

**Final Meeting Minutes
Restoration Advisory Board (RAB) Meeting
Sunflower Army Ammunition Plant (SFAAP)
Wednesday, July 7, 2004**

1. The thirty-eighth RAB meeting was held on Wednesday, July 7, 2004, in the Clearview City Ball Room. Copies of the agenda and sign-in sheet are attached. Mr. Tony Spaar, the Commander's Representative at SFAAP and Army RAB Co-chair, called the meeting to order at approximately 6:00 p.m. Introductions were made around the room.
2. Mr. Tony Spaar, the Commander's Representative at SFAAP and Army RAB Co-chair, then asked for comments regarding the draft minutes from the March 3, 2004 meeting. Mr. Leon Coker moved that the minutes be approved as submitted, seconded by Mr. Tom Price. Minutes approved without change.

3. IRP Project Update

A. FYO4 Obligation Plan

See attached spreadsheet. \$1,746,810 obligated, \$39,400 not awarded. The money not awarded will be added to FY05 obligation plan

B. Corp of Engineers Update

Five year Review: Phil Rosewicz (USACE) announced that the Five Year Review for SFAAP has begun and that a draft report will be put out for public comment before it is finalized. Phil also explained what a Five Year Review is, i.e., that after 5 years, all remediated sites with contaminants left in place above unrestricted levels have to be revisited, inspected and a report written verifying that corrective actions were successful.

C. Shaw Update of Ongoing Work

Task Order 004 – SWMU 22 – Old Explosive Waste Burning Grounds

Shaw has completed all delineation sampling along the outside borders of SWMU 22 and in the adjacent runoff ditches. Shaw received permission from the adjacent landowner west of SWMU 22 to perform sampling on his property. All of the sample results were below unrestricted clean-up standards. Excavation and stockpiling activities are ongoing with 95% of the cells completed. The remaining cells are in the roadways which were used to transport excavated soil to the stockpile. Screening, stockpiling and sampling for off-site disposal is ongoing. Transportation and disposal activities are ongoing with 28,400 tons of contaminated soil being transported to Johnson County Landfill for disposal. The current schedule to complete excavation and sampling is July 16, 2004. Transportation and disposal is currently scheduled to complete by July 30, 2004.

Task Order 007

(SWMU 66) Phase I Stream Study

Shaw has completed sediment and surface water sampling for phase I.

Phase II Stream Study

Phase II (spring event) has been completed, and the next sampling event is scheduled for the next major rain event.

SWMU 1, AOCs 18, 19, 20 and 21

The draft decision documents for remedial actions at AOC 18 and SWMU 1 were prepared and submitted to the Army in March 2004. These sites are currently on hold. Temporary piezometers were installed for collection of groundwater samples for phthalates at SWMU 1, and collection of sediment samples for metals at SWMU 1, will be completed by the end of July.

SWMU 39 – South Acid Drainage Ditches

Shaw completed additional groundwater sampling at SWMU 39 last week

SWMU 21 – Contaminated Materials Burning Ground

RFI Investigation – Shaw submitted a CMS to the TRC outlining a proposed remedy. Comments are being received and will be evaluated, once these comments have been responded to, the document will be revised and reissued in late July 2004.

Excavation and Bioremediation Pilot Test – Final sampling Plan to sample the bio-cell has been received and approved. Shaw will complete the sampling of the bio-cell in July. Shaw plans to use the soil onsite as backfill for SWMU 22.

Disposal Optimization Conceptual Plan

Shaw has submitted the Final plan to the TRC. The plan was titled Engineering, Evaluation and Cost Analysis for Onsite and Offsite Disposal of Non-Hazardous Waste.

Shaw evaluated four options: (1) Permanent CAMU, (2) Interim Soil Repository, (3) Offsite Disposal and (4) No Action. After preliminary evaluation, two options were retained for detailed analysis: (1) Permanent CAMU and (2) Offsite Disposal.

Shaw's next step was to evaluate sites for placement of a permanent CAMU. That evaluation included: (1) Effectiveness – was the site protective to the environment and humans, (2) Implementability – was the site practical, (3) Cost

– construction cost, operation and maintenance cost, (4) Area – was the site an area: where the CAMU could be constructed below ground, suitable for future land use considerations, where the geotechnical properties of the soils were suitable or contained clay for the liner, (5) National Environmental Policy Act – which includes a wide array of considerations like economic impact, endangered species, archaeological and cultural considerations.

Five sites were selected: (1) SWMU 17 – G-Line, (2) SWMU 20 – Ash Lagoons, (3) AOC 11 – Forced Air Dryers, (4) SWMU 41 – Calcium Carbonate Cake Landfill, and (5) SWMU 19 – Ash Landfill.

After the evaluations and cost comparisons were completed on the two options, the Permanent CAMU option was only \$550,000 less than the Offsite Disposal option. Due to the comparable estimates and the potential unknown costs of maintenance of the CAMU, the Army retained offsite disposal as the preferred alternative.

Disposal Optimization Treatability Study (DOTS)

Field sampling for the DOTS was conducted the week of April 16, 2004.

Analytical results have been received on the soil, the different admixtures and the percentages that were used for the bench scale study. Additional sites are currently being evaluated to sample and use as part of this study.

The Draft Treat-Ability Report is scheduled to be submitted to the TRC July 2004.

Task Order 008

Task Order 008 is funded to execute RFI investigations for SWMUs 3, 10, 13, 14, 18, 20, 27, 38, 41, 48 and 52. Additional funding has been allocated to complete a site-wide explosive safety assessment, database consolidation and for the development of a data delivery system for SFAAP.

SWMU 18 – Old/New Sanitary Landfills

This is an RFI investigation to locate the boundaries of the landfill, determine the type, approximate depth and design of the cap, determine groundwater flow direction and to gather enough information to begin to design of the remedy. The Draft Work Plan has been completed and is currently in internal review.

SWMU 10 – F-Line Ditches and Mechanized Roll Area

Scheduled soil sampling has been completed. The groundwater sampling and assessment are being included as part of the GWOU 2 plan that has been prepared and is currently being reviewed internally. A drawing has been prepared showing the exceedence and excavation locations based on the results of a walkthrough with KDHE. A new estimate for conducting a removal action was completed and submitted to USACE for negotiations. A decision document for the remaining was prepared and submitted to the Army. A request for year end funding to complete this activity will be submitted.

SWMU 20 – Lagoons and Sludge Disposal Area

The Draft RFI Addendum has been completed, reproduced and submitted to the TRC. This report is a low priority while Shaw is working on getting new sites approved and sampled.

SWMU 52 – Paint Bay Building 542

The Draft RFI Addendum has been completed, reproduced and submitted to the TRC. This report is a low priority while Shaw is working on getting new sites approved and sampled.

SWMU 38 – Oil Separator Building 542

The Draft RFI addendum has been completed and currently in internal review. This report is a low priority while Shaw is working on getting new sites approved and sampled.

SWMUs 3 – Main Sewage Treatment Plant

Surface and subsurface soil sampling has been completed. Installation and sampling of piezometers has been completed. The next phase of this project is to install two new monitoring wells and prepare a plan for the cleanup of the soil and sludge on this site.

SWMU 14 – Static Rocket Test Area

The collection of groundwater samples and the collection of surface soil samples have been completed. A drawing will be prepared showing areas that need to be excavated. Sample results that indicate nitroglycerine and metals contamination of surface soil and results that indicate metals contamination (Manganese) in groundwater were found. The contaminated soils will be removed.

SWMU 41 – Calcium Carbonate Landfill

Shaw sampled 16 monitoring wells in June and they are currently awaiting sample results. After reviewing these sample results, Shaw will sample an additional 6 wells two more times. Shaw will then prepare a report recommending the next step.

Explosive Safety Assessment

Shaw has answered all comments, revised the plans and sent the plan to internal review. The plan will be resubmitted next week and field work is scheduled to begin in early August.

Database

The integration of historical data has been completed. Shaw continues to add data being generated during ongoing field activities. Conversion and loading of data from Shaw's database to the Army's database is ongoing.

4. New Business

- The Department of Defense is modifying the guidelines on how to operate a RAB. These modified guidelines will be put into the Federal Register, and then there will be 60 days for comments to be made. These guidelines have yet to be posted.
- Mr. Spaar commented that the FY05 obligation plan may be completed by the next RAB meeting.

5. Question and Answers

- The board was asked “Will the EPA and KDHE have the same rolls in the cleanup effort if the new bill for Defense Appropriations passes?” Mr. Spaar replied that as far as he knows the rolls for both will be the same. Mr. Herstowski replied that he did not know if there would be any difference in the regulators rolls, that this bill was actually initiated by Johnson County as a way to minimize their liability. It was not initiated as a way to give all the land to the developer to do with what they choose.
 - Mr. Oyler asked Mr. Spaar “Is there any asbestos in the fire bricks buried on the site from the demolition of the boiler plant?” Mr. Spaar responded that the fire bricks did not contain asbestos and that they could be buried onsite as clean construction debris.
 - Mr. Charles Benjamin asked Mr. Spaar and Mr. Neal (Shaw) “Will a leachate collection system be installed at SWMU 18?” Mr. Spaar replied that a leachate collection system will not be installed. Shaw is developing a Frech Drain system that will be installed upgradient of the landfill to reroute the uncontaminated groundwater to flow around the landfill so that it does not flow into the landfill and cause leachate to be produced.
7. The next RAB meeting will be held on September 1, 2004 (first Wednesday of the month) at 6:00 pm.
8. Meeting was adjourned at 7:30 pm and opened up to non ER,A updates and questions.

**Sunflower AAP FY04 Obligation Plan
(Actual Obligations as of 28 June 2004)**

SITE NAME	SITE DESCRIPTION	PHASE	COST
SAAP-001	CLASSIFICATION YARD	RI	34,960
SAAP-003	MAIN SEWAGE TREATMENT PLANT DRYING BEDS	RI	169,990
SAAP-007	NORTH ACID AREA - CHROMATE AREA	RI	10,000
SAAP-008	NORTH ACID AREA -CHROMATE CONCENTR. POND	RI	23,190
SAAP-010	F-LINE AREA DITCHES	RI	190,880
SAAP-011	F-LINE AREA SETTLING PONDS	LTM	21,200
SAAP-013	SOUTH ACID AREA LWTP EVAPORATIVE LAGOONS	LTM	14,280
SAAP-014	ROCKET STATIC TEST AREA	RI	234,930
SAAP-018	OLD/NEW SANITARY LANDFILLS	RI	461,880
SAAP-021	CONTAMINATED MATERIALS BURNING GROUND	RI	14,520
SAAP-022	OLD EXPLOSIVE WASTE BURNING GROUND	RD	8,000
SAAP-022	OLD EXPLOSIVE WASTE BURNING GROUND	RAC	145,760
SAAP-025	NITROCELLULOSE AREA DITCHES	RI	120,960
SAAP-027	NQ AREA SAC & LWTP EVAPORATIVE LAGOONS	LTM	10,710
SAAP-033	PASTE AREA HALF TANKS & DITCHES	LTM	4,000
SAAP-034	FIVE CORNERS SETTLING PONDS	RI	4,000
SAAP-035	NITROGLYCERIN AREA SETTLING PONDS	LTM	12,000
SAAP-039	SOUTH ACID AREA DITCHES	RI	19,950
SAAP-041	CALCIUM CARBONATE CAKE LANDFILL	LTM	5,330
SAAP-045	BLDG 9040 (CA CYANAMID CONV & STOR. UNT)	RI	25,860
SAAP-047	NITROGUANIDINE PROD AREA (25) SUMPS	RI	10,000
SAAP-048	NITROGUANIDINE SUPPORT AREA	LTM	13,290
SAAP-050	DISP SITE EAST OF CLASSIFICATION YARD	LTM	13,500
SAAP-053	BURN AND DEBRIS AREA NORTH OF STP	RI	177,620
		TOTAL:	1,746,810