



Air Force Center for Environmental Excellence

**Remedial Process Optimization
Scoping Visit Out-brief
DSCR
28 September 2000**

Presented by
Lt Col Daniel L Welch

Overview

- Purpose of the RSV
- DSCR Site Status
- DSCR RSV Recommendations
- DSCR Follow-up



Purpose of the RPO Scoping Visit (RSV)

- Assist base in planning and reaching site closure
 - Scheduling and costing program through closure
 - Identify Remedial Process Optimization opportunities
 - Identify Follow-on RPO Phase II Requirements



RPO Components



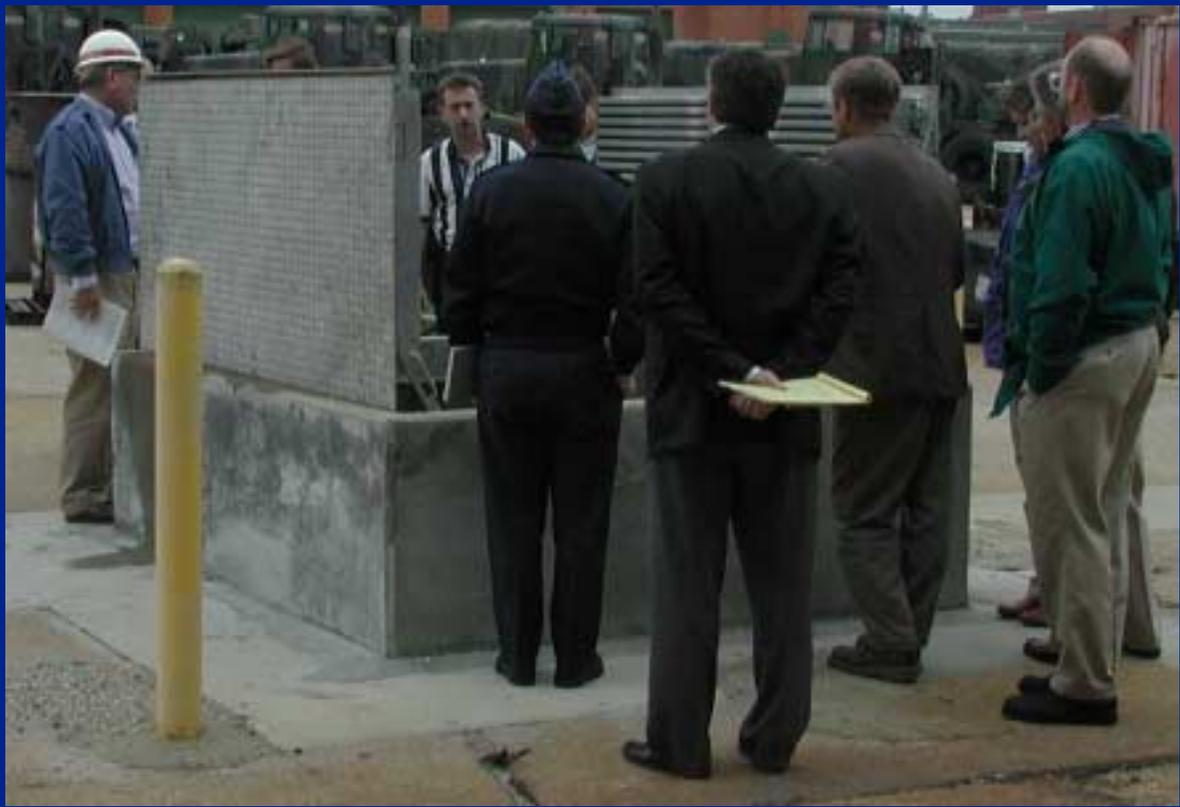
- 1 Evaluate accuracy of the conceptual site model (CSM) and appropriateness of clean up goals and data quality objectives (DQOs)**
- 2 Assess feasibility of remedial design/remedial action to meet clean up goals**



RPO Components Cont.



- ③ Establish DQO decision rules, and create decision trees for clean-up goals, technology selection and performance evaluation



RPO Components Cont.

4 Optimize remedial action operation (RA-O), performance monitoring, and Long-Term Monitoring (LTM)



5 Verify that field procedures and analytical protocols meet DQOs

6 Streamline and standardize data management



DSCR RSV



- **Conducted visit 25 - 28 September 2000**

- **RSV Team**
 - **Lt Col Daniel L Welch - Facilitator**
 - **Dr. Javier Santillan - RSV Team Leader**
 - **Dr. Ivan Boyer (*Toxicologist*)**
 - **Dr. Robert Sextro (*Chemical Engineer*)**
 - **Mr. Steven Glennie (*Hydrogeologist*)**
 - **Mr. Douglas Downey (*Civil Engineer*)**
 - **Mr. James Kapinos (*Engineer*)**



DSCR ERP Status

OU	DSERTS	Site Type	Remediation Phase	CSM	ROD	System ROD Compliant
1	4, 8, 28	Storage Area/ Soil	IC, SD-01	●	1992	Y
2	9	Storage Area Soil&GW	FS	●	2001	
3	26, 31	Maintenance Area/Soil	C, SD-01	●	1995	Y
4	17, 30	Fire Training Area/NA	C, SD-01	●	1999	Y
5	27	Pit/Tank Area/Soil	5Yr-01, SD-01	●	1992	Y
6	34	Aquifer/GW	FS	●	2003	
7	32	Aquifer/GW	RI	●	2002	
8	36	Aquifer/GW	FS, IRA	●	2001	
9	34	Interim Action for OU 6	RA-O	●	1993	Y
10	6	Storage/Soil	RI/FS D-gap		2001	
11	2	Storage Area/ Soil	RI/FS D-gap		2001	
12	14	Storage Building/Soil	RD		2001	
13	37	AST Area/Soil	RI/FS		2002	
PX	33	Fuel Storage&Dispensing	RA-O	●	1997	Y

IC=Institutional Controls; SD=Site deletion, ● Acceptable, ● Update



DSCR ERP Status

OU	DSERTS	Site Type	RA-O/LTM	Established appropriate Cleanup Goals	Will System Meet Cleanup Goals
1	4, 8, 28	Storage Area/ Soil	NA	Y	NA
2	9	Storage Area Soil&GW	NA	Y	NA
3	26, 31	Maintenance Area/Soil	Y	Y	NA
4	17, 30	Fire Training Area/NA	NA	Y	NA
5	27	Pit/Tank Area/Soil	NA	Y	NA
6	34	Aquifer/GW	F	●	TBD
7	32	Aquifer/GW	F	●	TBD
8	36	Aquifer/GW	Y	●	TBD
9	34	Interim Action for OU 6	Y	●	TBD
10	6	Storage/Soil	TBD	TBD	TBD
11	2	Storage Area/ Soil	TBD	TBD	TBD
12	14	Storage Building/Soil	TBD	●	TBD
13	37	AST Area/Soil	TBD	●	Likely
PX	33	Fuel Storage&Dispensing	Y	Y	Y

● Update



DSCR ERP Recommendations

OU	Site Type	Decision Rules	Alt Tech	Optimize Tech	Optimize Monitoring
1	Storage Area/ Soil				
2	Storage Area Soil&GW	●	●		
3	Maintenance Area/Soil				
4	Fire Training Area/NA				
5	Pit/Tank Area/Soil				
6	Aquifer/GW	●	●	F	F
7	Aquifer/GW	●	●	F	F
8	Aquifer/GW	●	●	Y	Y
9	Interim Action for OU 6	●	●	Y	Y
10	Storage/Soil				
11	Storage Area/ Soil				
12	Storage Building/Soil				
13	AST Area/Soil	●	●		F
PX	Fuel Storage&Dispensing	●	●		Y



Opportunity to optimize



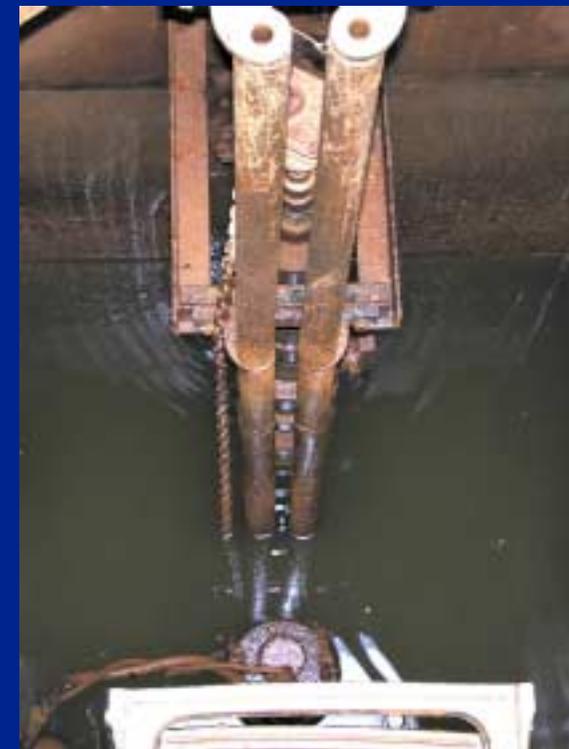
DSCR ERP Recommendations

OU	Site Type	Established Contaminant Trend Tracking	Tracking System Effectiveness	Availability of Current Costs	CTC STC
1	Storage Area/ Soil			NO	
2	Storage Area Soil&GW			NO	●
3	Maintenance Area/Soil			NO	
4	Fire Training Area/NA			NO	
5	Pit/Tank Area/Soil			NO	
6	Aquifer/GW	●	●	NO	●
7	Aquifer/GW	●	●	NO	●
8	Aquifer/GW	●	●	NO	●
9	Interim Action for OU 6	●	●	NO	●
10	Storage/Soil			NO	
11	Storage Area/ Soil			NO	
12	Storage Building/Soil			NO	
13	AST Area/Soil			NO	●
PX	Fuel Storage&Dispensing	●	■	NO	

● Opportunity to optimize ■ Low ROI Opportunity

RSV Team Recommendations

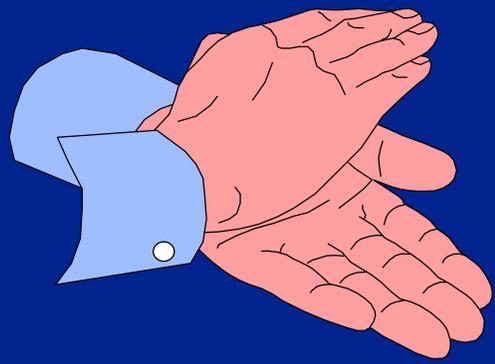
- **Creation of Decision Trees that establish a clear strategy for RA-O and LTM**
- **Enhanced Bioremediation & Phytoremediation assessment**
- **Optimize Groundwater Extraction System**
- **Create a Sound CTC and STC**





DSCR RSV Final Report

- **Final Report to be Delivered by 24 October 2000**
- **Follow-on Recommendations:**
 - **Provide guidance to DSCR on how to implement decision rules and alternate site closure criteria within the context of CERCLA and other applicable regulations.**
 - **Schedule RPO Phase II evaluations for:**
 - **OUs 2, 7, 8, 9, and PX Station**
 - **Develop and implement STC and CTC for one OU as example**



We Thank You for Your Support & Hospitality

Frank Dipofi