

APPENDIX G

**MEETING MINUTES FROM LANDFILL EE/CA MEETING
MARCH 24-26, 2003**

MINUTES
LANDFILL EE/CA MEETING
MARCH 24 - 26, 2003
FORT McCLELLAN, AL

Attendees:

Ft. McClellan
Ron Levy
Lee Jaye
Karen Pinson

Army Environmental Center
Mike Kelly

CDG Engineers
Mark Pugh

EPA
Doyle Brittain
Sharon Thoms
Ted Simon
Martha Brock

USACE, Mobile District
Lee Coker
Chip Parrott
Claude Leake

Gannett Fleming
Cheryl Nybro
Hugh Vick
Ben Bentkowski

ADEM
Philip Stroud
David Lovoy

Shaw Environmental, Inc.
Greg Sisco
Jeanne Yacoub
Paul Goetchius
Rich Prann
Troy Winton
Randy McBride
Steve Moran
Josh Jenkins

JPA
Miki Schneider

Matrix Environmental Services, LLC
Michelle Beekman

BRAC Field Office (Hampton, VA)
Robin Mills (by telephone)

Objectives:

1. To decide which landfills stay in the Landfill EE/CA and which go to RI/FS
2. To identify any data gaps associated with completion of the RIs for the landfills.

Meeting Summary:

EPA chaired the meeting, which began with a presentation by EPA Risk Assessors to the group on how EPA wants to see background concentrations treated in the selection of contaminants of potential concern. This presentation highlighted the necessity for the risk assessment subgroup to resolve lingering technical issues on background evaluations and selection of contaminants of potential concern. The group also agreed that this needed to be a separate meeting. After the presentation, the team turned its attentions to the comment response packages provided by the Army, and began to review the responses to EPA comments on the Landfill EE/CA. Very shortly into this exercise, Matrix suggested that the group address the comments by landfill, rather than trying to review each comment from the reviewers, since many of the comments were the same for

each landfill, for example, there were multiple comments suggesting the need for dioxin analysis. Shaw supported Matrix's suggestion to address comments and concerns on each landfill, but suggested the discussion focus on answering the stated meeting objectives. The team then decided to evaluate existing data on each landfill, discuss the comments in the response packages, and decide what additional data, if any, would be necessary to complete the evaluation of each landfill and satisfy concerns expressed in the comments. At the end of each landfill discussion, the team answered the two objectives identified above. The following information summarizes the results of the team's three days of evaluations and decisions. EPA and the Army agreed to the stated path forward on all the landfills. ADEM gave tentative agreement, but withheld concurrence pending further internal discussions.

Landfill 1

- Stays in EE/CA.
- Perform landfill gas monitoring.
- Collect 4 sediment samples (worst case); 2 near culvert and 2 upstream. Analyze for SVOCs, metals, dioxin, pesticides, PCBs.
- 1' soil cover where waste is exposed.
- LUCs with a requirement for soil cover maintenance.
- Monuments to define perimeter.
- Paul to clarify Conceptual Site Model (CSM).

The team reviewed the Army's current EE/CA recommendations for Landfill 1 and then discussed the comments received on that fill area. The Army indicated that it would perform landfill gas surveys on fill areas where the team agreed they are necessary; the team agreed that Landfill 1 would have a landfill gas survey. The team discussed the advantages and disadvantages associated with cover over the entire landfill vs. cover over the exposed area as recommended in the EE/CA. All the trees currently on the landfill would need to be removed to cover the entire landfill; Ron reminded the team that the JPA wanted the trees to be left alone. CDG asked what would happen if trees toppled over exposing fill contents, particularly in light of the possible presence of the military training items in the landfill. Members of the team noted that the root systems of the trees would be shallow, and would not significantly expose fill contents. After discussion, the team agreed that 1' of soil cover over the exposed area would be adequate. ADEM will check to see if the rules governing covers for solid waste landfills (ie., engineered impermeable layer overlain with top soil) apply to Landfill 1. EPA and the Army think the rules do not apply since Landfill 1 was closed before the laws were enacted; ADEM will check internally for a determination. The team then addressed the comment requests for more samples and dioxin analyses. After a comprehensive review of the historical data, the team agreed that 4 additional samples would provide adequate data to address the landfill, and also that dioxins would be included in the analytical suite.

Landfill 2

- Stays in EE/CA.
- Perform landfill gas monitoring.
- 1' soil cover.

- 2 sediment samples (analyzed for dioxins only).
- LUCs with a requirement for soil cover maintenance.
- Monuments to define perimeter.
- Rich/Paul to clarify CSM.

The team discussed the necessity for landfill gas survey at Landfill 2 and agreed that a survey is necessary. EPA indicated an expectation that the landfill gas surveys will be negative, but thinks they are necessary to demonstrate compliance with the presumptive remedy strategy that all migration pathways have been addressed. Robin expressed an overall concern about the necessity of landfill gas surveys, particularly at the Stump Dump. She also wants the BCT to concur on an exit strategy at each landfill.

The team discussed how dioxins would be evaluated. EPA indicated that current policy on dioxins in soil is 1 ppb for residential scenarios, and 20 ppb for industrial. Paul and Ted will work together to establish how dioxins will be evaluated at Ft. McClellan.

In reviewing the historical data for Landfill 2, EPA concurred that groundwater did not appear to present a problem given the data trends over time. Shaw presented results of the recently completed wetlands determination performed at Landfill 2. A small wetlands corridor exists along the southwestern parcel boundary. With the addition of the landfill gas survey, 2 additional sediment samples as close to the landfill as possible, and Paul and Rich to clarify the conceptual site model, the team agreed to the Army's recommendations as stated in the EE/CA.

Landfill 3

- Remove from EE/CA. Include all data and recommendations from EE/CA, and address in existing RI. Include minimal discussion in EE/CA to inform reader that LF 3 is addressed in separate RI.
- Groundwater
 - North and West defined.
 - East: Install 1 shallow well (30-50') between LF 3 and LF 4 to test for influence from LF 4. Analyze for VOCs only.
 - South: If G 41 (deeper well adjacent to G 10) is negative for VOCs, then stop. If positive, inform Corps and Ft. McClellan and scope additional work.
- Include results from nearby surface water/sediment sample PPMP-229-SW/SD03 in the RI.
- LUCs, perimeter monuments, soil cover/cap TBD.
- Perform landfill gas monitoring.
- Paul to clarify CSM.
- Army to consider including updated reuse plan in RI.

The team discussed the ongoing groundwater RI for Landfill 3, and the advisability of removing Landfill 3 completely from the EE/CA and addressing it in the RI. EPA expressed a concern that the public has already seen Landfill 3 in the EE/CA, and that removing it might look like the Army is trying to hide something about the landfill. The team discussed that the public is very aware of the ongoing efforts for Landfill 3 through

RAB meetings, the Army's outreach efforts with regard to the public water well survey, and discussion with private property owners nearby. The team agreed to remove Landfill 3 data, analysis, and recommendations from the EE/CA and incorporate it into the ongoing RI, but put some discussion in the EE/CA that advises the readers of the situation with Landfill 3, that it is being addressed in an ongoing RI/FS. Matrix also pointed out that the future plans call for a road to be constructed over part of the landfill, and requested that the Army consider this reuse in light of the recommendation for a cap over the landfill. The team evaluated the existing and planned data for Landfill 3 and decided to include an additional shallow well between Landfills 3 and 4, VOCs analysis only to evaluate if Landfill 4 might be a possible groundwater contamination source for Landfill 3. The team also decided to include some surface water and sediment data from Parcel 229 in the RI to address a potential data gap in surface water and sediment.

Landfill 4/Industrial Landfill

- Stays in EE/CA.
- Monuments to define perimeter.
- Paul to clarify CSM.
- ADEM to check permit status.

EPA concurred with the Army that this landfill is being operated in accordance with an existing ADEM permit, and feels the only action to be taken is to develop future LUCs. ADEM will check to verify the permit is still in place. Shaw presented results of the recently completed wetlands determination. Wetlands exist inside the eastern edge of the parcel boundary, but outside of the landfill's fenced area. Shaw noted that fill material is not present in the wetlands.

Fill Area West of Iron Mountain Road and Range 19

- Stays in EE/CA.
- NFA.

The team agreed that this fill area no longer exists due to bypass construction activities. It is also surrounded by property to which the BCT has agreed to NFA (Ranges West of Iron Mountain Road).

Stump Dump

- Stays in EE/CA.
- Perform landfill gas monitoring (ADEM wants; Army and EPA think unnecessary; BCT to talk with US Fish and Wildlife Service).

Ron indicated that the Stump Dump is on property planned as part of the National Wildlife Refuge, and will be transferred to the US Fish and Wildlife Service. ADEM wants a landfill gas survey; EPA and the Army disagree that a landfill gas survey is appropriate for this area. It is out in the open, there are no nearby structures, and there is no expectation of adverse affects from landfill gas if it exists. The BCT agreed to address this issue with the US Fish and Wildlife Service.

Fill Area North of Landfill No. 2

- Stays in EE/CA.
- Use "new" background evaluation with existing data to address metals.
- Erosion control (rip-rap) on slope.
- Remove surface debris.
- Monuments to define perimeter.
- Rich/Paul to clarify CSM.

The team discussed the presence of metals on this parcel, and agreed that the geochemical evaluation might be a useful tool for this parcel, and that additional explanation in the EE/CA showing the relationship of the parcel to its geology would help address the metals issues. Shaw presented the results of the recently completed wetlands determination. Wetlands exist in two very small areas within the southeastern portion of the parcel boundary, but not within the fill area itself. The team also agreed that the Army's current recommendations in the EE/CA are adequate.

Fill Area East of Reilly Airfield and Former Post Garbage Dump

- Stays in EE/CA.
- Perform landfill gas monitoring.
- Install 1 well between GP07 and GP12 to the west. Analyze for metals only.
- Remove surface debris.
- 1' soil cover on fill areas only.
- LUCs with a requirement for soil cover maintenance.
- Monuments to define perimeter.
- Rich/Paul to clarify CSM.
- Recommend investigation for wetlands due to metals > ESVs and proximity to recreational resources
 - Delineate all metals > ESVs (after background risk is evaluated).
 - Evaluate mercury in fish for food chain exposures.
 - ERA and HHRA.

The team agreed that landfill gas survey is necessary for this site. After evaluating the data for the site, the team decided that one additional groundwater well, analyzed for TAL metals only, would satisfy comments to fill the groundwater data gap. Shaw presented the results of the recently completed wetlands determination. Wetlands exist along the northern edge of the parcel boundary. EPA believes, and ADEM agreed, that a separate investigation in the wetlands for metals (exceeding ESVs) is necessary, particularly due to the proximity of the Reilly Lake recreational area.

Fill Area Northwest of Reilly Airfield

- Stays in EE/CA.
- Perform landfill gas monitoring.
- Install 1 well north of GP01. Analyze for metals, explosives, VOCs. Take water level measurements.
- Remove surface debris.
- 1' soil cover on fill areas only.

- LUCs with a requirement for soil cover maintenance
- Monuments to define perimeter.
- Rich/Paul to clarify CSM.

The team evaluated data for this site, and decided that an additional well, analyzed for metals, explosives, and VOCs, is necessary. A landfill gas survey is also necessary. The team also decided that the wetlands located approximately 500' northeast of this fill area should be included in the wetlands investigation for the Fill Area East of Reilly Lake. Miki indicated that the Mayor of Anniston wants to know if the fish in Reilly Lake are safe to consume. She indicated the Mayor has told her the Army intends to test the fish in the lake. The team decided the wetlands investigation should include Reilly Lake, and the wetlands west and east of Reilly Lake.

Fill Area at Range 30

- Stays in EE/CA.
- Remove asphalt debris and dispose appropriately; then NFA in EE/CA.
- Explain "seep" location in text.

EPA indicated that this is a site where the Army could perform a relatively quick clean up and disposal of the asphalt on the site, and then NFA the site. The team determined that landfill gas is not necessary for this site, and recommended clean up and disposal of the asphalt piles, then NFA. EPA also suggested clarification of the "seep" location at the site.

Parking Lot - After addressing all the landfills and fill areas, the team addressed several parking lot issues that resulted from discussions on the fill areas:

Background Data Set - Paul summarized the risk assessment subgroup's side-bar meeting on the background data issues. Paul noted Ted's observation that Ft. McClellan's existing background data set combines data from the Main Post and Pelham Range, and Ted's concern about the technical propriety of combining two such diverse data sets. Paul will check to see if it is statistically defensible to combine the two data sets.

Paul explained that Tier I screening consists of the 2X background mean comparison with site data. Tier 2 uses statistical tests to (1) determine the "bright line" standard for comparison (slippage test), and (2) determine whether site and background data appear to be drawn from the same population (Wilcoxon Rank Sum Test). Paul will check with staff to verify the adequacy of these tests. Tier 3 is the geochemical analysis. It is used when Tier 2 is not viable (less than 10 samples) or if either of the two statistical tests in Tier 2 fail. Paul will also check with geochemistry staff to ensure that site activities that alter exposure without altering natural background ratios are not overlooked. Future soil analyses should include pH in order to determine whether site-related activities have significantly affected the soil pH and thus metal solubility.

Ted provided human health risk criteria for dioxin levels in soil. The recreational site user is the individual exposed to sediment. There is a fraction in the IWWP to develop

criteria for sediment. Dioxins are similar to lead in that multiple sources preclude quantification of medium-specific risk levels. Paul will generate a memo deriving soil and sediment cleanup levels for sediment for the recreational site user.

Doyle requested a technical memorandum regarding background comparisons to which all the risk assessors agree. Paul will generate the memorandum by April 10.

Resolution of Comments - EPA suggested the Army send a letter to EPA and ADEM that comments on the EE/CA were discussed and resolved during this meeting, and that the Army will revise the document accordingly. Steve inquired about comments from the public.

Landfill 4 - ADEM will check LF 4 permit requirements and report back to the Army and EPA.

Landfill Gas Monitoring - Jeanne informed the group that Shaw is currently preparing a work plan for review by the BCT. Doyle suggested consulting a reference from the Solid Waste Association of America called the *"Manager of Landfill Operations Training and Certification Course Manual"* before getting too far along to make sure that EPA concerns are addressed in the work plan. Steve explained the 5-phase technical approach Shaw will propose for consideration; modeling, traverses, barholes survey, structures survey, and analytical samples using summa canisters.

Bullets on Ranges ERA - The Ecological Risk Subcommittee has incorporated grit sizes for bird ingestion into the Bains Gap Road Study Design (turkey, bob-white). Rich will distribute the information to the subcommittee next week and will set up a call to decide how the information will be used. If Sharon can't make the meeting, Doyle indicated that Cheryl Nybro will be the point person. Doyle stressed that he doesn't want progress to be delayed if Sharon is unavailable because Cheryl can get back to Sharon to keep her updated. Rich will also include Mike Kelly and Mark Huston on the conference calls.

Future Meetings - The RAB meeting is April 21. The project team meeting is rescheduled for April 22-23 at Ft. McClellan. Fran Coulters, the new NGB representative, will attend.

Landfill 3 - Landfill 3 will be removed from the EE/CA, but the Army will keep some discussion of landfill 3 in the EE/CA to demonstrate that it has been considered and is addressed in the RI. There is to be no data, no evaluation, no ARARs, no recommendations for Landfill 3 in the EE/CA.

The RI will include sediment data from parcel 229 (SD 03) to demonstrate no problem in sediment/drainage channel. Doyle asked whether the group was satisfied that the data set was adequate. Ben indicated his opinion that the data were adequate. Even though there is not a lot of surface soil data, there is adequate sediment data to satisfy the project team.

Wetlands Investigation for Reilly Lake Areas - EPA wants to identify a conceptual plan. Ron indicated that Mayor of Anniston is concerned about fishing in Reilly Lake. Miki said the mayor indicated to her that the Army would test the fish. The project team agreed that one human health and ecological risk evaluation for Reilly Lake and the wetlands located east and west of Reilly Lake is reasonable.