

**MEETING MINUTES**

<b>Meeting Subject:</b> NTC landfill site walk, and discussion and resolution of open issues and agency concerns regarding the Draft EE/CA for CTO-56*	<b>Meeting Date:</b> September 4, 1996 <b>Meeting Time:</b> 10:00 AM <b>Meeting Place:</b> NTC <b>Meeting Notes Prepared By:</b> Stephen Blanchard			
<b>Attendees:</b>  <table style="width:100%; border:none;"> <tr> <td style="text-align:center; vertical-align:top;"><u>Navy</u> Content P. Arnold Keith Forman Greg Sheffer</td> <td style="text-align:center; vertical-align:top;"><u>Bechtel National, Inc. (BNI)</u> Jerald Bailey Steve Blanchard Brian Cundelan</td> <td style="text-align:center; vertical-align:top;"><u>Regulating Agencies</u> Carol Tamaki (RWQCB) Aaron Yue (DTSC)** Tamara Zielinski (CIWMB)</td> </tr> </table>		<u>Navy</u> Content P. Arnold Keith Forman Greg Sheffer	<u>Bechtel National, Inc. (BNI)</u> Jerald Bailey Steve Blanchard Brian Cundelan	<u>Regulating Agencies</u> Carol Tamaki (RWQCB) Aaron Yue (DTSC)** Tamara Zielinski (CIWMB)
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<b>Additional Distribution (In Addition to Attendees):</b> Linda Geldner (Navy), Steve DeYoung (BNI), Angelos Findikakis (BNI), John Kluesener (BNI), Bong Kown (BNI), Dale Obenauer (BNI), Kathryn Parker (BNI), Robert Tait (BNI), Martin Hausladen (EPA), Corey Walsh (RWQCB), Glenn Young (CIWMB)				

\* refer to the teleconference meeting minutes, August 26, 1996

\*\* denotes attendee present by telephone during post-site walk meeting.

Description of Action Items:

Item No.	Item Description	Responsible Individual	Due Date/ Status
1	Ask the San Diego Port District if any wastes were found in the footing excavations for the terminal expansion building (near the uncertain waste extent in geophysical survey area 2), and observe the footing excavations, if possible. The results of this research shall be included in the EE/CA.	Navy	TBD <sup>(1)</sup>
2	Add a contingency to the EE/CA that if LFG monitoring indicates potential problems, then additional measures will be taken.	Navy/BNI	TBD
3	In the EE/CA, explain waste extent more clearly, and tie all existing data together more clearly on a few figures, possibly as overlays. Add boring logs to an appendix	Navy/BNI	TBD
4	Address uncertainties in the off-site waste extent in geophysical area 4. Survey the area and evaluate what is possible logistically for additional field work.	Navy/BNI	TBD
5	Prepare an addendum to the ESI work plan for the additional geophysical area 4 assessment of waste extent, and send the addendum to the regulators for review.	Navy/BNI	TBD

6	Add the results of the additional waste extent assessment in geophysical area 4 to the Final EE/CA	Navy/BNI	TBD
7	consider doing additional subsurface work to define the extent of wastes in geophysical area 2	Navy	TBD
8	Perform annual soil cover maintenance	Navy	Sept. 23 <sup>(2)</sup>
9	Perform LFG monitoring after soil cover maintenance	Navy	late Sept./early Oct.
10	Separate the Water SWAT and ESI metals results on tables in the groundwater monitoring report for clarification	Navy/BNI	TBD
11	Visit NTC at the time of the upcoming BCT and RAB meetings to do a site walk at the landfill	A. Yue	Sept. 24
12	Send written recommendations, as discussed in this site walk and meeting, to A. Yue.	RWQCB and CIWMB	Sept. 12
13	Prepare a letter documenting the RWQCB, CIWMB, and DTSC recommendations, and send the letter to the Navy	A. Yue	Sept. 13

Notes:

<sup>1</sup> TBD - to be determined.

<sup>2</sup> Planned date. Actual date will depend on the Construction Battalion's (CBs) scheduling and equipment availability.

## I. LANDFILL SITE WALK

Meeting attendees met at the environmental office at NTC and traveled to the Inactive Landfill to discuss extent of the landfill waste and to perform an informal LFG survey in areas where T. Zielinski and G. Young observed cracking and noted odors during their previous site walk. K. Forman also presented a map indicating the locations and results of some informal LFG monitoring the Navy and BNI performed on August 27, 1996, to help guide the LFG survey.

Prior to checking for LFG, BNI distributed figures showing the landfill waste extent (including the four geophysical survey areas investigated during the ESI), utility lines, and the Water SWAT geophysical survey results (on a color figure). A discussion ensued regarding various issues, as follows:

LFG Monitoring Probes - Probe locations, probe construction, and their relationships to the areas where landfill waste extent is uncertain, was discussed. In particular, T. Zielinski was concerned about the two geophysical survey areas where landfill wastes may extend onto the airport property (geophysical survey Areas 2 and 4). T. Zielinski suggested that for the post-closure monitoring, LFG monitoring wells should be installed at the property boundary in Areas 2 and 4. Those locations would have a two-fold purpose: 1) to help assess landfill waste extent during drilling; and 2) to monitor for potential landfill gas migration towards the terminal expansion building.

Landfill Waste Extent - T. Zielinski found it difficult to assimilate all the data collected to date to evaluate waste extent, particularly since the color geophysical maps were not in the ESI. T. Zielinski suggested that an expanded and clarified presentation of waste extent be included in the EE/CA. This presentation should include figures showing the relationships between the Water SWAT survey results, boring/well locations, previous LFG probe points, and other pertinent data. The boring logs should also be included in the EE/CA, and discussed with respect to any waste encountered during drilling. Borings/wells and LFG probe locations and results could be presented as overlays for clarity.

In addition, it was agreed that to help evaluate waste extent near Area 2, the Navy will ask the construction contractor and/or San Diego Port District if any wastes were found in the footing excavations for the terminal expansion building. The Navy will also directly observe the footing excavations, if possible. The results of this research shall be included in the EE/CA.

Farmer's Model and Cap Design - The assumptions and inputs to the Farmer's Model, the use of the Farmer's Model results in the risk assessment in the ESI, and the implications of the results on the landfill cap design were discussed. T. Zielinski explained that she would have preferred that direct emissions results from the modeling be input directly into the risk assessment, rather than including other factors such as dispersion modeling. T. Zielinski also indicated that a comparison of different scenarios should have been done, in a manner similar to that done with the HELP model in the EE/CA.

It was noted that the Farmer's model was discussed in detail during the ESI review, and that the Navy followed the regulator's guidance. The method was also noted by BNI as being very conservative. The Navy and CIWMB agreed that the model will not be re-run. T. Zielinski indicated that she is not confident that the modeling and landfill cap is sufficient as presented, and the Navy needs to make sure that they are confident that the design will work.

EE/CA modifications - Based on the preceding discussions, T. Zielinski requested that the following issues be clarified or stated in the EE/CA:

- Add a contingency that if LFG monitoring indicates potential problems, then additional measures will be taken.
- Explain waste extent more clearly, and tie all existing data together more clearly on a few figures, possibly as overlays. Add boring logs to an appendix.
- Address any uncertainties in the off-site waste extent by advancing additional LFG monitoring probes and/or borings. Regulatory requirements are probes every 1,000 feet or near structures. This can be done now, or later during installation of the LFG monitoring network.

Following the discussion, various locations in cracks in the soil surface and in surface structures (drainage grates, utility boxes) in the central west portion of the landfill were checked for LFG emissions. T. Zielinski used a GasTech combustible gas indicator calibrated to methane and scaled to gas percent, and S. Blanchard used a Foxboro organic vapor analyzer calibrated to methane and scaled to parts per million. The

cracks were checked by placing the probes approximately 0 to 2 inches into the cracks/surface structures.

## II. MEETING IN ENVIRONMENTAL OFFICE AT NTC

The site walk participants attended a meeting in the environmental office to further discuss and resolve the open issues.

### Geophysical survey area 4

K. Forman presented information showing that a portion of the land belonging to the Navy between the Least tern area and the airport runway was leased to the airport for a 50 year period beginning in 1972. Therefore, the leased portion was part of Navy property at the time the landfill was in operation, which raises the question as to whether waste may have been deposited in that area. This corresponds to geophysical Area 4 where waste extent was uncertain, primarily due to surface interference.

As a result, the Navy believes additional waste extent assessment in that area is warranted. The Navy proposed the following:

- Survey the area and evaluate what is possible logistically. The recreational vehicles and one fence have been removed, but access to the runway area is limited.
- Prepare a brief addendum to the ESI work plan, with references to the ESI methodologies and procedures, to expedite the work. The addendum will be sent to the regulators for review prior to initiating work. T. Zielinski suggested that a backhoe is the most efficient method to obtain feedback on waste extent.
- Add the results of the additional waste extent assessment to the Final EE/CA.
- Considering the EE/CA timeline, the Navy prefers to do the additional assessment work as soon as possible. Also, agreement is needed from the regulators on the responses to the Draft EE/CA comments.

At this point in the meeting, A. Yue joined the meeting by telephone. T. Zielinski summarized the site walk/LFG survey findings, and her concerns about waste extent and LFG monitoring (refer to bulleted items under "Landfill Site Walk"). K. Forman explained the additional information on the leased property, and the proposed plan of action for additional waste extent assessment. A. Yue and T. Zielinski agreed with the Navy's proposed plan of action for that area.

T. Zielinski asked if the LFG monitoring probes will be installed before the landfill cap. K. Forman indicated that the Navy will consider doing that.

### Geophysical survey area 2

K. Forman reiterated that the Navy intends to check the terminal expansion footings and to talk with the San Diego Port District to find out if any waste was encountered during

construction. K. Forman also indicated that the property boundary in that area has not changed historically, and that the Navy would not have deposited waste off-site.

T. Zielinski indicated that a LFG probe or boring may still be necessary at the property boundary since the ESI states that waste may extent onto Lindbergh Field property, and this issue needs to be resolved. The Navy will consider doing additional subsurface work in this area, and if this work is done the Navy will coordinate placing a boring/probe on the Lindbergh Field side of the fence.

#### Landfill Cap Design

The Navy indicated that the single layer cap is still the recommended option.

C. Tamaki indicated that the RWQCB's concerns are post-closure maintenance of cap, and questions on the re-runs of the HELP model in the Least tern area, with regard to infiltration. The Navy indicated that for the Least tern area, the proposed curbing will remain, and that the Navy is still working with Natural Resources on the sand thickness, possibly to reduce it to 2 feet. There is currently no regulation governing the sand thickness, but the Department of Fish and Game recommendation was 3 feet based on the ant problem at Naval Air Station North Island.

#### LFG modeling/monitoring

T. Zielinski reiterated that she is still not comfortable with the LFG modeling, but she and A. Yue agreed that the contingency in the EE/CA to take additional measures if any problems are indicated, based on LFG monitoring, is acceptable. In addition, LFG emissions will be evaluated initially after the upcoming annual soil cover maintenance.

#### Soil Cover Maintenance

C. Arnold indicated that the annual soil cover maintenance is tentatively scheduled for Monday, September 23rd, although this depends on the CBs scheduling and equipment availability. After soil cover maintenance, LFG monitoring will be performed, probably at the end of September or early October.

#### Groundwater Monitoring Plan

C. Arnold asked if the regulators have reviewed the responses to the comments on the groundwater monitoring plan, as presented in the EE/CA, and when can the Navy expect concurrence on the responses. A. Yue indicated that C. Walsh thinks that additional refinement is still needed. C. Tamaki explained that it is difficult for the RWQCB to make decisions regarding the monitoring plan because of variations in the detection limits between the various sampling events for the metals (in particular, the Water SWAT sampling events). The RWQCB is looking for baseline levels. BNI explained that the variations may be due to interference in the sample and/or differing analytical methods, and that the latest analytical technology is being used. The Navy will send the latest sampling results to the RWQCB soon, which C. Tamaki indicated will help the RWQCB make their decisions.

At C. Tamaki's request, BNI and the Navy agreed to separate the Water SWAT and ESI metals results on tables in the groundwater monitoring report for clarity, given the different detection limits.

Other miscellaneous items and Schedule

1) A. Yue will visit NTC at the time of the upcoming BCT and RAB meetings (September 24) to do a site walk at the landfill.

2) The RWQCB and CIWMB will send their written recommendations, as discussed in this site walk and meeting, to A. Yue, who will prepare a letter documenting the recommendations. A. Yue will send the letter to the Navy. The tentative schedule is as follows:

- RWQCB and CIWMB letters due to A. Yue by September 12
- A. Yue can issue the letter on September 13.