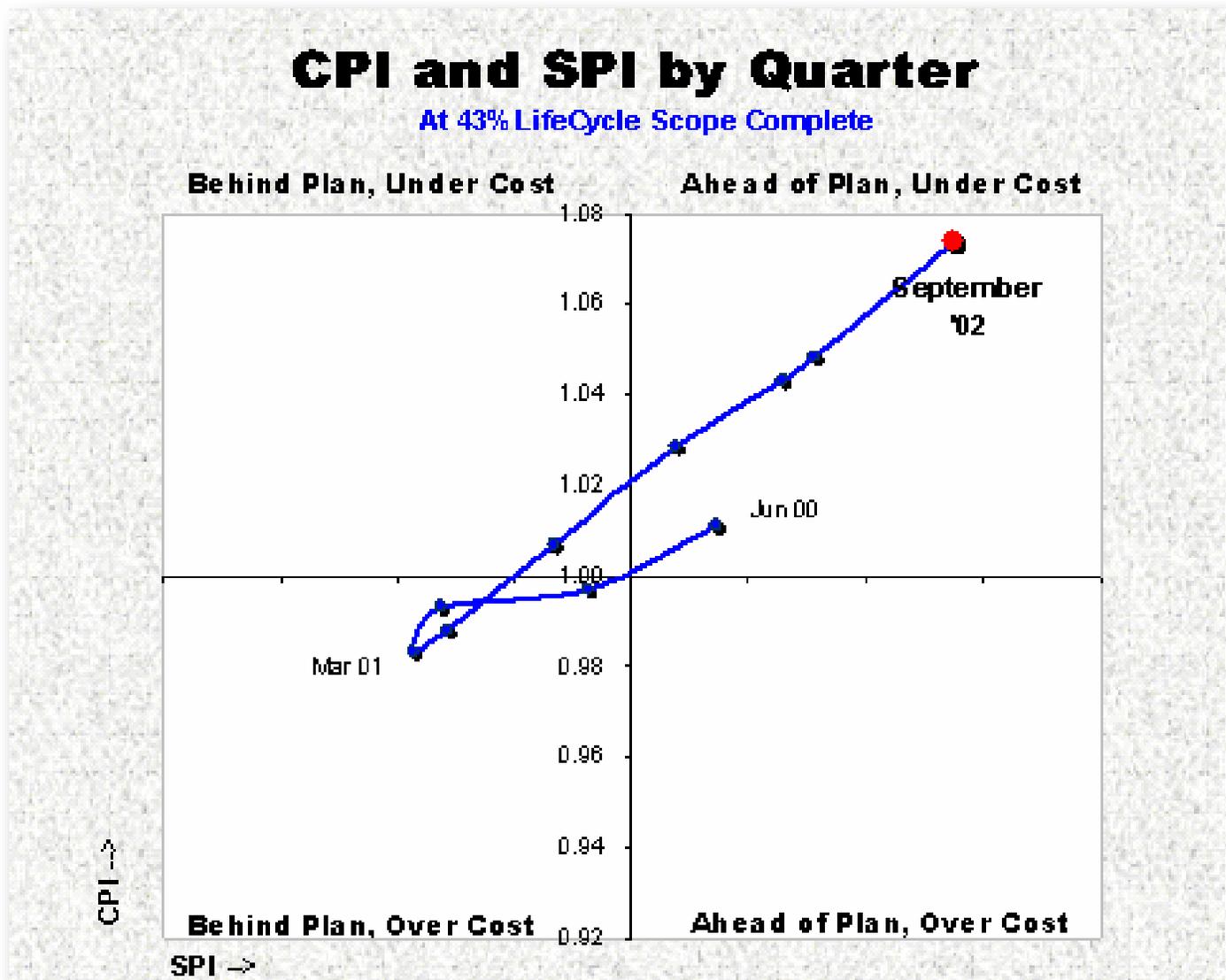


# RFFO RFETS

# Total Project Report

## 4th Quarter, FY02

July - September, 2002



# Total Project Report RFFO RFETS

4QFY02 • July - Sep 2002

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## Executive Overview

**In General:** K-H is continuing to complete work activities below the estimated cost and ahead of schedule. Positive cost and schedule variances have prevailed for the previous twelve months. K-H continues its emphasis on working safely and maintaining compliance with procedures to ensure safe operations.

**Key Accomplishments:** The Project had its most productive quarter completing 44 million dollars or 25% more work than what was scheduled for the quarter. Some accomplishments included: the start of SNM shipments, the ramping up of D&D work in B371, the completion of 20 D&D work sets in the nuclear buildings and the demolition of Buildings 125, 850, and 280, along with 19 other facilities (trailers, sheds and tanks). The Site continued to accelerate shipping of Low Level Waste (7,993 m<sup>3</sup>), TRU Waste (763 m<sup>3</sup>), completed the Building 460 readiness assessment, and initiated waste operations in the facility. The remediation of Building 442 and eight Individual Hazardous Substance Sites was completed. The contractor began mobilization for the 903 Pad remediation project.

METRIC	
<b>Safety:</b>  <i>Bears Watching</i>	Two (2) Site Noncompliance Tracking Reports were submitted for the fourth quarter of 2002. One report was entered on July 30 and one on August 9, 2002. The first report identified a negative performance trend in work control with some of the subcontractors at the Rocky Flats Closure Project. Although none of the individual events were significant, the collective significance of those events warranted reporting. The second report identified a failure to perform semi-annual source inspections as required by the Site Radiological Control Manual.
<b>Cost:</b> <i>On Plan</i>	<b>Cumulative Cost Variance</b> = +7%, +\$119M out of ~\$1,726M BCWP <sub>CUM</sub> <i>LIFECYCLE: 43% of target scope completed; 40% of target cost expended - continues positive performance.</i>
<b>Schedule:</b>  <i>On Plan</i>	<b>Predetermined Work Activities (RFFO Validated) SV</b> = +40%, +\$51M (Surpassed FY PWA goal) <i>LIFECYCLE: 11% of scope scheduled; 16% of scope completed - continues positive performance.</i>  <b>Traditional Schedule Variance</b> = +5%, +\$90M <i>LIFECYCLE: 41% of scope scheduled; 43% of scope completed - continues positive performance.</i>
<b>Critical Path</b>  <b>Completion Date:</b> <i>On Plan</i>  <b>Current CP:</b> <i>Under Review</i>	<b>CP</b> = <u>SNM activities, B371 D&amp;D</u> <b>Estimated Completion Date:</b> <u>December 15, 2006</u>  The contractor has been closely examining critical path activities for acceleration opportunities and efficiencies, and has incorporated modified logic ties /relationships in the September critical path calculation to accelerate D&D activities in B371. DOE will monitor these adjustments. For the foreseeable future, RFFO will continue to use the December 15, 2006 Target Date as the Estimated Completion Date ECD.
<b>Key Milestones</b> <i>DNFSB: Bears Watching</i>  <i>RFCA: Complete for 2002</i>  <i>STP: On Plan</i>	<b>Closure Activities:</b> Demolished Buildings 125, 280, and 850, along with 19 other facilities (trailers, sheds and tanks).  <b>DNFSB:</b> <i>Liquids</i> - Complete. <i>Residue repackaging</i> - Complete. <i>Pu Metals &amp; Oxides</i> - May 2002 milestone was not met. Assessment performed in September concluded that the revised estimate for January 2003 completion will not be met. New PuSPS completion date of October 2003 is being proposed.  <b>RFCA FY02 Milestones:</b> <i>K-H Reporting. These figures are validated Quarterly by RFFO</i> <i>D&amp;D</i> - Complete, <i>LLW</i> - Complete, <i>TRU waste</i> - Complete, and <i>ER</i> - Complete. <b>STP:</b> To date all milestones have been met, and others have been extended by State.
<b>GFS/I</b> <b>Status:</b> <i>Bears Watching</i>  <b>Forecast:</b> <i>Bears Watching</i>	Impacts of the delay in delivery of a receiver site for Special Nuclear Material are being calculated. • HQ supplemental for Carlsbad is needed to fund the WIPP security program for classified TRU wastes and for solid core sampling of TRU waste at Argonne West. • Need DOE receiver site for Low Level Mixed Waste Orphans.

## Executive Summary

### Contract Status

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

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

**TCD:** 15 December 2006

### Fee Payments

RFFO has made fee payments to K-H totaling \$58,948,794 through September 30, 2002 under the provisions of the Site Closure Contract. The contractor has requested no fee deferrals under this contract.

### Penalty Assessment

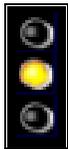
No Fee Penalties were issued this Quarter. To date, four fee penalties have been issued under the terms of this contract with total penalties equaling \$510,000.

### Requests for Equitable Adjustments (REAs):

Negotiations on the REA for National Emergency costs have been completed, and the contract modification is under review at Headquarters. The contract modification was signed this quarter (July) for two REAs (IAEA and WIPP WAC Part II) that were settled last quarter (*See the TPR for 2<sup>nd</sup> quarter, FY02*).

### Pending REA's: ~ \$37M +/-

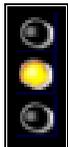
- ✦ ~ \$18 million: National Emergency (2002 – 2003 Costs): *Negotiations complete pending HQ review.*
- ✦ ~ \$13 million: WIPP WAC Part III (projected 2002 - 2005 costs)
- ✦ ~ \$1 million: PuSPS Moisture measurement
- ✦ ~ \$3 million: Shipment of 125 items greater than 1000A2. (Rec'd Oct 2002)
- ✦ ~ \$3+ million: Miscellaneous (System Engineers/B371 VSS, NTS Waste Acceptance Criteria, PuSPS outside SRS Requirement, Beryllium Monitoring)



### Safety

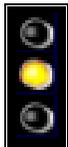
#### 1 Major (Level-of-Concern 5) Event

Total Site-wide events for the fourth quarter of FY2002 were 405. During this time, there was one (1) Major Level 5 event. This event involved two employees who were performing a walkdown when demolition activities started prior to the departure of the employees from the building. There were also two (2) Level 4 events and eleven (11) Level 3 events.



### Management Priorities / Initiatives

Confirm Receiver sites and approved containers for the shipment of SNM.  
Disposition for TRU/TRM and LLMW Orphans.



### GFS/I Performance

GFS/I related delays prevented the scheduled initiation of SNM shipping. The contractor has been able to recover projected schedule based on DOE's expanded SST commitment.

HQ supplemental funding to Carlsbad is needed for WIPP security program upgrades associated with classified TRU wastes. Funding is also needed for solid core sampling of TRU waste at Argonne West as part of the centralized characterization project.

*Future Focus:* Treatment and disposal sites for orphan waste, and disposal sites for LLMW between 10 and 100nCi/g activity. B776/777 Decommissioning Operations Plan Modification.



### Critical Path

**ECD:** 15 December 2006

The contractor has been closely examining the critical path activities to identify schedule acceleration opportunities. In their September schedule status reporting they have included some modified logic ties/relationships, some expected efficiencies, and have calculated the resultant critical path. The change in logic that produces the biggest change in the critical path is severing the logic tie between the completion of SNM shipping and the D&D of Set 8 in Building 371. The resultant critical path includes preparation / packaging of composites followed by B371 D&D and site grading. RFFO is monitoring the critical path and for the foreseeable future will continue to utilize December 15, 2006 as the estimated completion date.

# Total Project Report RFFO RFETS

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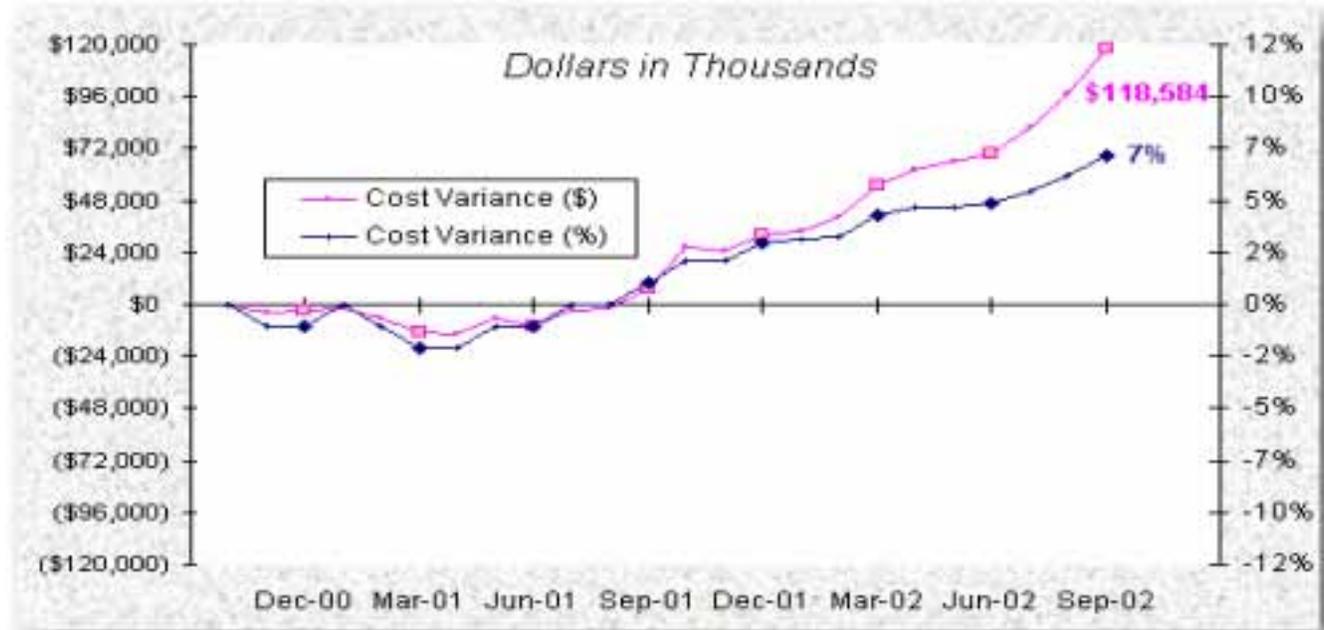
## Cost

Cost Variance +7%, +\$119M (positive trend)

LIFECYCLE: 43.3% of scope completed; 40.3% of target cost expended

During the fourth quarter of Fiscal Year 2002 (4QFY02), cost performance continued to improve. Cost Variance for target activities went from +\$70M and +5% in June 2002 to +\$119M and +7% in September. K-H has maintained a positive cumulative cost variance for five successive quarters. (See below.)

## Cumulative Cost Variance Over Time



**NOTE:** Currently, the closure project has accumulated \$13.1M in non-target Site Closure (EW05) and Safeguards and Security (FS40) 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.

## Cost Performance by PBD\*:

	Project Description	BCWP	ACWP	CV (\$)	CV (%)
1A	371 Complex Project	230,050	244,127	(14,077)	-6%
1B	707 Complex Project	133,072	132,057	1,015	1%
1C	B771/774 Closure Project	154,482	162,820	(8,337)	-5%
1D	B776/777 Closure Project	122,107	117,443	4,664	4%
1E	Industrial and Site Services Project	306,028	243,323	62,705	20%
1F	Material Stewardship Project	394,577	385,547	9,030	2%
1G	Remediation Project	31,883	21,929	9,953	31%
1H	Engr, Environ, Safety & Quality Programs	124,955	108,445	16,510	13%
1J	Support Project	228,427	191,304	37,122	16%
<b>Project Totals</b>		<b>\$1,725,580</b>	<b>\$1,606,996</b>	<b>\$118,584</b>	<b>7%</b>

Includes **all target** fund sources: EW05, FS40, EW02, GG08, NN61 and YN01

The positive cost performance on the Closure Project is concentrated in PBD E, *Industrial and Site Services Project*, and in the level-of-effort activities in PBD J, *Support Project*. Significant cost savings have been realized in some cost accounts of PBDs A, and C (371 and 771), however they are overshadowed by overruns in other cost accounts of those PBDs.

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## Schedule (Predetermined Work Activities)

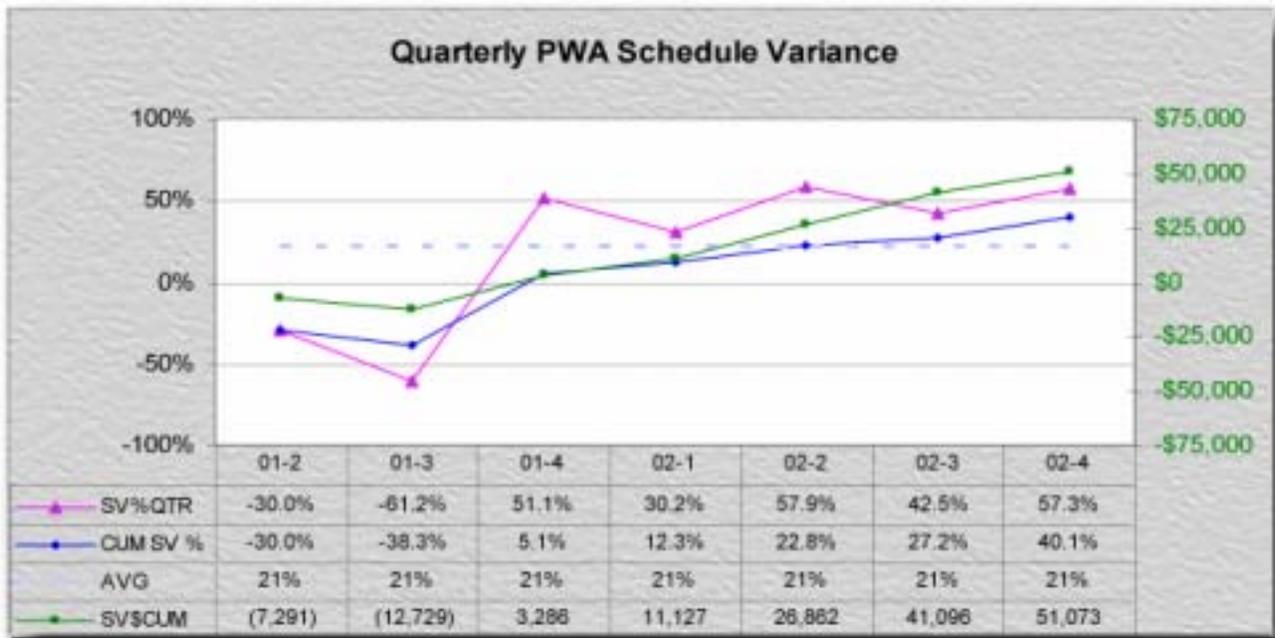
**SV<sub>PWA</sub> (+\$51.1M, +40%, positive trend)\***

K-H continues the positive performance on Predetermined Work Activity schedule variance (SV<sub>PWA</sub>) begun in June of 2001. At the end of September, 39% of the contract duration has elapsed (32 out of 82.5 months), 11% (\$127M) of the PWA scope was scheduled for completion (lifecycle), and 16% (\$178M) of the PWA scope is actually completed. During the quarter, validated SV<sub>PWA</sub> performance improved from +\$41M and +37% in June to +\$51.1M and +40%.

[Other indicators of schedule performance include Traditional Schedule Variance, Modified Milestone Schedule variance and P3 estimated completion dates. The Traditional Schedule Variance and Modified Milestone Schedule Variance are +\$90M (+5%) and +\$85M (+20%) respectively. The P3 estimated completion date is currently several months ahead of the target date of December 15, 2006. The gain in schedule is the result of K-H's revisions to the B371 D&D schedule. RFFO is monitoring the resultant critical path and for the foreseeable future will continue to utilize December 15, 2006 as the estimated completion date. These other indicators are further discussed in Appendix D.]

\* These are the validated RFFO figures

## Validated Schedule Variance on Predetermined Work Activities



K-H reported higher PWA earned value for the PBDs A, F, and G than was validated by RFFO. See the relevant PBD sheets for explanations of the deltas.

## PWA Schedule Performance by PBD

(\*RFFO BCWP differs slightly from KH methodology in PBD A)

Project Description	BCWS	BCWP	SV (\$)	Change from last QTR	SV (%)	Change from last QTR	DELTA KH - RFFO BCWP**
1A* 371Complex	36,816	34,229	(2,587)	Better	-7%	Better	468
1B 707Complex	29,996	36,484	6,488	Worse	22%	Worse	0
1C B771/774Closure	25,762	28,836	3,074	Better	12%	Worse	0
1D B776/777Closure	18,527	38,185	19,658	Better	106%	Better	0
1E Industrial and Site Services	3,291	9,516	6,225	Better	189%	Better	0
1F Material Stewardship	12,567	29,948	17,381	Better	138%	Better	238
1G Remediation	526	1,359	834	Worse	159%	Worse	5,637
<b>Project Totals</b>	<b>127,484</b>	<b>178,407</b>	<b>50,923</b>	<b>Better</b>	<b>40%</b>	<b>Better</b>	<b>6,492</b>

\*\*All values are cumulative-to-date

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## Key Milestones

CLOSURE MILESTONES: Demolished Buildings 125, and 280. Removed incinerator glovebox from B771. All unneeded maintenance pallets were removed from the B371 Central Storage Vault. Began installation of Pu oxide moisture measurement equipment in B371.

DNFSB MILESTONES– *Plutonium Metals and Oxides* – The May 2002 milestone completion date was not met due to delays in the startup of the PuSPS, lower than anticipated production rates, and a higher than anticipated failure rate. Assessment performed in September concluded that the revised estimate for January 2003 completion will not be met. New PuSPS completion date of October 2003 is being proposed.

*Residues* – All 2002 milestones complete..

*Building 771 Liquids* – All 2002 milestones complete.

RFC A MILESTONES– Performance results summary:

All 2002 milestones were met or exceeded.

STP MILESTONES–2002 milestones were met. Two were extended with regulator's approval.

## Additional REA Information

To date, RFFO has received a total of 17 REAs requesting approximately \$44.4M (about 1% of total project cost) in upward adjustment to target cost. Ten REA's have been incorporated into the contract increasing the Target cost by \$10.2M. One New REA was submitted this quarter (Systems Engineers). A Contract Modification for the National Emergency REA is pending headquarters review.

### Potential REA's

- **National Emergency** (FY 2004-2005 costs)
- **WIPP Vent Filters**
- **SNM removal delays** ~ \$10+ million and extension of closure date : This REA could be avoided with the resolution of issues related to disposition of SNM. Most importantly, solving the remaining issues related to a receiver site for plutonium oxide, Safe Secure Transport shipping services and providing container certifications for the DT-22 will avoid cost and schedule impacts.
- **Dangerous Goods Regulation** ~\$4 million : Changes per IATA/49CFR
- **All Other Potential REAs** ~\$1 million : DOE and Kaiser-Hill are working to mitigate/eliminate the impact of these smaller REAs.

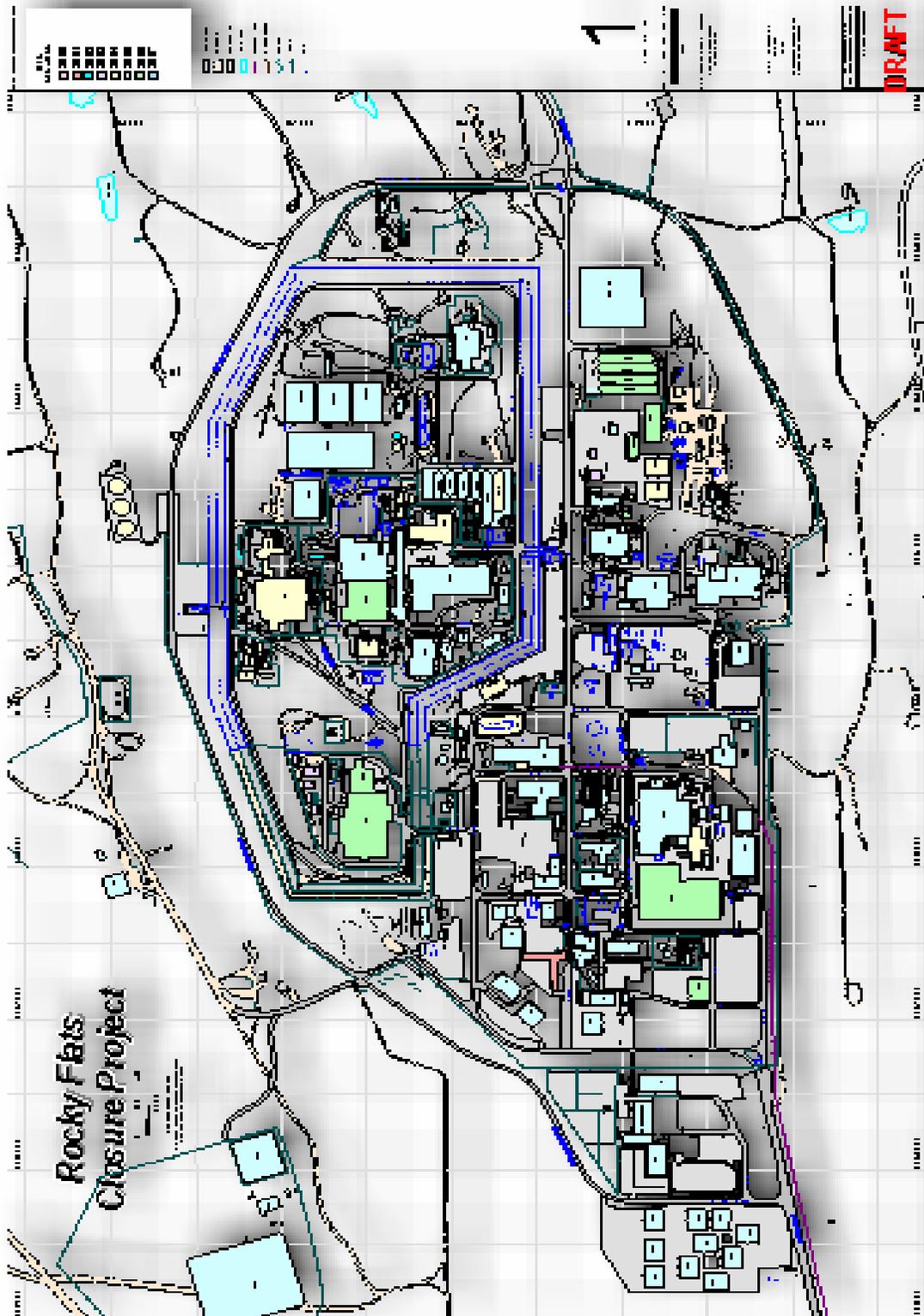
**Total Potential REAs: ~\$15 million**

## KH Project Risk Report

Kaiser-Hill's 4th quarter schedule uncertainty analysis indicates that the controlling path for overall closure includes activities in Building 371 and subsequent Environmental Restoration (ER) activities. Preparing Special Nuclear Material (SNM) for shipping continues to comprise the early part of the critical path, and is followed by B371 D&D as the highest risk activities. The number of activities in Building 707 and 776 that result from the stochastic critical path analysis indicate these two buildings should not have an impact on the Closure Project Targets.

In summary, the project remains in a solid position to meet the target schedule and target cost provided that SNM shipping is sustained.

## Detailed Overview



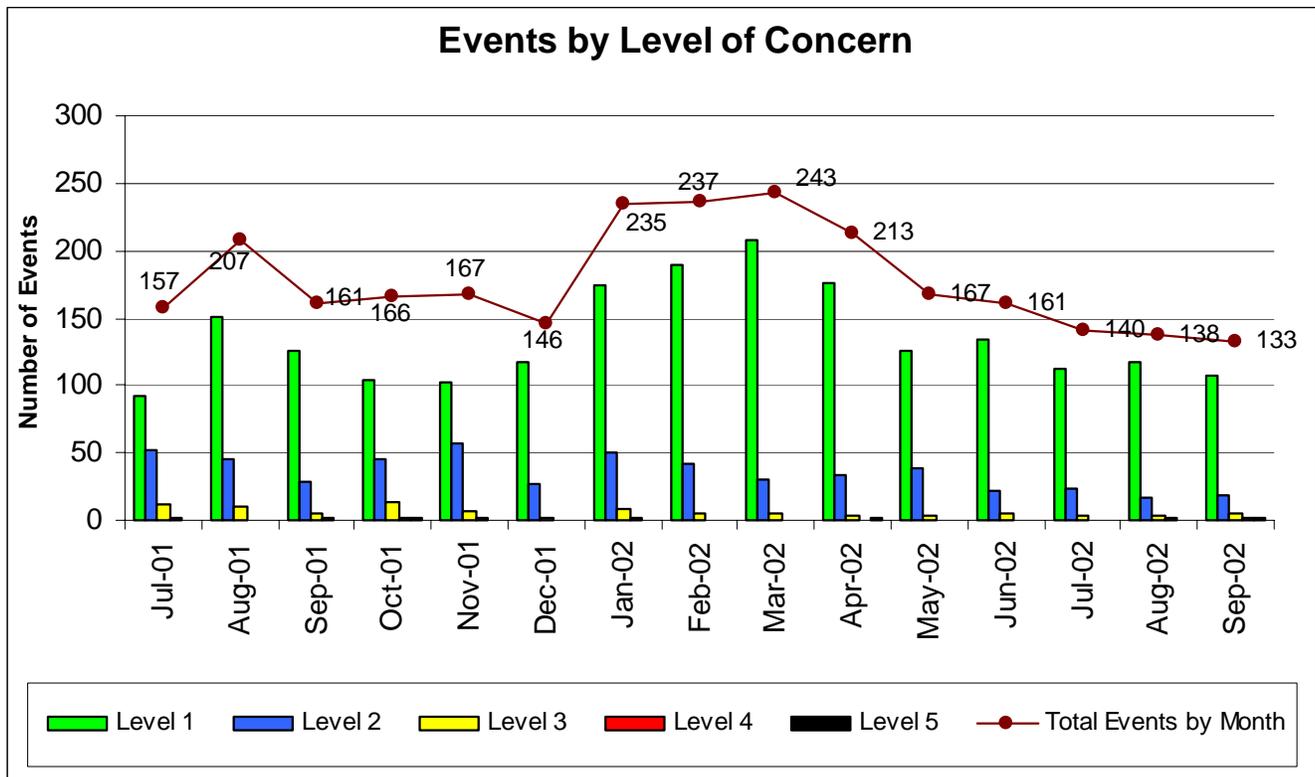
## Safety

James Jeffries x 7417

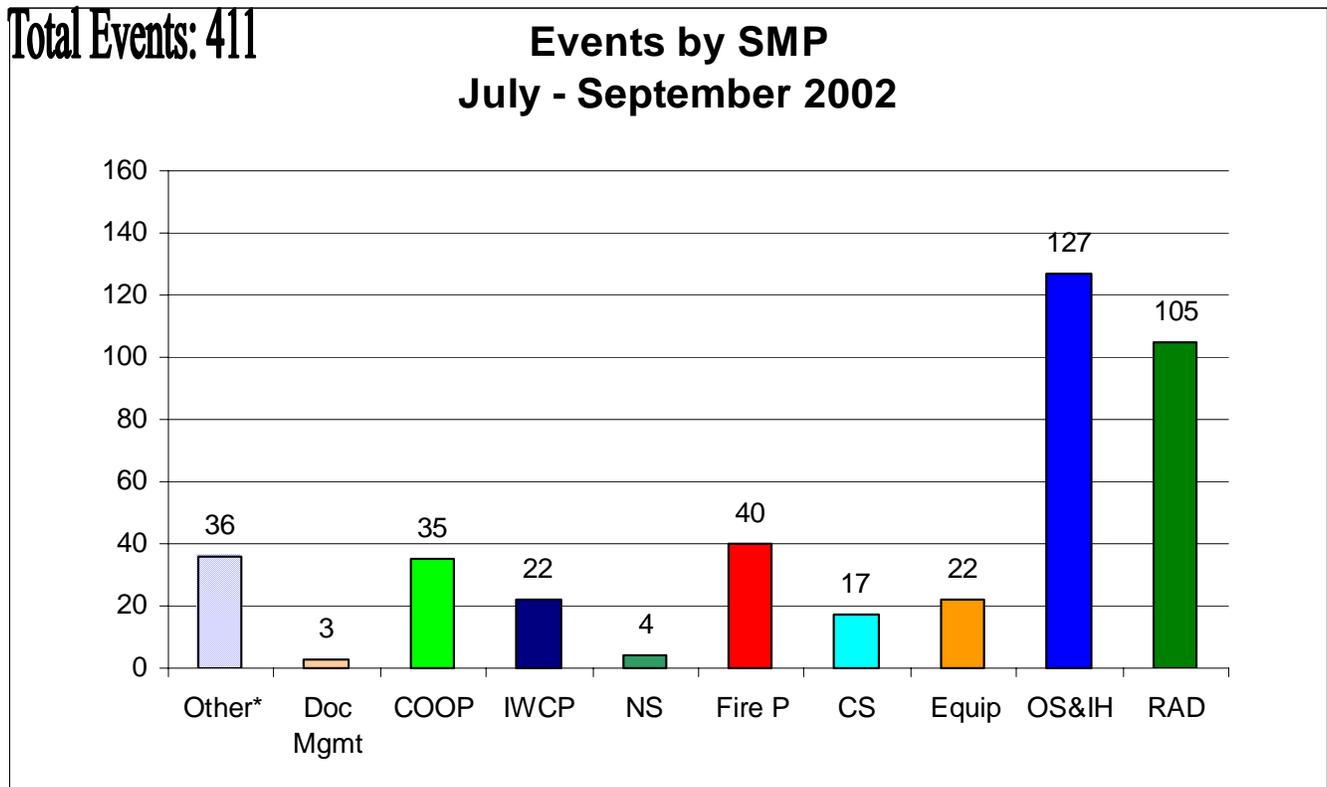
### B.6 Safety Analysis

There are no reported incidents where the B.6 safety criteria were exceeded (and contractual actions taken) during the fourth quarter of FY 2002.

The focus on safety related concerns is a high priority at the Rocky Flats Site. The site-wide events identified below are representative of a wide variety of D&D activities and are analyzed in the Safety Assessment Center (SAC). Some categories of events may have a seemingly large number of events, but the concern level remains low due to the nature of the events. Much of this information is used as leading indicators, directing our safety program improvements.



Safety at the Rocky Flats Site is managed very aggressively with the intent that RF Safety Management Programs (SMPs) are responsive to identified concerns. Site-wide events are analyzed from a safety program perspective as identified below. This data helps direct specific safety program improvements in an effort to improve safety at the Site. Again, some categories of events may have a seemingly large number of events, but the concern level remains low due to the nature of the events.



#### Focus Areas:

- Electrical Safety
- Fall Protection
- Hoisting and Rigging
- Heavy Equipment
- Fire

#### Improvement Initiatives:

- Increased Occupational Safety/Industrial Hygiene Personnel
- Increased Union Safety Representatives
- JCUSC Cross Building Safety Walk-downs
- KH Corporate Safety Review
- Subcontractor Safety Mentoring
- Safety Stand-downs/Safety Presentations
  - Electrical Safety Stand-down-August
  - Safety Speaker/Presentation-August
  - General Safety Stand-down-September

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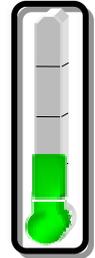
## PBD A 371 Complex Fred Gerdeman x6203

BCWS <sub>LC</sub>	436,783
ACWP <sub>CUM</sub>	244,127
BCWP <sub>CUM</sub>	230,050
BCWS <sub>CUM</sub>	238,422
CV <sub>CUM</sub>	-6%
Scope Completed	53%
Cost Expended	56%

This PBD is over cost and behind schedule. This PBD has a negative CV (cumulative) of -\$14M (-6%). Most of the Closure Project's negative CV is accumulated in this PBD. -\$28M in negative cost variance in PuSPS and "Measurements, MH&P POC Activities", is partially off-set by positive CV in Project Management, Decommissioning, and Residues. The negative CV is not expected to be recovered during the life of the project, and may increase.

The contractor completed \$2.7M in PWA scope this quarter, recovering about \$1M in accumulated negative SV. The RFFO verified SV on PWAs now stands at -6%, or -\$2M. KH reports an additional \$468K in cumulative earned value. \$350K of the delta is from a glovebox deactivation PWA that was not validated as complete. The rest is due to the different methodology the contractor uses to calculate the EV on quantity based measures.

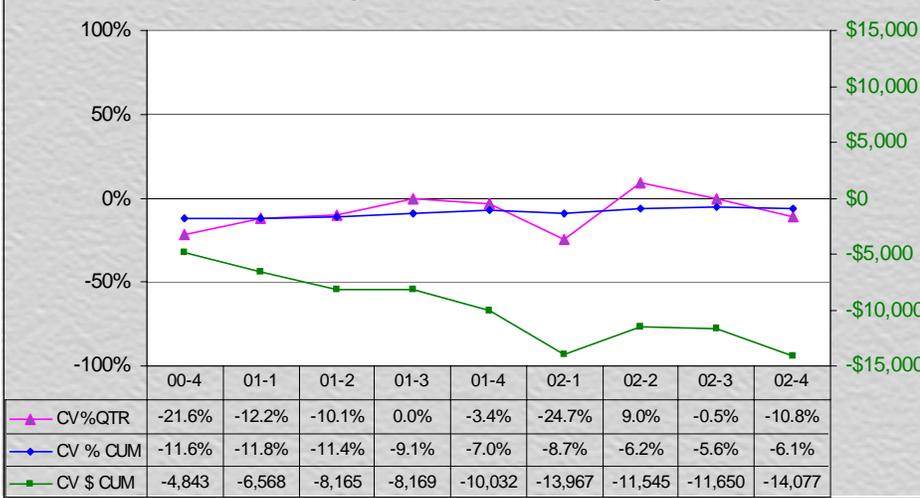
\$128M



\$34M  
27%

**PWA  
Completion**

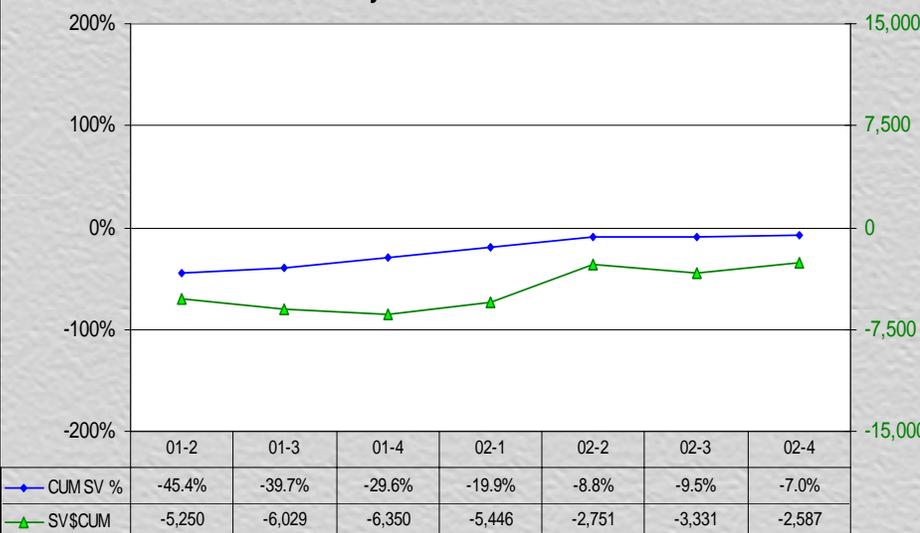
**Quarterly Cost Variance Percentage**



**Accomplishments this quarter:**

- SNM shipments to SRS have started.
- Completed 4 deactivation / decommissioning PWAs including decommissioning PWA set 15: "Criticality Tank Dismantlement" for a quarterly total of \$2.7M. (K-H claimed 5 PWAs were completed, but RFFO determined that set 12 was not complete.)
- Completed cleanout of Tank 231B to facilitate transition to using the Alternate Waste Treatment System.
- PuSPS 984 acceptable 3013s have been completed, certified and verified and released for shipping.
- TRU waste packaging is progressing.

**Quarterly PWA Schedule Variance**



**Potential Impacts to Cost & Schedule:**

- Availability of areas to deactivate or decommission will decrease because they will be needed for storage if SNM shipments cannot be made. However, the contractor is rescheduling activities to minimize the impacts

**UPCOMING:**

*Key Activities / Milestones / GFS/I*

- 9975 SARP revision 14 approval by 12/15/02.
- Complete packaging of TRU waste.
- Approve Decommissioning BIO 2/03.
- Demolition subcontract approval 2/03.

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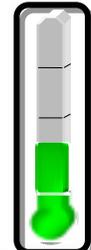
**PBD B**  
**707 Complex**  
 Gregg Nishimoto x7022

BCWS <sub>LC</sub>	267,761
ACWP <sub>CUM</sub>	132,057
BCWP <sub>CUM</sub>	133,072
BCWS <sub>CUM</sub>	127,685
CV <sub>CUM</sub>	1%
Scope Completed	50%
Cost Expended	49%

This PBD is slightly below cost and ahead of schedule. The project has a 4.2% schedule variance and a 0.8% cost variance. By comparison, last quarter, the project reported a 3.6% schedule variance, and a 0.6% cost variance.

A total of \$4.9 million in PWA earned value was validated this quarter. The cumulative schedule variance for Predetermined Work Activities is 22% (+\$6.5M) a decrease from 41% in June 2002. Although the variance is still positive, the decrease reflects the more difficult D&D sets being done. Seven sets were completed this quarter.

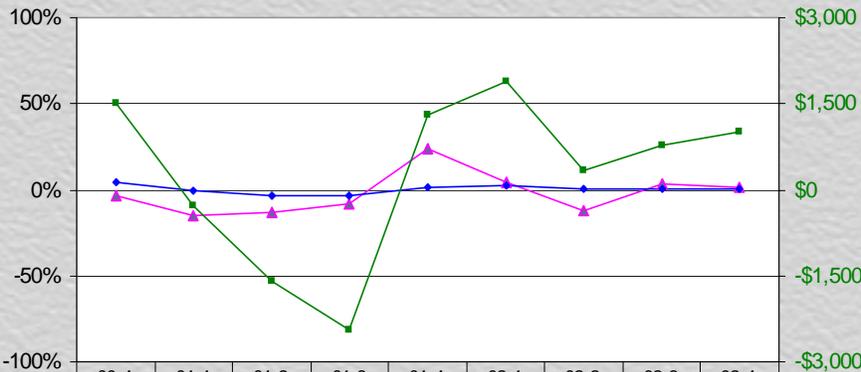
\$111M



\$36M  
32%

**PWA**  
Completion

**Quarterly Cost Variance Percentage**



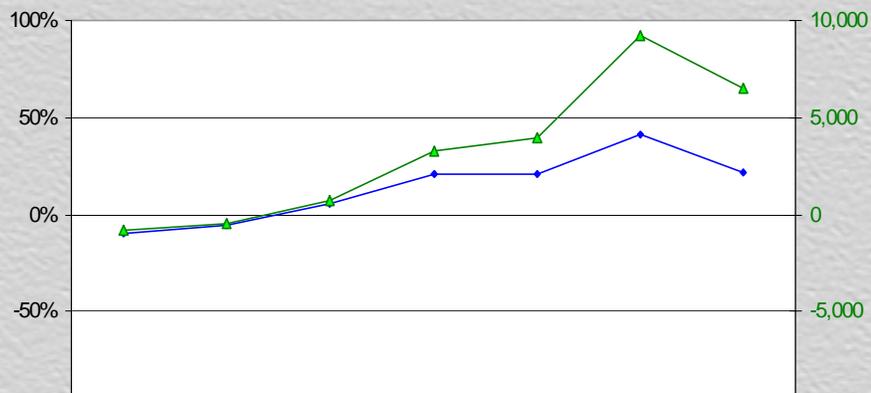
**Accomplishments this quarter:**

- Seven D&D sets were completed: Second Floor, Set 19 - equipment removal, Sets A3, A5, B1, B2, F2, and F4.

**Potential Impacts to Cost & Schedule:**

- None

**Quarterly PWA Schedule Variance**



**UPCOMING:**

Key Activities / Milestones / GFS/I

- Complete 6 D&D work sets (next 90 days)

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**PBD C**  
**771 Complex**  
 J. Brothers x7756

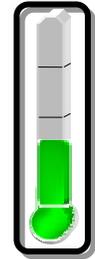
BCWS <sub>LC</sub>	<b>231,935</b>
ACWP <sub>CUM</sub>	162,820
BCWP <sub>CUM</sub>	154,482
BCWS <sub>CUM</sub>	147,549
CV <sub>CUM</sub>	-5%
Scope Completed	67%
Cost Expended	70%

This PBD is ahead of schedule, but over budget. With 64% of the work scheduled to date, cumulative variances show an SV of +5% and a CV of -5%. Most of the negative cost variance is concentrated in Support Services and Maintenance (-\$16M).

The PBD has maintained positive cumulative schedule variances for the last seven months and has currently accomplished about \$7M in accelerated work scope.

The contractor completed \$4M in PWA workscope this quarter, slightly more than was scheduled. Cumulative PWA performance is excellent at +12%, reflecting \$3M in accelerated scope.

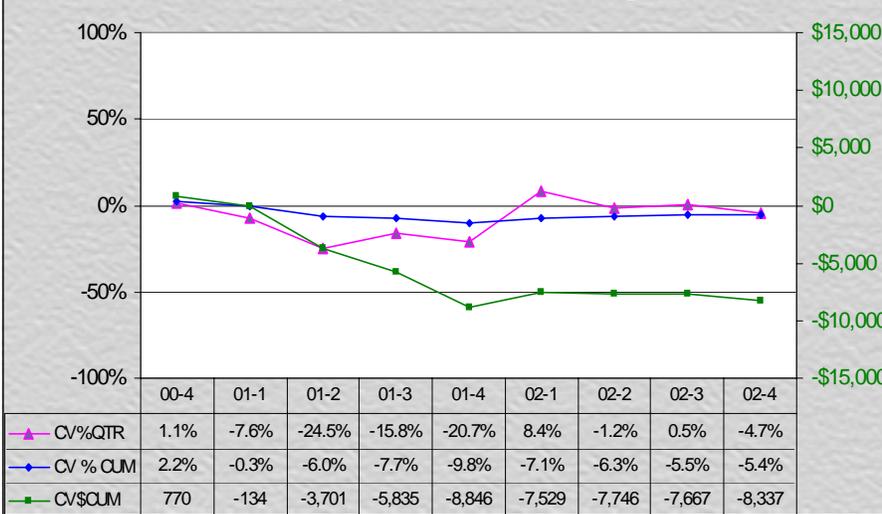
\$77M



\$29M  
38%

**PWA**  
Completion

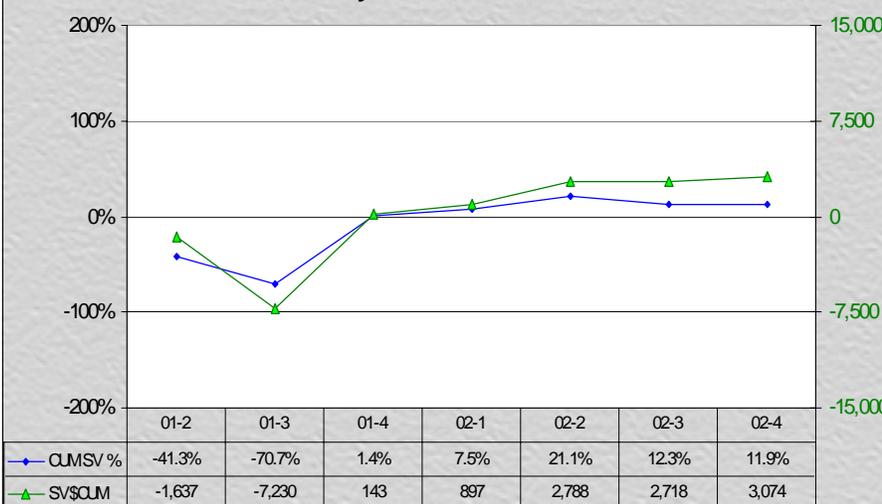
**Quarterly Cost Variance Percentage**



**Accomplishments this quarter:**

- KH completed five-D&D sets (#22, #75, #63, #83, #84 and Area AN (Structural Decon)
- Drained System 95 (a liquid system in B774).
- Two of the largest tasks completed this quarter were the completion of Set 22 (Incinerator firebox) and Removal of Set 63, requiring over 600 bag outs

**Quarterly PWA Schedule Variance**



**Potential Impacts to Cost & Schedule:**

- The majority of work left in Bldg 771 is the removal of Raschig ring tanks. If these tanks cannot be successfully decontaminated the cost and / or schedule variances may be negatively impacted.

**UPCOMING:**

*Key Activities / Milestones / GFS/I*

- None

# Total Project Report RFFO RFETS

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**PBD D**  
**776/7 Complex**  
 Gary Schuetz x3016

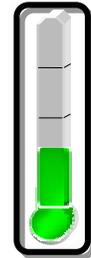
BCWS <sub>LC</sub>	<b>268,342</b>
ACWP <sub>CUM</sub>	117,443
BCWP <sub>CUM</sub>	122,107
BCWS <sub>CUM</sub>	105,890
CV <sub>CUM</sub>	4%
Scope Completed	46%
Cost Expended	44%

This PBD is ahead of schedule and under budget. The PBD has a schedule variance of \$16.2M (15.3%), and a CV of \$ 4.7M (4%). This is consistent with last quarter's \$14.1M (SV<sub>CUM</sub>) and \$4.3M (CV<sub>CUM</sub>).

Most of the positive SV (\$15.6M) is in Decommissioning. A large part of the positive CV is attributable to D&D Technology (\$7.1M).

Predetermined Work Activities continue their positive trend and are more than 100% ahead of schedule (\$19.6M), at the end of the Quarter. The contractor accomplished \$7.6M in PWA scope this quarter – more than doubling planned performance.

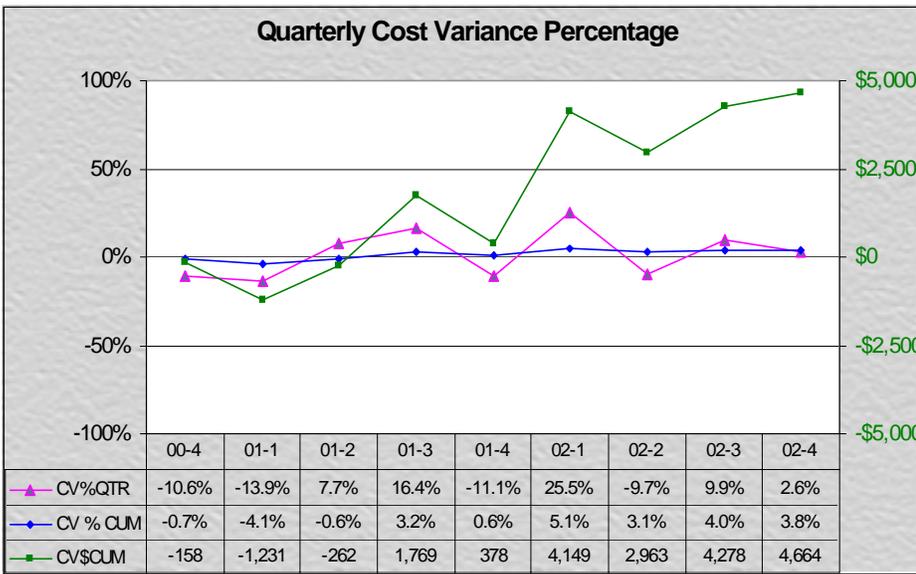
\$122M



\$38M  
31%

**PWA**  
Completion

**Quarterly Cost Variance Percentage**



**Accomplishments this quarter:**

- 7 work sets this Quarter (28 total FY 02)
- 68 of 84 work sets completed to date
- First location suspected to have buried equipment, the Autoclave Pit under the floor of the Carpenter Shed, was accessed and found to have no equipment or contamination in it.

**Potential Impacts to Cost & Schedule:**

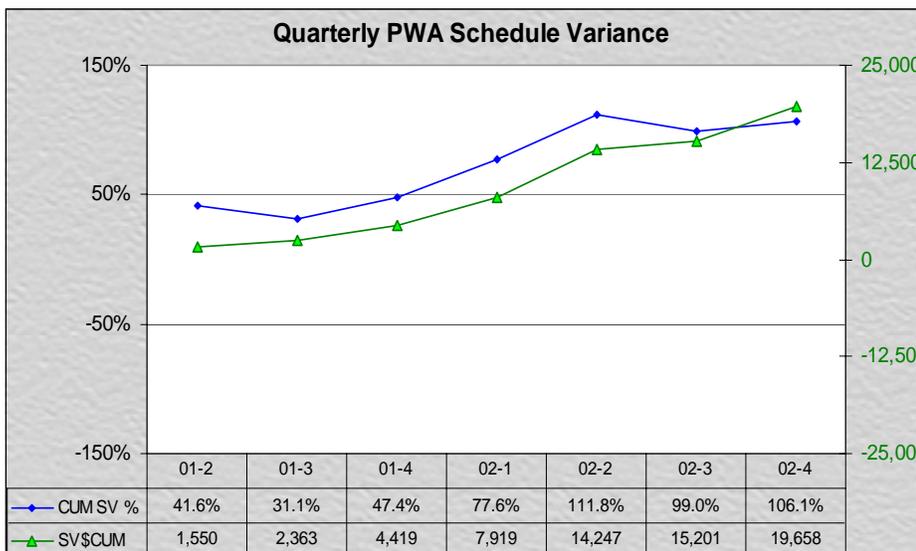
- Unknown conditions such as buried equipment and building demolition continue to challenge baseline assumptions

**Upcoming:**

Key Activities / Milestones / GFS/I

- The project initiated a re-review of the buried equipment work set. Personnel interviews, a search of relevant documents and records and results from core-boring into suspected areas suggest that there is reason to believe that there is not equipment buried in these areas as was originally suspected. The project is preparing a report to support their conclusion and is expected to be available to DOE late in the first quarter of FY-03.
- Contaminated building demolition strategies are being discussed with DOE. The project is evaluating risks when demolishing the contaminated facility without a confinement structure. The target date for regulator approval of the structural demolition is June 2003.

**Quarterly PWA Schedule Variance**



# Total Project Report RFFO RFETS

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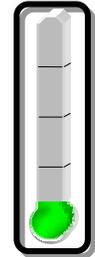


## PBD E Industrial / Site Services Steve Tower, x2133

BCWS <sub>LC</sub>	<b>794,086</b>
ACWP <sub>CUM</sub>	243,323
BCWP <sub>CUM</sub>	306,028
BCWS <sub>CUM</sub>	246,783
CV <sub>CUM</sub>	20%
Scope Completed	39%
Cost Expended	31%

This PBD continues to be ahead of plan and under cost. Compared to baseline, the cost variance is a positive 20%, \$63M, and schedule variance is positive 24%, \$59M. The projected completion date for Industrial Area D&D is December of 2005. \$21M of positive cost variance and \$16M of schedule variance were generated this quarter. Most of this progress can be attributed to Area 1 decommissioning progress, mostly in the large 800 area buildings, but building 444 demonstrated substantial progress too, now having most of its equipment removed. Building 886 cluster buildings completed decommissioning as a PWA accomplishment this quarter. The contractor completed \$1.5M in PWA scope this quarter (all of it accelerated), bringing the cumulative PWA variance to +\$6.2M.

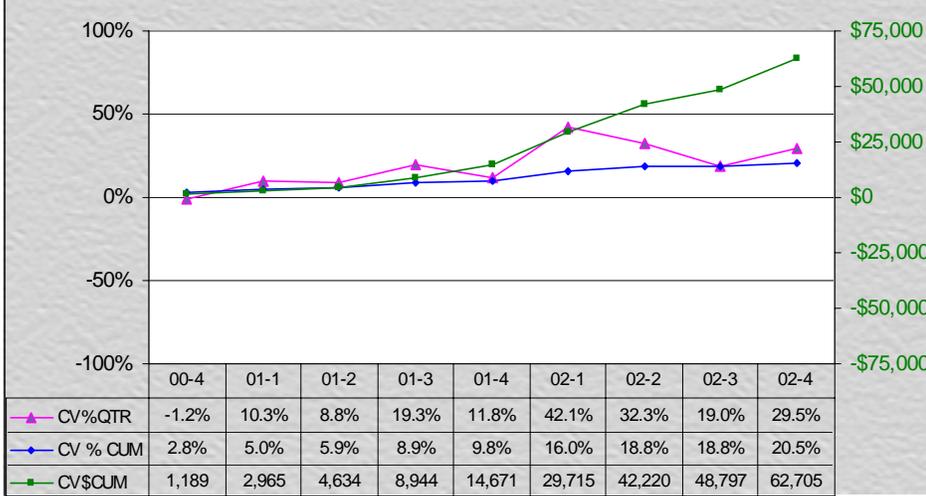
\$306M



\$9.5M  
3%

**PWA**  
Completion

**Quarterly Cost Variance Percentage**



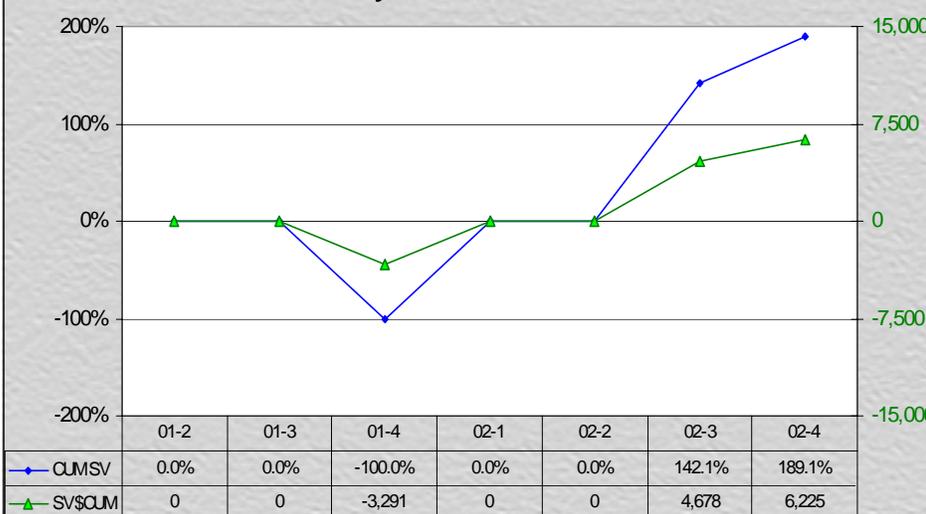
**Accomplishments this quarter:**

- Demolished buildings 850, 280, 125 and 19 other smaller bldgs & trailers.
- Initiated decommissioning in Buildings 881 and 883.
- The newly installed temporary boiler system started up and is now carrying Site steam load allowing boiler plant decommissioning.

**Potential Impacts to Cost & Schedule:**

- Continued lack of safety achievement in Building 865 could jeopardize schedule for completion of that project and maybe others but not the Site closure date as south side decommissioning is well ahead of schedule.

**Quarterly PWA Schedule Variance**



**UPCOMING:**

*Key Activities / Milestones / GFS/I*

- Buildings 334, 441, 443 demolition,
- AWTS Operations to make first off-Site shipment of aqueous waste for off-Site treatment in December

# Total Project Report RFFO RFETS

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## PBD F Material Stewardship

Fran Geurink x4619

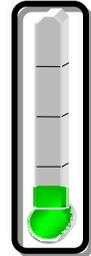
BCWS <sub>LC</sub>	<b>858,373</b>
ACWP <sub>CUM</sub>	<b>385,547</b>
BCWP <sub>CUM</sub>	<b>394,577</b>
BCWS <sub>CUM</sub>	<b>390,789</b>
CV <sub>CUM</sub>	<b>2%</b>
Scope Completed	<b>46%</b>
Cost Expended	<b>45%</b>

With 46% of the work scheduled to have been completed, this PBD is under cost and ahead of schedule. The PBD has a cost variance of \$ 9M (2.3%), and a schedule variance of \$4M (1%). This is the first time PBD F has achieved a positive cumulative SV since July 2000.

763 m<sup>3</sup> of TRU Waste were shipped in 98 shipments this quarter.

RFFO validated \$6.6M in PWA scope performance this quarter, bringing the accumulated positive schedule variance to \$17M. KH reports an additional \$238K in earned value to-date due to differing methods of EV calculation.

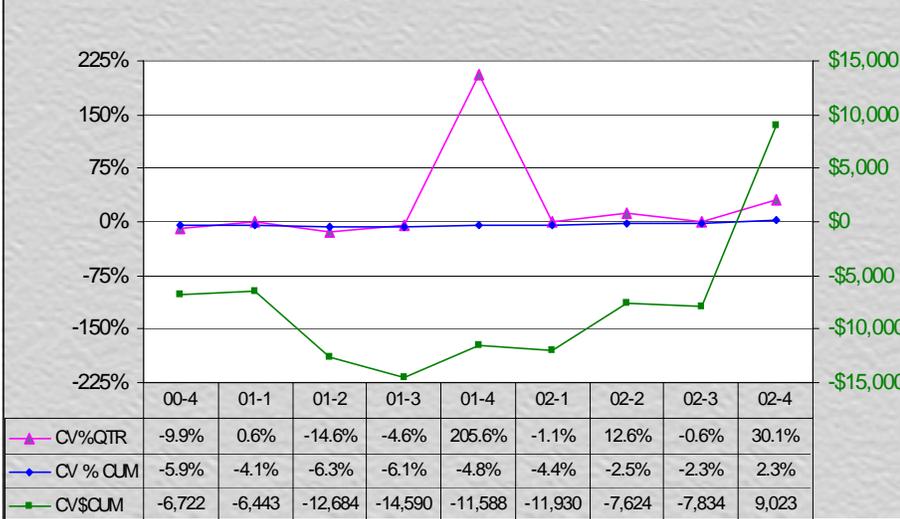
\$161M



\$30M  
19%

**PWA  
Completion**

**Quarterly Cost Variance Percentage**



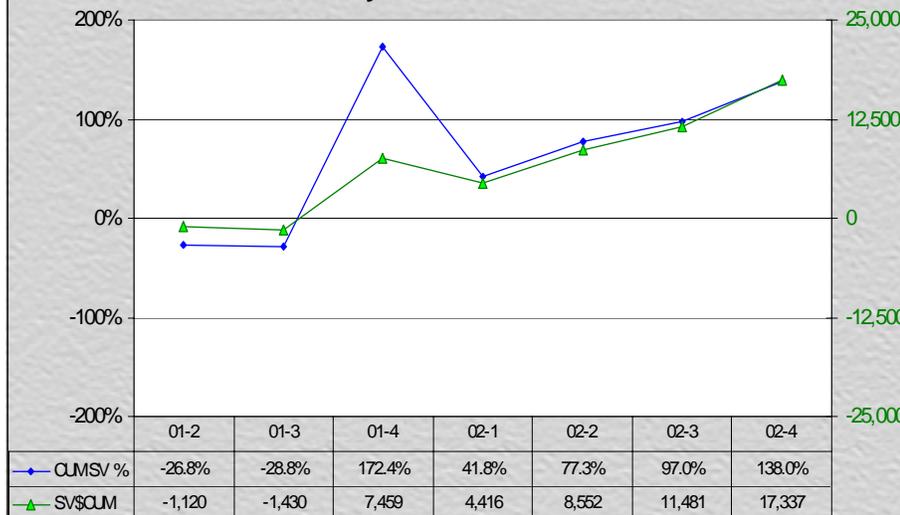
**Accomplishments this quarter:**

- Shipped 975 m3 of Solar Pond Sludge in the 4th Qtr. of FY02
- Shipped 7,993 m3 of LL Waste to NTS in the 4th Qtr. of FY02
- Began LL/LLMW storage operations in Building 460 in August FY02

**Potential Impacts to Cost & Schedule:**

- Receiver sites for LLMW (>10nCi/g)
- Continued availability of TSCA Incinerator for organic solids and sludges

**Quarterly PWA Schedule Variance**



**UPCOMING:**

*Key Activities / Milestones / GFS/I*

- All FY02 Site Treatment Plan (STP) Milestones were met for Low-Level Mixed Waste. This included shipment of some waste previously referred to as "Orphans", including Granular Activated Carbon, Mercury, and Liquid PCBs during the 4th Quarter of FY02.

# Total Project Report RFFO RFETS

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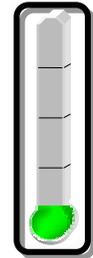
## PBD G Remediation Norma Castañeda x4226

BCWS <sub>LC</sub>	295,956
ACWP <sub>CUM</sub>	21,929
BCWP <sub>CUM</sub>	31,883
BCWS <sub>CUM</sub>	25,473
CV <sub>CUM</sub>	31%
Scope Completed	11%
Cost Expended	7%

This PBD is ahead of schedule and under cost. The CV<sub>CUM</sub> is at +31.2 % (\$9.9M), and the traditional SV<sub>CUM</sub> is at 25.2 % (\$6.4M). The main drivers for the positive variances are the site preparation and equipment mobilization activities of the 903 Pad, and the Solar Evaporation Ponds Remediation work.

The Contractor is taking credit for the completion of six PWAs ahead of schedule this quarter, and reporting a cumulative schedule variance on the PWAs of +\$6.4 million. Work completed to date on these PWAs has been verified and found satisfactory. However, until the Close-out Reports are approved by the regulators, RFFO cannot validate PWA completion. Therefore, cumulative PWA SV stands at +\$834k and +159% (\$5.6M delta).

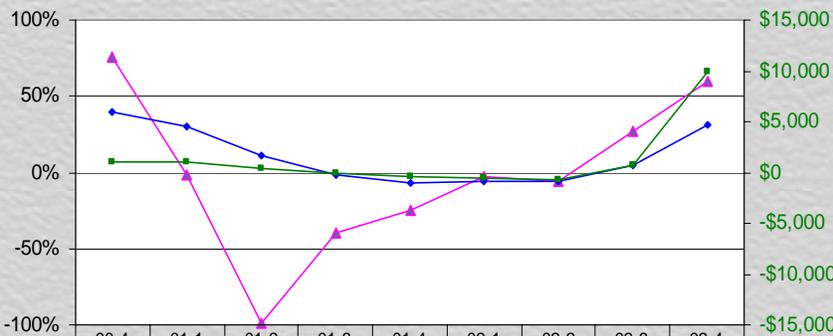
\$240M



\$1.4M  
1%

**PWA  
Completion**

**Quarterly Cost Variance Percentage**



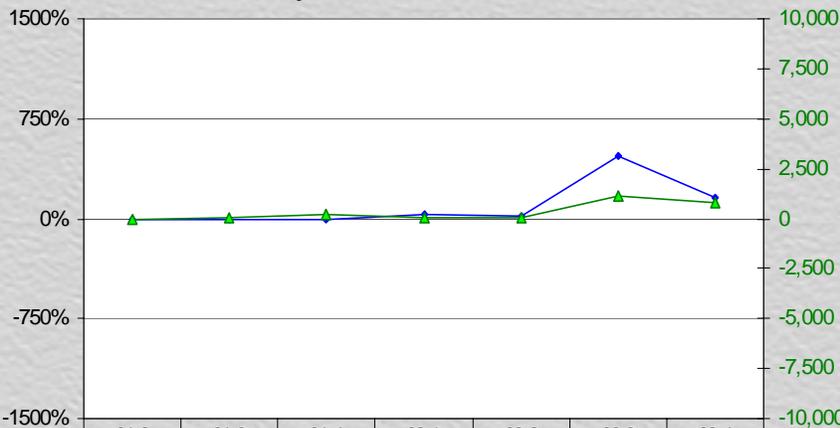
**Accomplishments this quarter:**

- Remediated B442 site
- Removed Sixth Street and RR tracks
- Remediated B886 and B889 slab
- Remediated area between B440 and B664, the asphalt surface near B559 (Former pesticide storage area), and Portal 1 waste process spill
- Mobilized for 903 Pad Remediation

**Potential Impacts to Cost & Schedule:**

- None at this time

**Quarterly PWA Schedule Variance**



**UPCOMING:**

Key Activities / Milestones / GFS/I

- Start excavation of 903 Pad (Project duration is 6-7 months)
- Complete field characterization of Individual Hazardous Substance Site (IHSS) Groups 600-1 (B663 slab removal and remediation of soil), and 600-2 (T452A/B/G/F)
- Complete No Further Action (NFA) field characterization of IHSS Groups 300-6 and 500-7
- Complete remediation of Solar Evaporation Ponds

# Total Project Report RFFO RFETS

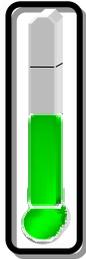
4QFY02 • July - Sep 2002

## PBD H

### Engineering, Environmental, Safety, Health & Quality

J. Torma-Krajewski x7165

\$239M



\$124M  
52%

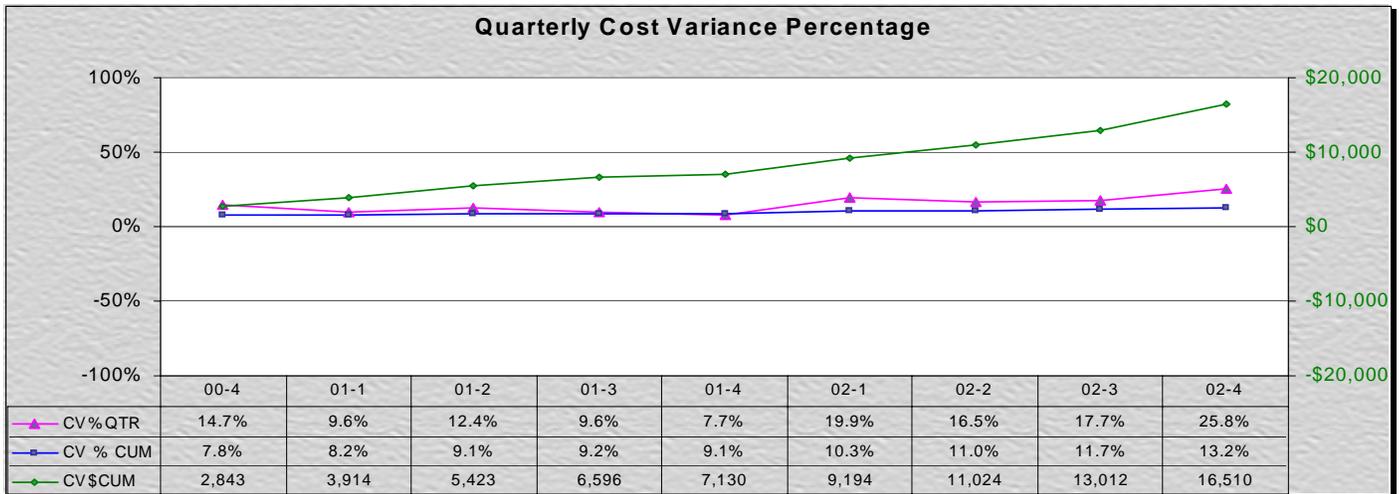
BCWS <sub>LC</sub>	<b>239,299</b>
ACWP <sub>CUM</sub>	108,445
BCWP <sub>CUM</sub>	124,955
BCWS <sub>CUM</sub>	124,955
CV <sub>CUM</sub>	13%

This level-of-effort PBD is +13% under budget (+\$16.5M). PBD H accumulated +\$1.8M in positive cost variance during this quarter, bringing the cumulative CV to +13% and +\$16.5M.

The contractor attributes the positive CV in this PBD in large part to staff vacancies.

#### Scope Completion

Quarterly Cost Variance Percentage



#### Accomplishments this quarter:

- The CDPHE Water Quality Control Division removed portions of the Big Dry Creek Segment 5 from the Total Maximum Daily Load List.
- Issued a proposed action memorandum, Draft RCRA Closure of the RFETS Solar Evaporation Ponds, for regulator review.
- K-H completed a draft version of the "White paper on Site-Wide Water Balance Model Application: Assessment of Sub-Surface Flow in Selected Areas of Groundwater Contamination and Simulation of Additional Land Configuration Scenarios," as a precursor to groundwater VOC modeling work scheduled for FY03.
- A joint RFFO/K-H assessment of the Fire Department was conducted. Staffing requirements are being met despite the adverse circumstances of being a closure site.

#### UPCOMING:

Key Activities / Milestones / GFS/I

- Kaiser-Hill is developing decision flow charts for the Site Water Management Plan, which are needed to ensure compliance with water quality standards through to closure.

#### Potential Impacts to Cost & Schedule:

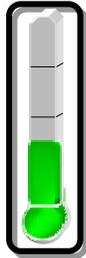
- Numerous problems involving Pu mass overloading of waste containers have occurred during this quarter, and eight have occurred in just the last month. (Self-reported by K-H)
- There were two Price Anderson Amendments Act Noncompliance Tracking System (NTS) violations identified during the fourth quarter of FY02. The RFFO is currently tracking 15 Site NTS reports: eight are open, six are in closure review by RFFO, and one is awaiting Office of Enforcement (OE) closure.
- K-H's criticality physics staffing expertise continues to decline. The last senior-level criticality physics expert resigned.

# Total Project Report RFFO RFETS

4QFY02 • July - Sep 2002

## PBD J Support Project Bob Birk x5921

\$591M



\$228M  
39%

**Scope  
Completion**

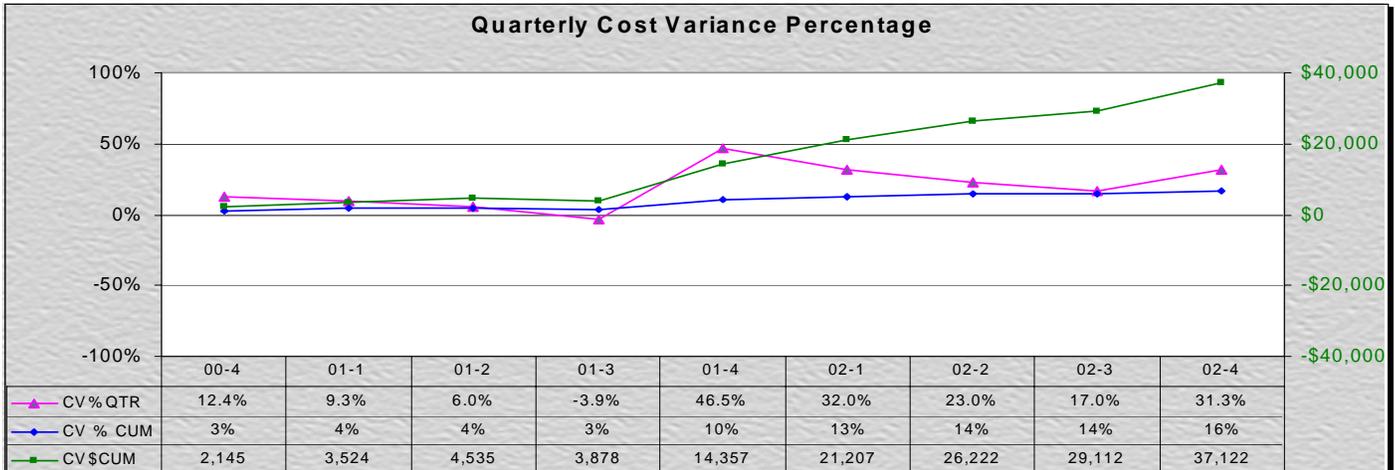
BCWS <sub>LC</sub>	<b>590,779</b>
ACWP <sub>CUM</sub>	191,304
BCWP <sub>CUM</sub>	228,427
BCWS <sub>CUM</sub>	228,427
CV <sub>CUM</sub>	16%

This level-of-effort PBD has completed 39% of its workscope and expended 32% of its costs. PBD J tends to run positive cost variances with an average monthly CV of +20% calculated since June 2000. It is currently 16% under cost (+\$37M).

PBD J accumulated another +\$8M in positive cost variance during this quarter (CV<sub>QTR</sub>), bringing the cumulative CV to +\$37M.

This PBD is also a major contributor to the Closure Project's overall positive cost variance with 31% of the project's positive CV at the PBD level.

**Quarterly Cost Variance Percentage**



**CAD Cost Analysis:**

JAA – KH Executive Office was +84%, or \$15M. The positive CV is primarily due to cost risk funds held in management reserve (contingency) in this cost account, along with previous understaffing.

JAB – General Counsel & Audit was +27%, or \$1.5M. The positive CV is due to historical under staffing of this cost account partially offset by an underestimate of outside legal counsel costs.

JAC – Planning and Integration cost variance was +20% or \$4.1M. The positive CV is due to several positions being periodically understaffed and reduced consulting subcontract costs.

JAE – Steelworker Overhead cost account was +25% or \$3.2M. The positive CV is due to the difference between the budgeted amount of lump sum bonuses planned for distribution and the amount actually paid as well as lower idle/training time charges to steelworker overhead account.

JAG – Fringe Benefits- was +100% or \$7.2M. The positive CV is due to a greater than planned recovery of fringe benefits costs because more labor hours were worked than originally planned. This is due to higher than anticipated use of security and steelworker overtime. By fiscal year end (end of this quarter), all fringe benefits costs are allocated to the projects based on direct labor dollars.

**Accomplishments this quarter:**

- Relocated internet access support to Denver Federal Center and dispositioned 10,009 cu. Ft. of records for FY02.

**UPCOMING:**

*Key Activities / Milestones / GFS/I*

- None

**Potential Impacts to Cost & Schedule:**

- None.

# Total Project Report RFFO RFETS

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4QFY02 • July - Sep 2002

## Rocky Flats Field Office

Budget: Lance Schlag x3171

### **RFFO Budget**

#### **Performance**

EW05 Budget Authority \$24.7 M, Obligated through September \$24.5 M or 99%.

FS40 Budget Authority \$.45M, Obligated through July \$.45 M or 100%

#### **Issues/Concerns**

RFETS utilities costs have been managed successfully and are no longer a near-term concern. RFFO provided approximately \$9 M in funding to Kaiser-Hill to accelerate closure activities during the Fourth Quarter.

.

#### **Upcoming Focus**

Continuing to manage commitments and obligations in a manner that reduces RFFO support requirements and provides additional funding to Kaiser-Hill to accelerate closure activities.

## Appendix A

POC: Greg Moore x2394

### SNM Shipping

*Update as of November 2002*

#### **Description:**

Removal of special nuclear material (SNM) is a critical activity in achieving RFETS closure schedule and cost targets. The magnitude of the uncertainties related to SNM shipping are decreasing as DOE addresses the issues of shipping containers and receiver sites. Remaining key issues include:

- EM-5 packaging approvals to use the 9975 for certain plutonium metals, oxides and special items
- Absolute confirmation of receiver sites for all SNM

#### **Current Status:**

DOE guidance includes:

- Plutonium metals and oxides will be sent to SRS
- HeU will be sent to SRS
- 125 parts greater than 1000 A2 will be packaged in containers certified for these materials and shipped to SRS

#### **Milestones**

- Shipments to SRS have begun.

#### **Top to Bottom References**

- Issue #5 Safeguards and Security: Reducing the Threat at EM Sites – Special Nuclear Material remaining at Rocky Flats longer than necessary is not optimum for safety and security and increases the baseline cost of operating the site.
- Issue #10 Packaging and Transportation to Support Accelerated Risk Reduction – current packaging and transportation policies and procedures are delaying the removal of the material from Rocky Flats, causing increased costs and delaying risk reduction. In addition, the lack of organizational responsibility and accountability for packaging and transportation has resulted in long delays in package certification (e.g., 9975, DT22), which in turn has caused delays in the removal of materials from sites. The inability to predict when certified containers will be available makes it difficult to schedule SSTs and to negotiate shipments with states.

#### **Sensitivities**

- If there are cost and schedule impacts, the contractor will request an equitable adjustment resulting in an increase to target cost and target schedule.
- Tri-Valley CARES lawsuit
- Governor of South Carolina position on shipping SNM

## Appendix B

POC: Steve Slaten x4839

Lam Xuan, x3135

### Orphan Wastes

*Update as of November 4, 2002*

#### Issues:

- **Lack of Disposal Capability for Mixed Low-Level Waste greater than 10 nanocuries per gram**

The site currently lacks a disposal site for mixed low-level waste (MLLW) with activity levels greater than 10 nanocuries per gram (nCi/g). Two sites have been identified by the Radioactive Waste Programmatic Environmental Impact Statement (PEIS): Hanford and the Nevada Test Site (NTS). Hanford is not available due to ongoing efforts with the Hanford Solid Waste Program Environmental Impact Statement. The Record of Decision for this EIS is not expected until July 2003 at the earliest. NTS has submitted a permit to the State of Nevada to allow offsite waste disposal of MLLW. This permit is currently under review by Nevada. It is not known when this permit will be approved and disposal of Rocky Flats' MLLW could commence. This lack of disposal capability complicates the Site's plans for treatment of MLLW with activity greater than 10 nCi/g. There are STP milestones to complete offsite shipment of approximately 1000 cubic meters of MLLW, most of it greater than 10 nCi/g. Without disposal capability, this waste will either need to be stored offsite at the commercial treatment facility at increased cost to the closure project or returned to the site after treatment, again with increased costs. Commercial facilities are also restricted by their license limits for storage of radioactive material. Additionally, onsite storage capacity is diminishing as facilities are being decommissioned and demolished. RFFO has requested Kaiser-Hill to perform an analysis of this situation and provide a recommendation to RFFO in November 2002.
- **TSCA Incinerator**

The Toxic Substances Control Act Incinerator (TSCAI) in Oak Ridge, Tennessee, is currently the only available facility for some RFETS wastes requiring incineration. Due to higher than expected levels of Be, two of the original FY02 milestones were not met. These waste streams are PCB Solids and Organic Solids, Non-PCB. A one-year milestone extension was approved by the CDPHE for these milestones. The waste streams have been subdivided to split out the high beryllium population. The result is most of these two waste streams meet the TSCAI acceptance criteria and are awaiting shipment to TSCAI once the FY03 Burn Plan is approved by Tennessee. The high beryllium subpopulations of these waste streams do not have a defined treatment path at this time and Kaiser-Hill is evaluating several treatment options.
- **Availability of Commercial Treatment Facilities**

Some existing wastes are without an available treatment facility. For MLLW, there are several waste streams that do not have a clearly identified treatment option. These waste streams are:

  - Trench T-1 remediation waste (220 cubic meters)
  - High beryllium PCB Solids and Organic Solids, non-PCB (~3 cubic meters)
  - Used Absorbents (1 cubic meter)

RFETS is working with EM-50 on the Trench T-1 waste stream and is currently performing treatability studies at a commercial vendor. The high beryllium and used absorbent waste streams are relatively small and treatment options are being evaluated by Kaiser-Hill.
- **TRU disposition at WIPP**

A number of issues regarding disposal of transuranic waste are being worked on including:

  - Legacy Solidified Organic TRU (OASIS) 807 drums
  - Solid Core Sampling (statistical sampling about 50 drums of the OASIS and aqueous TRU waste populations)
  - Hydrogen Gas Generation Problem (subpopulation of OASIS - (400 drums))
  - Aqueous TRU (500 drums)

## Appendix B, CONT...

- Organic TRU liquids (50 drums)
- TRU waste contaminated with PCB > 50 ppm (25 drums)
- Disposal of Classified TRU waste at WIPP (247 drums)

### **Background:**

Orphan wastes are mixed or PCB wastes that have no current path for treatment to meet disposal site waste acceptance criteria or transportation requirements. As required by the Federal Facility Compliance Act of 1992, a Compliance Order on Consent was signed in 1995 to implement a treatment plan for those wastes in violation of the one year RCRA storage prohibition. This Site Treatment Plan (STP) describes the treatment options for each waste stream and establishes milestones on a rolling basis through negotiations with the State. Milestones are proposed and updated in the Annual Progress Report and Quarterly Progress Update reports. Compliance with the STP is necessary to allow the site to continue storage of mixed wastes in excess of one year without being subject to fines or penalties. To date all milestones have either been met or have been extended by the State. RFETS has several mixed waste streams with milestones due in FY 2003.

EM-50 is providing technical support and funding to find solutions for treatment challenges.

Teams are being created to provide technical support for:

- T-1 Trench Material Disposition Plan
- Bypass and Wet Slurry Cake Sludge Treatment and Disposition Plan
- Plan for Mitigation of WIPP Transportation Issues involving TRU Oasis Sludge

### **Impacts:**

1. If treatment and/or disposal facilities are not found for Low Level Mixed and TRU Mixed Waste, the waste would have to be stored at RFETS or another DOE site after closure.
2. Lack of disposal capability may result in increased storage and/or transportation costs
3. Request extension of STP Milestone(s) from the CDPHE if necessary.

### **Recommendations:**

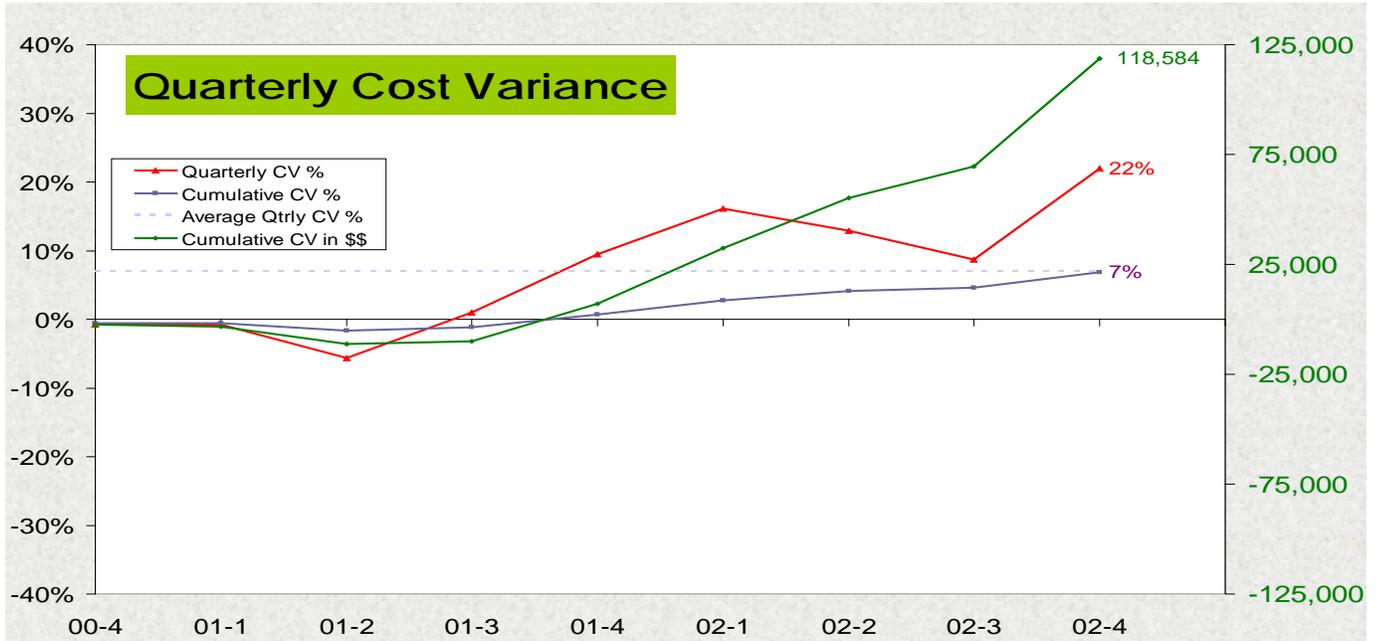
- Continue partnering with K-H, and work with EM-50 on technical assistance for problematic waste streams.
- Brief manager monthly on status of Orphan Wastes.

## Appendix C

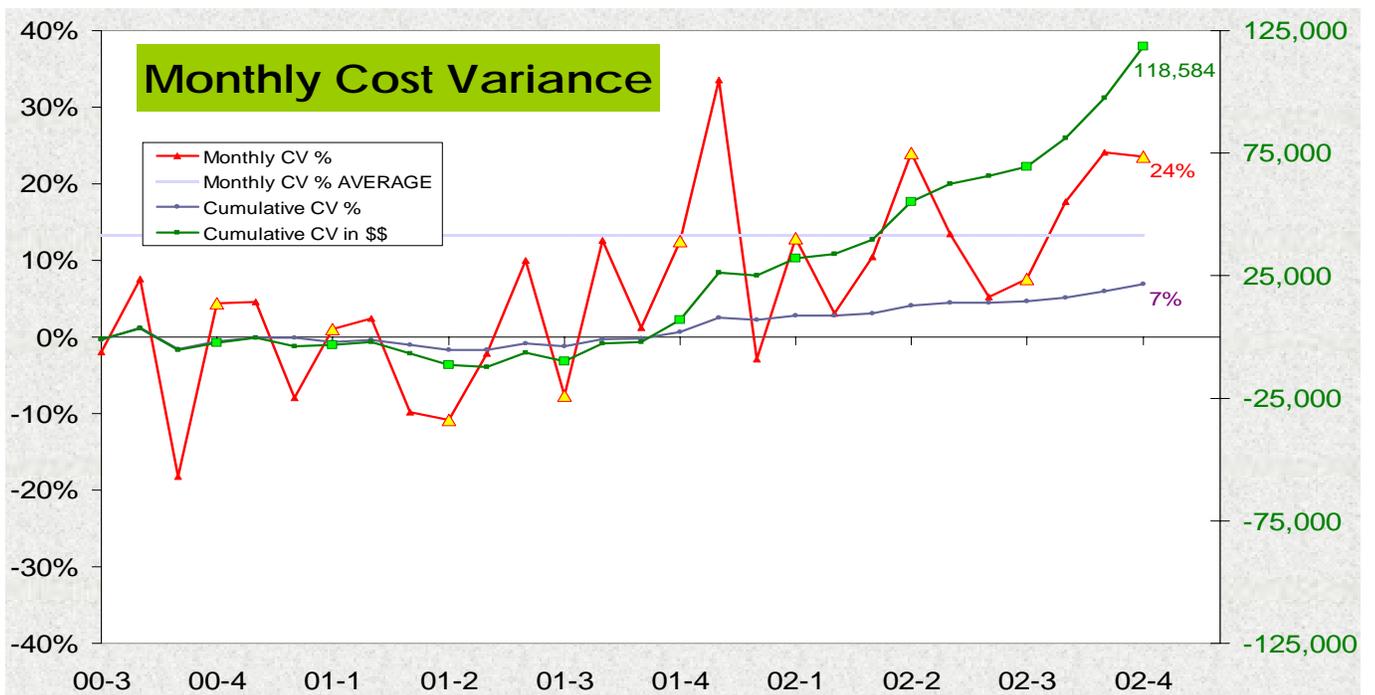
### Cost Variance Trending

The following charts depict Project cost variance trends by quarter and monthly as referenced in the Cost section of the Executive Summary.

#### Quarterly CV



#### Monthly CV



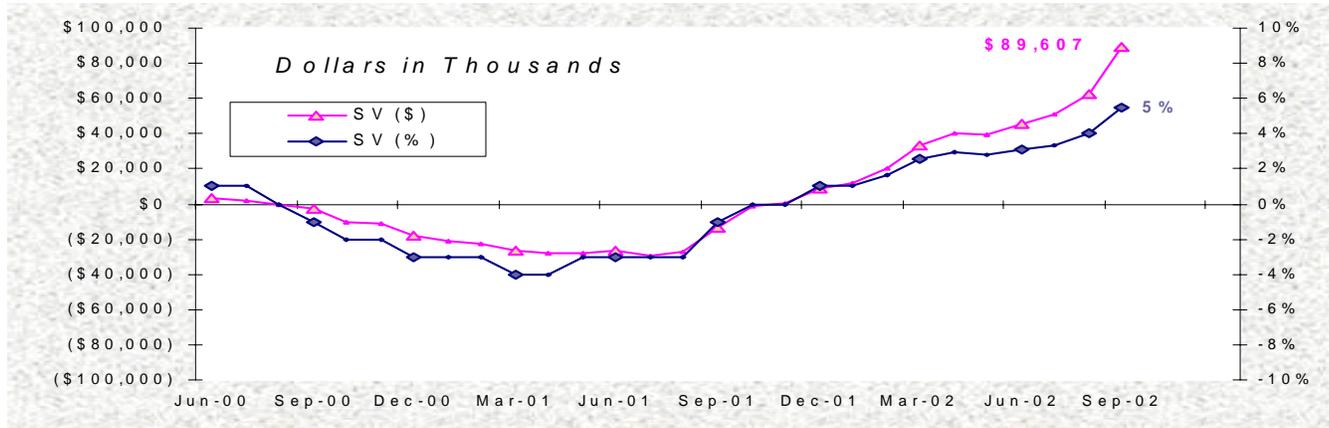
## Appendix D

### Other Schedule Performance Indicators

The following charts depict Project schedule variance metrics used to evaluate K-H schedule performance as referenced in the Schedule section of the Executive Summary.

#### Traditional Schedule Variance

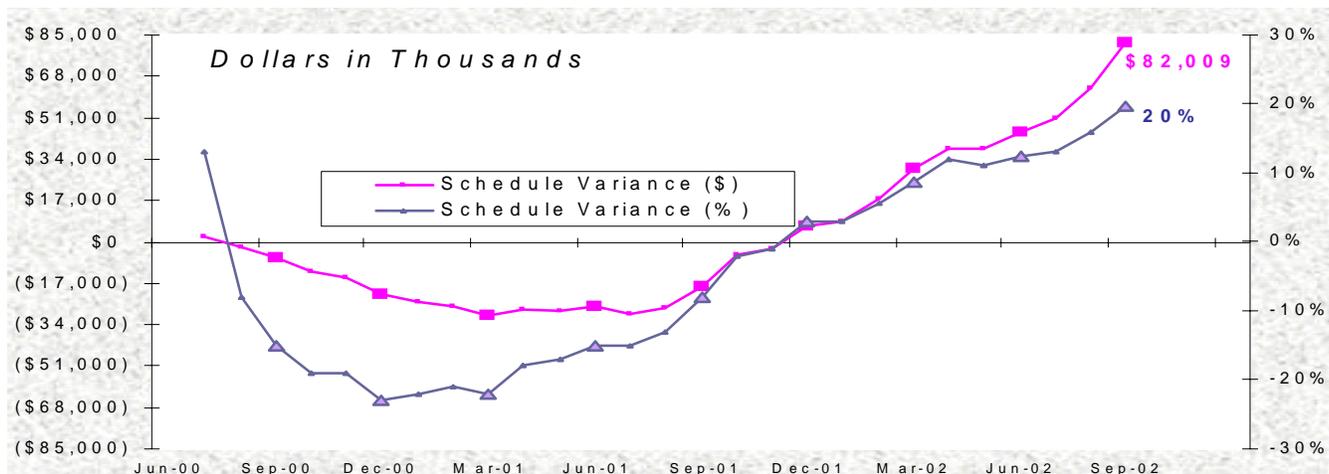
SV\$: +\$90M    SV%: +5%, improving trend



Traditional Schedule Variance (SV) for target activities went from \$45.5M and 5% in June to \$90M and 5% in September.

#### Modified Milestone Schedule Variance

SV\$: +\$82M    SV%: +20%, improving trend



The RFFO has developed a measure of schedule performance called the Modified Milestone SV. This measure takes all level of effort activities and pre-May 25, 2000 activities out of the SV calculation, and adds non-target, EW40 Technology Development milestones. The activities that remain use the traditional method (percent complete of each activity or milestone) to determine earned value. The current Budgeted Cost of Work Scheduled (BCWS) for these modified milestone activities is \$417M, and the life cycle BCWS for these activities is \$1.591 billion (B). The Modified Milestone SV went from \$45M (12%) in June 2002 to \$82M (20%) in September. The change in this indicator is due mostly to additional improvement in the positive schedule performance of the Industrial and Site Services Project, and to the improvements in the Material Stewardship and the Remediation projects which have both pulled out of their negative schedule variances. About 26% (\$417M/\$1,591M) of the modified milestone activities were scheduled to be complete at the end of 3QFY02, and 31% (\$499M/\$1,591M) of the modified milestone activities were completed.

# Total Project Report RFFO RFETS

4QFY02 • July - Sep 2002

## Appendix D CONTINUED

### P3 Completion

**Estimated Completion Date:** 15 December 2006

The *K-H generated* Estimated Completion Dates (ECDs) from the P3 schedule are represented below.

K-H has been closely examining the critical path activities to identify schedule acceleration opportunities. In their September schedule status reporting they have included some modified logic ties/relationships, some expected efficiencies, and have calculated the resultant critical path. RFFO is analyzing this critical path and it appears that the contractor's modified logic ties / relationships have definite acceleration potential. Review of the logic changes is not yet complete, and accordingly, RFFO will continue to utilize December 15, 2006 as the Estimated Completion Date.

PBD	Activity Description	Baseline Early Finish	Stated Early Finish
A	B371	11-Oct-06	01-May-06*
B	B707	13-Mar-06	14-Dec-05
C	B771/774	18-Aug-04	17-Aug-04
D	B776/777	31-Oct-06	05-Jun-06
E	Industrial Sites	11-Oct-06	15-Dec-05
F	Material Stew.	13-Dec-06	24-May-06
G	ER	14-Dec-06	05-Jul-06*
<b>ALL</b>		<b>14-Dec-06</b>	<b>05-Jul-06*</b>

\* Under RFFO Review

### Comparative Schedule Metrics

Positive schedule metrics in B776 Closure Project (D) and the Industrial and Site Services Project (E) are masking negative schedule metrics in the B371 Complex Project (A) caused in part by delays in composite preparation and SNM removal. K-H's revised critical path has resulted in some projected early finish dates for the individual Projects. DOE is still reviewing the K-H changes and will utilize December 15, 2006 as the estimated completion date for the Total Project.

Project		SV <sub>TRAD</sub>	SV <sub>PWA</sub>	SV <sub>MM</sub>	SV <sub>P3 +/- Days</sub>
1A	371 Complex Project	-4%	-6%	-11%	102**
1B	707 Complex Project	4%	22%	12%	54
1C	B771/774 Closure Project	5%	12%	10%	1
1D	B776/777 Closure Project	15%	106%	38%	94
1E	Industrial and Site Services Project	24%	189%	115%	187
1F	Material Stewardship Project	1%	138%*	4%	127
1G	Environmental Remediation	25%	159%*	29%	102**
<b>Total Project:</b>		<b>5%</b>	<b>40%*</b>	<b>20%</b>	<b>102**</b>

\*The RFFO Validated Percentages differ from the KH reports

\*\* Under RFFO Review