FT. McCLELLAN BCT MEETING MINUTES
PARTNERING SESSION #48
ORANGE BEACH, AL
SEPTEMBER 18-19, 2002

AGENDA ITEM	RESPONSIBILITY	NOTES
Check In Guest Introduction and Roles	Host: Chip Parrott Leader: Doyle Brittain Recorder: Jeanne Yacoub	See Attendees List – Attachment A.
Ground Rules	BCT	Attachment B provides the ground rules, as revised in January, 2001.
Agenda	BCT	Attachment C provides the draft October agenda. Attachment D provides the September meeting summary.
Accept Previous Minutes	BCT	The team reviewed the draft August minutes, and accepted the minutes with revisions as final.
Action Items	BCT	Action items were reviewed and updated, as indicated in Attachment D.
Long-Term Planning (BCP)	BCT	IT provided a final BCP on December 21, 2001.
Goals/Metrics Update	BCT	The team began brainstorming this topic during the June, 1998 meeting, and also began development of preliminary goals for consideration by the group. This topic requires the BCT to set aside schedule time to address.
Facilitator Observations	David Sanderson	David Sanderson attended his twenty-ninth meeting with the team. His notes and observations are provided at Attachment E.

ATTACHMENT A

LIST OF ATTENDEES
BCT SESSION #48
ORANGE BEACH, AL
SEPTEMBER 18-19, 2002

Attendees:
Ron Levy, Ft. McClellan (FTMC)
Lee Coker, US Army Corps of Engineers, Mobile District (USACE, Mobile District)
Philip Stroud, Alabama Department of Environmental Management (ADEM)
Doyle Brittain, US Environmental Protection Agency, Region IV (EPA)
Dan Copeland, US Army Engineering and Support Center, Huntsville (CEHNC)
Miki Schneider, Joint Powers Authority (JPA)
JoAnn Watson, National Guard Bureau (NGB)
Bernie Case, Alabama Army National Guard (AL-ARNG)
Wayne Sartwell, AL-ARNG
Jeanne Yacoub, Shaw Environmental & Infrastructure (Shaw)
Steve Moran, Shaw
David Sanderson, Eagle Point Consulting
Sharon Chittam, Foster Wheeler Environmental Corp. (FWENC)

Guests:
Chip Parrott, USACE, Mobile District
Claude Leake, USACE Mobile District
Mark Harrison, ADEM
Spencer Nelson, URS
Porter Morgan, CEHNC
Cynthia Bachus, AL-ARNG
Hugh Vick, Gannett Fleming
Ben Bentkowski, Gannett Fleming
Josh Jenkins, Shaw
Troy Winton, Shaw

ATTACHMENT B

BCT GROUND RULES

General:

1. Leave rank and title at the door, and have a free and open discussion on any subject affecting the BCT.
2. Work smarter, not harder: create ways to simplify and streamline the BCT process.
3. Identify and express individual team members' sensitive issues, and agree to keep them within the team.
4. Alert other team members of any changes in cost or schedules.
5. Rotate meeting leaders.
6. Have fun.

Meeting Behavior:

1. Come prepared; do your homework.
2. Participate fully: offer your perspective and advice for the benefit of the whole team.
3. Listen to others' views and opinions, try to understand their needs, respect them, and work to resolve differences, and support team decisions.
4. Draw out other members: be open to other ideas and different perspectives.
5. Avoid interruptions and side conversations.
6. Call time out when necessary.
7. Make decisions by consensus: all in agreement, all owning the decision.
8. Turn off cell phones.

ATTACHMENT C

BCT MEETING AGENDA

1. Check In

2. Guest Introduction/Role in Meeting

3. Review Ground Rules (Attachment B to these minutes)

4. Finalize Agenda with additions and/or subtractions (Item 9 of this Attachment)

5. Accept Previous Meeting Minutes

6. Review Action Items from Previous Minutes (Attachment D to these minutes)

7. Review Long-Term Planning (BCP)

8. Goals/Metrics Update

9. Accomplish Agenda Items (Item 9 of this Attachment)

10. Meeting Summary Review

- Set next meeting date
- Set next meeting agenda
- Set time and date for conference call
- Set meeting dates for next six months
- Review action and consensus items
- Review and evaluate Partnering Process

ITEM #9
DRAFT OCTOBER AGENDA

Wednesday, October 16, 2002

0800 – 0900	Check-in/Finalize Minutes/Agenda/Action Items	BCT
0900 – 0915	Document Status Tracking	Lisa
0915 – 1015	*Games People Play*	David
1015 – 1130	Range J Comment/Responses Resolution	Shaw
1130 – 1300	Lunch	
1300 – 1530	Site Visits (Historical Ranges for later discussions)	Shaw
1530 – 1700	Historical Ranges Comment/Responses Resolution (Parcels 136Q, 104Q, 98Q, Former Tank Ranges)	Shaw

Breaks as Needed
Dinner Plans

Thursday, October 17, 2002

0800 – 0830	JPA Update	Miki
0830 – 0930	Former Trap and Skeet Range Comment/Responses Resolution	Shaw
0930 – 1030	Artillery and Mortar Impact Areas Comment/Responses Resolution	Shaw
1030 – 1130	Range 4A Fog Oil Storage Area Comment/Responses Resolution	Shaw
1130 – 1300	Lunch	
1300 – 1400	SOTS Comment/Responses Resolution	Shaw
1400 – 1500	Blue Hole Comment/Responses Resolution	Shaw
1500 – 1600	Sinkholes at Pelham Range (Decision on SI data) and Pelham Range Water Supply Comment/Responses	Shaw

1600 – 1700	Range L Work Plan	Shaw
1700 – 1730	Parking Lot and Meeting Reflections	BCT

Breaks as Needed

Parking Lot
Landfill #3 Groundwater (Further Discussion/Decision)

ATTACHMENT D

MEETING SUMMARY
With
ACTION ITEMS

Next BCT Meeting: October 16 - 17, 2002
Ft. McClellan, AL

Primary Agenda: See Item #9

September Meeting Summary:

Check-In – Team members introduced themselves and told the group why they were at the meeting and what they wanted to achieve.

Finalize Agenda and Minutes – The team reviewed the August minutes, made a few minor revisions, and concurred with the "first" set of minutes. During review of the "second" set of minutes, Doyle indicated his opinion that the Army had agreed to roll the Fill Area EE/CA into an RI/FS. Ron stated that the minutes accurately depicted the Army's position. Doyle indicated he would not concur with the minutes until the word "consider" is changed. The conflict required that the BCT meet alone with the facilitator; for the remainder of the attendees, the meeting adjourned until the following morning.

A New Day….. – Doyle opened the meeting with the announcement that the BCT would do something new and different. The BCT talked through some issues yesterday and emerged from that meeting with a clear sense of direction and purpose going forward. In the future, the BCT will rotate team leaders. Doyle is project team leader until November, then Philip, then Ron. When we use the work "team," the leader will be representing the "team" at Ft. McClellan. Ron, Philip, and Doyle are the BCT; others are project support members. The BCT will have "scoping" meetings instead of "on-board reviews." The BCT will provide thoughts on how to proceed at the sites. When Shaw provides the draft work plan, there should be no surprises. The work will be implemented if the draft is representative of the BCT's agreement reached during scoping. There will be a 30% progress review once the work plan is implemented. The BCT will make adjustments to accommodate the situations addressed in the 30% review. Changes will be made using an addendum. There will be a 60% review when data is halfway collected. The 90% review will occur when fieldwork is completed, preliminary (not QA'd) data are available; "based on the data, here's what the report should say." Philip indicated this may help ADEM because it will allow Philip to provide his management with periodic updates on project status. Ron explained there are some Army concerns about funding on this basis. The BCT will meet separately with David in another meeting apart from the project team.

Doyle asked David to conduct a half-day team-building session during the October meeting using three reference books as training tools. The books are *Games People Play, Transactional Analysis*, and a third book on non-verbal communication.

Doyle suggested that if a team member has a problem that is preventing work, they should set aside the agenda and resolve the conflict. He acknowledged that trust is an issue for the team.

Miki expressed concern about the lines of communication remaining open with the JPA if she is not at the meetings with the BCT. Doyle and Ron indicated that all decisions on property cleanup and investigation will be discussed within the project team. The separate meetings will address BCT interpersonal issues, administrative concerns, and interagency interactions.

Bernie suggested that the BCT recommend who from the Guard should attend the meetings. Wayne, JoAnn, and he all represent different perspectives of the Guard's interests. The BCT indicated that all three attendees should continue to attend the meetings.

David provided a draft copy of the BCT's resolution from the special meeting. The resolution is provided at Attachment F.

Site Status Update – This will be an agenda item for October. Shaw will include ranges and any sites where work is unfinished. Ron indicated that the team could use the document status tracking spreadsheet as a starting point for their discussions. Steve suggested half a day of site visits prior to discussions. The meeting attendees will wear appropriate field dress to make the site visits. Shaw and the Corps will coordinate all health and safety issues prior to the site visits. Shaw will also coordinate OE issues and any range control issues to assure safe access.

Groundwater Subcommittee Meeting Status – Also an October agenda item. Discussion to focus on impacts to schedule and cost.

Finalize Agenda and Minutes – The BCT made modifications to the "second" set of minutes and approved the minutes with the revisions. The group also added the following items to the parking lot:

- UXO Update
- 24A, T-38, T-5, T-6 Work Plans
- Miscellaneous Comment Responses

GSA Warehouse
Tier II

Range J Comment Responses – Shaw provided comment responses for the BCT to evaluate. ADEM and EPA will review the responses and be prepared to discuss and make decisions at the October BCT meeting. BCT and project team members are to bring the packages they received to the October meeting for discussion.

Historical Ranges – Same as for Range J.

Burial Mound at Rideout Field – Steve provided groundwater data for this site. NRC is awaiting the groundwater report and results of the walkover survey.

Sinkholes at Pelham Range – Troy presented data for the 4 sinkholes at Pelham Range. The BCT will consider the data and be prepared to discuss the sites at the October BCT meeting. The BCT and project team members are to bring the packages they received to the October meeting for discussion.

Miscellaneous Comment Responses – Response packages were distributed for the following sites:

- Former Trap and Skeet Range (Parcel 127Q),
- Water Supply Wells at Pelham Range,
- Artillery and Mortar Impact Areas (Parcels 138Q-X, 139Q-X, 140Q-X, 141Q-X, 142Q-X)
- Range 4A Fog Oil Storage Area (Parcel 123(6),
- SOTS, Parcel 102(7), and
- Blue Hole

Doyle asked everyone to come prepared the following month (October BCT meeting) to make decisions on the sites.

UXO Update – Ron indicated that if ADEM or EPA need UXO data short of internal Army issues, then CEHNC and their contractors are to provide the data to answer any questions. Doyle expressed his appreciation for Ron's commitment and reiterated his and Philip's commitment to the team and process.

- The M.101 removal report is under review by CEHNC and the Army.

- Transition Force, CEHNC, and USATCES (US Army Technical Center for Explosive Safety) are reviewing the Alpha EE/CA. The Army is using the 1997 reuse plan for its evaluations. Miki asked about schedule for report issuance; USATCES would not give a date for when their evaluation would be complete.

- CEHNC is performing internal review of the Bravo EE/CA. They are also waiting on resolution of Alpha issues before proceeding with Bravo, so that they may incorporate applicable comments to the Bravo document. The Army did find some additional areas that need clearance. They also found some 155s that required investigation. The Army did some mountain traverses that resulted in areas needing clearance as well. Philip asked if UXO had been disposed in Yahou Lake. Porter indicated that Yahou was built in the 1960s, over a training area. Dan indicated that all the Army has found in the vicinity of Yahou Lake are APTs (Armor Practice Tracers) and TPTs (Target Practice Tracers).

- Because of the dense metal found in the Rocket City area, the most efficient removal action is to use mechanized removal techniques. The ESS (Explosive Safety Submission) has been submitted, FWENC has ordered armor for the equipment, and they are preparing to implement the removal action. Porter has a projected schedule to begin digging the first week of November, provided USATCES and DDESB (Department of Defense Explosives Safety Board) approve the plans. Dan will send Spencer a copy of the ESS for the Eastern Bypass, along with letters from USATCES and DDESB.

- It appears there will be three removal areas in the Charlie area. The only unexpected item was the coastal rounds. The USF&W is very concerned about removal actions in Charlie because of long-leaf pines and white fringeless orchids, and requested a meeting with the Army on Charlie. The Army met with them a couple of weeks ago.

- CEHNC will finish the additional acreage in the Eastern Bypass removal by mid-October. Philip will want an update periodically on erosion control in the area, since ALDOT will not be working there until they secure funding.

Landfill #3 Groundwater Subcommittee – The subcommittee met on September 9 and discussed three topics. One of the topics was the off-post well/spring user survey. The Army wants to provide written information to the RAB on this effort in advance of the actual survey. Shaw will provide for Army consideration, a list of survey questions that will be asked of potential well/spring users. The area of focus for the survey is north of the post. The subcommittee had a conference call on September 12 and 16 as well for meeting (see subcommittee minutes, Attachment G). The Army will provide ADEM with a plan for purge water discharge to the ground. Philip will send Ron a letter saying that discharge of filtered water is allowed (next week or week after).

Josh presented the subcommittee's work to date on the LF #3 wells, and the group did not come to complete agreement on the requirements. The BCT did concur with Shaw's recommendations for the 8 additional wells. The BCT wants to discuss the LF #3 again at the next BCT meeting.

Ranges South of Range 25 – Lisa got concurrence letters from ADEM and EPA on this site. She took the concurrence letters to Glynn for signature on the Decision Document. After signature (about a month later), the Army got 3 pages of further comments from ADEM. Philip will check out the situation and get back to the Army.

"HTRW" – Based on previous BCT direction about wording of recommendations in documents, Shaw has provided recommendations for "HTRW" only, excluding OE. EPA wants future documents to only address "hazardous" substances, unless toxic or radiological materials are explicitly addressed in the investigations. The Army does not need to go back and change past documentation.

Document Status Tracking – Lisa distributed the document status tracking spreadsheet to the group and asked that they pay particular attention to the items in bold on the spreadsheet.

Future Meetings (3-month look ahead) – BCT only on October 15 @ 1:00pm, Project Team meeting October 16 – 17 @ Ft. McClellan; RAB meeting on October 21; BCT only on November 18 @ 8am, RAB meeting on November 18, Project Team meeting November 19 – 21 @ Ft. McClellan.

Status of Action Items

Action Item No.	Responsible Team Member	Due Date	Status	Action Item
02/2/3	Philip	Mar 02	SNR	Report back to BCT on ADEM's position on the Pelham Range Water Supply issue.
02/6/3	Lisa	July 02	Done	Email Ft. McClellan's document tracking status spreadsheet to Doyle.
02/7/1	Steve	July 02	SNR	Have Shaw risk assessment personnel contact EPA risk personnel prior to responding to EPA comments on revised IWWP.
02/7/2	Philip	Aug. 02	SNR	Provide comments on revised IWWP.
02/7/3	Francine	Aug. 02	Done	Clarify Tier II role and report back.
02/7/4	Philip	Aug. 02	Done	Provide comments/revisions to May 2002 BCT meeting minutes.
02/7/5	Josh	July 02	Done	Organize groundwater subcommittee and begin discussing issues.
02/7/6	Philip	Aug 02	SNR	Report on the status of contacting the junkyard owners across from LF3
02/7/7	Steve	July 02	Done	Arrange meeting to resolve comments on IMR Problem Formulation and BBGR SLERA.
02/7/8	Steve	July 02	Done	E-mail comment responses on IMR Problem Formulation and BBGR SLERA to Doyle.
02/8/1	Lisa	Sep 02	SNR	Provide Doyle with copy of EPA's comments and concurrence letter on the previous IWWP.
02/8/2	Josh	Sep 02	SNR	Coordinate Puls-Barcelona evaluation with hydrogeological subcommittee; report to BCT at September BCT meeting.
02/8/3	Jeanne	Sep 02	SNR	Email September meeting attendees about conflict resolution workshop for Tier 1 on afternoon of September 18.
02/9/1	Dan	Oct 02	SNR	Send Spencer copy of ESS and letters from USATCES and DDESB on Eastern Bypass.
02/9/2	Josh	Oct 02	SNR	Provide Army with a list of

questions for the well/spring user survey.

02/9/3 Josh Oct 02 SNR Provide Army/ADEM with purge water discharge plan for landfill #3 monitoring wells.

02/9/4 Philip Oct 02 SNR Send Ron a letter indicating discharge of filtered water to the ground is allowed for the landfill #3 monitoring wells.

02/9/5 Philip Oct 02 SNR Report back to Army on ADEM comments sent a month after ADEM concurrence letter on Ranges South of Range 25.

SNR=Status Next Report

ATTACHMENT E
FACILITATOR NOTES AND OBSERVATIONS

Meeting Summary

The BCT met on September 18-19, 2002, in Orange Beach, Alabama. The technical work of the meeting took place on the second day and included Dan Copeland's update on UXO work, issues about several high-priority sites, and the groundwater subcommittee's report on the Landfill 3 work plan. The quality of the complex discussion on additional wells at the landfill was very good, and, although the team did not reach agreement and decided to make a final decision in October, the focus of the issue narrowed from a total of seven wells to two. Various project team members had different objectives in mind, and agreement on a single set of objectives will be needed.

But the technical work was overshadowed by an important meeting of the three core BCT members on the first day. Because of a conflict that arose almost as soon as the meeting began, Philip, Doyle, and Ron agreed to meet alone to try to resolve the issue. They not only resolved it, they went on to develop four major procedural points (see the "Resolution" in the minutes) designed to enhance their communications, ensure that information is shared in a full and timely way, and avoid surprises. From my viewpoint, the three demonstrated a genuine commitment to making the BCT partnership work and an impressive amount of good will.

The core BCT members met briefly twice more on the second day, in one case resolving immediately a communication gap between contractors, before it had a chance to develop into a major problem.

At the end of the meeting, one project team member described the meeting and the BCT's agreements as a "watershed" event. The agreements will need to continue to be implemented (and supported by Tiers II and III), but I have no doubt that the BCT demonstrated in Orange Beach its commitment to teamwork and also its increasing ability to manage its relationships and team process.

ATTACHMENT F

DRAFT

The BRAC Cleanup Team for Fort McClellan

Resolution
September 18, 2002

We, the members of the BCT, in order to fulfill our mission and enhance our ability to collaborate as partners, commit ourselves as a team to the following procedural agreements:

1. Tier I Empowerment

We affirm our responsibility to resolve base cleanup and closure issues at our level. We ask that Tiers II and III support this responsibility by giving us the authority to conduct this work and make decisions at our level.

2. Process on Dealing with Documents

We will work through documents, e.g., on the Landfills EE/CA, in order to realize a win-win solution for everyone.

3. A Planning and Review Process for Timely and Full Communication

We will implement the following process:

- Scoping meeting to develop a Work Plan.
- Reviews at key points in the implementation of the Work Plan (30% of the work completed, 60%, and 90%) with revisions to the Work Plan added as appendices, as appropriate.
- Field work may precede formal approval of written Work Plans.

4. Meeting Schedule

The three of us, representing ADEM, EPA and the Army, will meet alone with the BCT facilitator either for an appropriate period of time during regular monthly meetings or separately every other month. In either case, our goal will be to enhance our communications, share information, and avoid surprises; our agenda will include information-sharing and general and procedural issues facing the BCT.

Additional Agreements:

- We encourage BCT contractors and consultants to voice their opinions about technical aspects of and decisions about FTMC sites.

- We want to increase use of the telephone and face-to-face meetings as alternatives to e-mails, especially when clear, direct communication is needed.

_____	_____	_____
Army	EPA	ADEM

ATTACHMENT G
GROUNDWATER SUBCOMMITTEE MEETING MINUTES

Minutes of 1st Groundwater Subcommittee Meeting
August 8, 2002, Shaw E and I, Knoxville, TN

Attendees: Ben Bentkowski, Gannett Fleming, Inc.
Josh Jenkins, Shaw E and I, Inc.
Bill Hedberg, Shaw E and I, Inc.

Agenda:

- Identify potential data gaps in groundwater and other site media for fill areas presented in the Draft Site Investigation and Fill Area Definition Report (FADR).
- Discuss and propose appropriate course of action to close any identified potential data gaps in the FADR.
- Discuss rationale and propose wells for 2002 3rd and 4th quarter groundwater sampling for Landfill No. 3.
- Discuss the July 17, 2002 BCT presentation and make modifications for presentation to the RAB on August 19, 2002 meeting.

Identification of Potential Data Gaps:
Nine of the ten fill areas presented in the FADR were examined for potential data gaps in all media sampled; this included groundwater, surface and subsurface soils, surface water and sediment and depositional samples. The fill areas examined were: Landfill No. 1, Landfill No. 2, Landfill No. 4 and the Industrial Landfill, Fill Area North of Landfill No.2, Fill Area East of Reilly Airfield and the Former Post Garbage Dump, Fill Area Northwest of Reilly Airfield, Fill Area at Range 30, Fill Area West of Iron Mountain Road and Range 19, and Stump Dump. It was decided to discuss Landfill No. 3 at a later time to determine additional monitoring well locations. Of the nine fill areas discussed, it was concluded that hydrogeologic data gaps were not present at seven of the fill areas and that additional media sampling at these sites was not warranted. The fill areas determined to require additional investigation and or sampling were: Fill Area East of Reilly Airfield and Fill Area Northwest of Reilly Airfield.

Potential Data Gaps:
On data gaps for the Fill Area East of Reilly Airfield, Mr. Bentkowski wished to reserved judgement for the present. He will be given additional time in order to further evaluate the distribution of metals (in general) in groundwater and metals (mainly arsenic and chromium) in surface soils, surface water/sediment and depositional samples.

On data gaps for the Fill Area Northwest of Reilly Airfield, all parties present agreed that one additional monitoring well should be proposed in the area northeast of Parcel 229, approximately between PPMP-229-GP07 and PPMP-229-GP01. The intent of the well, to be installed in the residuum, will be to further evaluate an above SSSLs detection of vinyl chloride in GP07, above SSSLs detections of naphthalene and 1,4-dichlorobenzene in GP01 and RDX detections above SSSLs in GP01 and GP05.

3rd and 4th Quarter Groundwater Sampling for Landfill No. 3:
19 wells were selected and agreed to by all parties present for proposed groundwater sampling for the 3rd and 4th quarter of 2002 for Landfill No.3; analysis of samples will be for VOC only. The selection of wells falls in to two categories: 9 public concern wells and 10 wells to track the geometry of the plume.

9 wells of public concern:

- 5 Brown property wells: OLF-G31, OLF-G32, OLF-G29, OLF-G30, and OLF-G37
- 2 Blarney Drive wells: OLF-G27, and OLF-G28
- 2 City of Weaver water supply wells: City of Weaver No.2, City of Weaver No.3

10 wells to track plume geometry and vertical concentration profile

- 4 Deep wells: OLF-G34, OLF-G38 define deep north edge of plume. OLF-G35, OLF-G36 define deepest concentrations within center of plume
- 4 Intermediate Depth Wells: OLF-G33 define plume at intermediate depth at northern edge of plume. OLF-G25 define plume at deep well at south edge of plume. OLF-G22, OLF-G23 define profile at intermediate depth in plume center
- 2 Shallow Wells: OLF-G12, OLF-G24 define upper profile at shallowest depth in plume center

August 19, 2002 Landfill No. 3 Presentation to RAB:
The BCT presentation was reviewed and modified for clarity. Mr. Bentkowski's suggestions were discussed and implemented and the slide order was changed along with deletion of several slides.

Minutes of 2nd Groundwater Subcommitee Meeting
September 9, 2002, Shaw Trailer, Fort McClellan, AL

Attendees: Chip Parrott, USACE
Philip Stroud, ADEM
Ben Bentkowski, Gannett Flemming, Inc
Josh Jenkins, Shaw E & I, Inc
Bill Hedberg, Shaw E & I, Inc.

Agenda:

- Present a preliminary letter work plan for concurrence or comments for a proposed Well/Spring User Survey for an area north of Landfill 3.
- Recommend and obtain subcommittee agreement of additional well locations needed to define the vertical and horizontal extent of contamination of the Landfill 3 plume.
- Discussion of low-flow (minimal drawdown) sampling results compared to the FTMC method.

Well/Spring User Survey:
Shaw distributed to members of the subcommittee copies of a preliminary letter work plan for a proposed Well/Spring User Survey (September 6, 2002) within an area of interest defined to the north of Landfill 3 and the Fort McClellan boundary. The proposal was discussed and all members were in agreement with the scope of the survey as presented. An announcement either by the RAB committee and/or by local newspaper prior to the commencement of the survey was recommended.

Recommendation for Additional RI Well Locations to Define Vertical and Horizontal Extent of Contamination at Landfill 3:
Shaw presented a map showing the location of eight additional wells recommended to define, for the purpose of the RI, the vertical and horizontal extent of contamination at Landfill 3. See Figure 1. The map included the intended total depth of the wells and suggested amsl depths for well screens. Three additional monitoring well clusters consisting of a deep and shallow bedrock well at each cluster were recommended in the area to the northwest, north and northeast of the landfill (OLF-G43/G44; OLF-G45/G46; OLF-G47/G48). The clusters, essentially at the edge of Base property, would establish a northern fence for annual or semi-annual groundwater sampling. In addition to the three, well clusters a single deep well (OLF-G49) was recommended as part of the fence to the east of this area. An eighth well (OLF-G50) was also recommended to be drilled to an intermediate depth east of the landfill adjacent to existing well LF4-MW1.

Coring from top of the bedrock to TD and packer sampling of groundwater at 20-foot intervals was recommended for the deeper of the wells at clusters, and for the two non-cluster wells. It was recommended that all wells be logged with the same suite of geophysical logs run in other wells at LF-3.

The locations and depths for 8 wells recommended at Landfill 3 was agreed. Shaw will provide a rational table for the 8 proposed wells at the next BCT meeting. Mr. Stroud reserved further discussion to consider an additional upgradient well to the south of the landfill. Mr. Bentkowski reserved additional time to investigate if other potential data gaps exist. It was agreed by all members to reconvene by phone on September 12 to discuss these questions.

Discussion of Low-Flow (minimal drawdown) Sampling Results Compared to the FTMC Method:
Shaw presented data comparing low-flow minimal draw-down sampling results with those obtained by the FTMC method. It was acknowledged that the low-flow sampling method would save time and money through the lesser quantity of IDW generated. However, analytical results from the low-flow sampling were not on the conservative side when the two methods were compared in a limited number of wells.

It was concluded to continue the FTMC method for sampling of wells. However Mr. Stroud stated that ADEM will permit wells that are sampled for VOCs only to be purged at a higher rate than is currently being followed. The rationale is that since at those sites where VOCs have been established as the only contaminants of concern, sample turbidity is not an issue. On-site treatment and discharge of purge water will be allowed by ADEM if the treated purge water is not directly discharged to surface water.

Mr. Stroud and Mr. Bentkowski recommended that Shaw investigate the potential of using a single packer set-up with the purge/sample pump assembly for deep wells as a potential method to temporarily isolate a well screen zone during well purging. This concept, if implemented, would require less water to be purged for each well prior to sampling. Shaw will investigate to determine if this can be implemented at FTMC.

Minutes of 2nd Groundwater Subcommittee, Teleconference, September 12, 2002

Attendees: As Above

Mr. Bentkowski forwarded to members a list of 15 data gaps and recommendation for 14 additional well locations to close perceived data gaps. See Attachment 2

It was agreed by members that discussion of the data gaps and additional well recommendations by Mr. Bentkowski would be reserved for further discussion by teleconference on September 16, 2002

Minutes of 2nd Groundwater Subcommittee, Teleconference, September 16, 2002

Attendees: As Above

Mr. Bentkowski's September 12, 2002 list of data gaps was discussed. After lengthy discussion, the following resolution to the perceived data gaps and recommendation for 14 additional well locations were reached:

- Resolution of one perceived data gap 8: Move previously agreed to proposed well location OLF-G49 to location near GSPB-155-MW01.
- Resolution of one perceived data gap1: Agreed additional well not warranted.
- Temporary Resolution of five perceived data gaps 1,2,3,12 and 15: Quarterly monitoring for 2 quarters and re-evaluate acetone and other data.
- No Resolution of two perceived data gaps: data gap 9 and data gap at OLF-G11.
- No Resolution of one perceived data gap16: Unable in past efforts to obtain access.
- No Resolution of four perceived data gaps 10, 11, 13 and 14: Shallow and intermediate well clusters within landfill.

Further consideration of unresolved issues will be addressed 10:00 am, September 18, 2002, Orange Beach, AL.

ATTACHMENT 2

Draft Well Recommendations for Landfill 3, Fort McClellan, AL

To: Fort McClellan Hydrogeology Subcommittee
From: Ben Bentkowski, Gannett Fleming
Date: September 12, 2002

This list of data gaps is from the previous e-mail. I have gone through my cross sections and determined specific well locations and general depths to fill those data gaps. This proposed list of wells is the second list. Upon further review, data gaps 4, 5 and 6 were in error.

1. South of G21
2. Deeper from G21
3. Deeper from G20
4. Shallower from G31 (in error)
5. West from G31 (in error)
6. Shallower from G31 (in error)
7. Shallower from G33
8. Intermediate from G15/38 (also is east of G33)
9. East from G23
10. East from G12
11. East from G22
12. West from G12
13. East from G07
14. East from G20
15. East from G21

Well depth characterization depths are listed by elevations taken from the midpoint of the screen.
VERY SHALLOW above 700'
SHALLOW 600' to 700'
INTERMEDIATE 500' to 600'
DEEP below 500'