

N00207.AR.003487  
NAS JACKSONVILLE  
5090.3a

TELEPHONE CONVERSATION TRANSCRIPT REGARDING REGULATORY REVIEW AND  
COMMENTSS ON REMEDIAL INVESTIGATION FEASIBILITY STUDY FOR OPERABLE UNIT  
3 (OU 3) NAS JACKSONVILLE FL  
8/4/1994  
ABB ENVIRONMENTAL

11/10/94 11/10/94

Date of Meeting: August 4, 1994

Project No.: 07586-43

Project Description: NAS Jacksonville OU3 RI/FS Workplan

Telephone Conversation Between: Dana Gaskins, EIC Southern Division- Navy; Peter Redfern, Task Order Manager; Wayne Britton, Technical Lead, OU3; Greg Beumel, Risk Assessment, OU3 Project; and Conrad Bernier, Lead Technical Reviewer ABB-ES

And: James Hudson, RPM EPA Region IV; Sonny Sun, Risk Assessment Specialist at Dynamac and Mitch Cohen, Civil Engineer at Dynamac

Purpose: To discuss selected comments provided by EPA on the OU3 RI/FS Workplan.

- I. Conference call held from 1:10 pm until approximately 2:20 pm at ABB Environmental Services (ABB-ES) office-Arlington, Virginia and USEPA and Dynamac offices in Atlanta, Georgia.
- II. Comments and Discussions

**General Comment #4**

The Field Sampling Plan in Appendix M2 states that polyvinyl Chloride (PVC) pipe will be used to construct the groundwater monitoring wells. However, EPA discourages the use of PVC as a well construction material. Instead, EPA recommends that stainless steel be used for the following two reasons. First organic contaminants can leach from PVC into groundwater, resulting in nonrepresentative samples. Second, it is possible for organic contaminants in the groundwater to absorb to the PVC material, again resulting in nonrepresentative samples. Therefore, if PVC is to be used, specific analytical data should be provided indicating that neither the leaching nor the sorption of organic compounds from the PVC well materials will interfere with the data quality of the groundwater samples.

**Discussion**

Mr. Hudson stated that EPA would not require use of stainless steel well construction material only that they were recommending it's use for the reasons stated. If the Navy uses PVC well construction materials it will have to accept the stated risks. Mr. Gaskins explained that the Navy was willing to take the risk of using PVC casing versus that of stainless steel for monitoring well construction. Mr. Hudson agreed that no specific letter was needed to confirm this understanding. It was recommended that data supporting the use of PVC pipe be

placed in an Appendix of the workplan for clarification purposes. Mr. Hudson restated that EPA does not recommend the use of PVC pipe for monitoring well casings, but that the Navy may use PVC at it's own risk.

**Specific Comments on #17**

**Page 3-6, Paragraph 3:** The text states that 'draft soil cleanup goals" were presented to the partnering team by the State of Florida. State in the text what the draft soil cleanup goals are.

**Specific Comments on #18**

**Page 3-6, Preliminary Remediation Goals:** The last statement, regarding soil clean up goals, does not specifically acknowledge what will be used for these goals. EPA will consider numerous numerical methods for generating soil clean up standards which are protective of the ground water. Further portions of the text suggest that comparisons will be made to background values. Both comparisons would be useful, but additions discussion is needed: these values will be used to calculate volumes of contaminated soil, project costs, and ultimately will affect the choice of source remediation.

**Discussion**

A discussion was held on whether the Florida soil cleanup goals should be followed and included as a part of the workplan for OU3. Mr. Hudson believes that it was too early to make a final decision because the Florida soil cleanup goals were preliminary and had not been promulgated. Mr. Britton explained that the work plan would, therefore, not state the specific cleanup goals to be used for recommendation.

Mr. Sun asked what methodology was used to derive the Florida cleanup goals. Mr. Bernier responded that the methodology was similar to that used by EPA Region III to establish screening values but that a number of assumptions were different.

Mr. Hudson indicated that Florida will want the Navy to use its cleanup goals. Mr. Beumel explained that ABB-ES traditionally follows RAGS part B for establishing preliminary remediation goals. It was agreed that ABB-ES will still need to resolve what cleanup criteria will be used at NAS Jacksonville. It was further agreed that this was a subject that should be discussed at the next partnering meeting scheduled for August 16-17, 1994.

**Specific Comment #29**

**Page 6-13 to 6-14:** The 58 shallow hand-augered soil borings referred to in the text should be located on a figure. Soil boring samples are proposed for depths of 0-2', 2-4', and 4-6' at 58 locations. Surface soil samples must be collected no

deeper than 0-1' for direct contact risk assessment purposes. These 58 locations should be sampled for 0-1' instead of 0-2'. Without these locations the only surface soil data suitable for direct contact risk assessment will be the 8 locations at PSC 15 proposed on Page 6-16.

### Discussion

Mr. Britton explained that ABB-ES will not be able to show the 58 soil boring locations on a figure since 51 of the locations are associated with monitoring wells whose locations can not be indicated until after the field program has been initiated.

Mr. Hudson asked that ABB-ES clarify why 0 to 2 foot soil samples were being taken instead of 0 to 1 foot samples. Mr. Britton explained that PSC 15 was the only area where there is any exposed soil, and is the only soil area which receives surface runoff. Therefore, the 0 to 2 foot was not meant to sample surface soil, but provide subsurface soil characterization. Mr. Hudson asked if this was not stated in the text, would ABB-ES add a statement to the workplan explaining that the area within OU3 is primarily covered by concrete.

### Specific Comment #32

Page 6-22: The DPT sampling is identified as Level I (comparable to Level V) Data Quality. The DPT sampling involves testing for TCL/TAL parameters (not non-conventional parameters) are shown in Table 2-5 of Appendix M2, samples will be sent for 24 hour turnaround, and no data validation will be performed. Based on this information, it is more likely that the DPT data will be Level II or Level C (comparable to Level III) at best. The DPT data is unlikely to be suitable for risk assessment purposes, as stated in the second paragraph, and should be used only to determine confirmatory sample locations for further analysis. The term "validated data" should be changed to "validated (qualified) data".

### Discussion

Mr. Hudson stated that EPA did not object to the use of the DPT; EPA does, however, have a problem with classifying the data obtained from the DPT samples as Level 5. Mr. Britton agreed that the data should more properly be classified Level 3.

Mr. Britton then asked about the use of DPT data for baseline risk assessment. Mr. Hudson explained that Jim Crane of Florida DEP normally will require permanent sampling wells for the acquisition of groundwater samples to be used in risk assessment calculations. Mr. Hudson stated that EPA, is willing to accept DPT analytical data results, as they are interested in having the work performed in the least expensive way.

Mr. Beumel stated that the discussion should be directed toward whether groundwater was an exposure pathway. Studies performed at Hanger 1000 at NAS Jacksonville has demonstrated that groundwater cannot be used as a reliable source of drinking water supply because less than 3 gals/min could be pumped out of a 6" well. Mr. Beumel suggested that the groundwater risk issue be brought up in the next partnering meeting. Mr. Beumel also commented that Dr. Aiken of EPA, Region IV stated that a baseline risk assessment would not be necessary if the Navy agreed to address chemicals of concern that exceeded an agreed to preliminary remediation goal, e.g. MCLs.

**Specific Comment #34**

**Page 6-25, Paragraph 4, Section 6.5, 1.2:** The rationale stated in the paragraph for not evaluating potential surface soil exposure under the occupational exposure scenario is unsubstantiated. If exposure to subsurface soils during construction activities were to be evaluated under both the current and future land-use conditions, evaluation of the potential exposure to the contaminated surface soils must also be included in the risk assessment.

The definition for surface soils ("0 to 12 inches deep") and subsurface soils (0" inches to the water table"), as provided in the paragraph, are apparently contradictory. Please clarify.

**Discussion**

Mr. Beumel discussed and explained the issue of surface soil exposure as related to OU3. In most locations there is no exposed surface soil at this site. Therefore, a surface soil pathway will not be evaluated where surface soil is covered with concrete. Everyone agreed there appeared to be no problem with surface soil contamination (except possibly at PSC 15).

Mr. Beumel stated that subsurface soil exposure would be evaluated only as a construction scenario. This was stated in the occupational exposure scenario paragraph. Mr. Beumel explained that ABB-ES and the Navy wanted to consider all soils with which construction workers would come in contact. Mr. Sun asked for an explanation of the definition of subsurface soil as "0 inches to the groundwater table". Mr. Britton clarified that 0 inches is measured from the bottom face of the concrete and confirmed that this description would be added to the text.

**Specific Comment #36**

**Page 6-27, Table 6-2:** A surface soil exposure assessment should be included under the occupational exposure scenario. See Specific Comment No. 34.

It is unjustified to include child resident receptors in only the surface water and sediment, but not in the groundwater and surface soil exposure assessment.

Compared with adults, children are more sensitive to contaminant exposure. The potential for and implication of children's exposure to contaminated media should be fully evaluated in all exposure pathways.

### Discussion

Mr. Beumel again stated that there was no exposed surface soils at most of OU3. Mr. Beumel explained that he wanted to defer a discussion of the appropriate exposure pathways until after the partnering meeting addressed the issue. He stated that exposure pathway should be identified after an agreement is made on the groundwater pathway at the partnering meeting. Everyone agreed this was acceptable.

### Specific Comment #43

Pages 0-6 through 0-9. Tables 0-2 through Table 0-5: For the parameters, "Exposure Frequency," "Exposure Duration" and "Noncancer Averaging Time," the sources provided on these tables indicated "USEPA, 1991b/Assumption." This notation is misleading since the values for these parameters, as presented in these tables, were not derived from the EPA reference document cited as "USEPA, 1991b." Therefore, the wording "USEPA, 1991b" should be deleted from these source terms, and the full names of the EPA reference documents which are cited as "Source" should be included on these tables instead for easy referral and completeness.

Provide the rationale for selecting an exposure duration value of 1 year for the construction exposure scenario. This value appear too low to be used to represent and industrial/occupational exposure setting.

### Discussion

Mr. Beumel agreed to the requested changes and the use of "Professional Judgement" instead of "Assumption". It was agreed that more detail would be provided on sources in the table. Mr. Sun requested that EPA references only be indicated when default values will be used. Mr. Beumel further explained that the soil exposure scenario was selected to represent a construction worker rather than industrial occupational exposure because of the lack of exposed surface soil at OU3. Mr. Britton and Mr. Redfern explained that because of the sites' location and operations, construction would be short and conservative. Mr. Beumel also stated that the facility was likely to increase it's coverage of impervious surfaces over time rather than decrease them.

Mr. Sun expressed concern with the reasonable maximum exposure (RME) time. He felt that the one year stated in the text may under represent the RME for a construction worker. It was decided that the uncertainty analyses would address the evaluation of longer exposures. However, the work plan text will not be changed.

Mr. Beumel stated that the discussion of RME in the uncertainty analyses will include an evaluation of the impact of increased exposure duration. Mr. Sun confirmed this must be done to put the risk analyses in perspective.

**Specific Comment #46**

**Appendix M2, Page 3-20, Paragraph 3:** The text states well development "will continue for 1 hour or until further development does not yield improvement in water clarity." A development time of 1 hour will not likely allow for the water to become free from visible sediment. In addition, the text does not specify how long development will continue before the determination is made that the water clarity is not improving. The ECB SOPQAM, which does not put a time constraint on well development, states that "the new monitoring well is free of visible sediment, and the pH, temperature, and specific conductivity have stabilized. Since mud-rotary drilling is being used at OU 3, adequate well development will definitely take more than 1 hour. The ECB SOPQAM also states that "continuous flushing for several days may be necessary to complete the well development." The well development criteria in the RI/FS Workplan should be modified to be consistent with the ECB SOPQAM.

**Discussion**

Mr Britton clarified that reference to "1 hour for monitoring well development" was taken out of text and that the parameters will be monitored as indicated. He also said that as soon as the groundwater parameters are stabilized, and no further indication that the clarity will improve, the well development operation will cease.

Mr. Cohen explained that the main issue of this comment was to make sure that the parameters were stabilized. Mr. Britton and Mr. Redfern explained this is clarified in text. Every agreed on this response.

**Specific Comment #47**

**Appendix M2, Page 3-20, Paragraph 3:** The RI/FS Workplan does not specify the waiting period between placement of the bentonite seal and placement of the cement-bentonite grout. The ECB SOPQAM states that the bentonite seal "shall be allowed to hydrate a minimum of eight hours or the manufacturer's recommended hydration time, whichever is longer". The RI/FS Workplan should be consistent with this criterion.

**Discussion**

Mr. Britton discussed submitting data and manufactures information on the hydration of bentonite. ABB-ES explained that it had taken exception to the minimum 8 hour rule for the hydration for bentonite. Data shows that a 1 hour of hydration time is sufficient (from Dr. Willard Murray (ABB-ES) and Manufactures literature). Mr. Hudson and Mr. Cohen said this was all right with them, but ESD has the final authority on these matters.

A separate submittal will be forwarded to James Hudson, which will provide a rationale for the reduced hydration time.

**Specific Comment #48**

Table 3-2 of Appendix M1: Lower quantitations limits should be used for any potable water samples by selecting a low concentration or drinking water method for organics. A low concentration method would not be needed for all groundwater as it would not be appropriate for contaminated samples.

**Discussion**

Mr. Britton explained that no potable water samples were being collected. Mr. Hudson asked if ABB-ES was trying to use another method. Mr. Bernier explained that alternative methods have been used in the past, however ABB does not feel lower concentrations should be used on samples during this program, as there was no need for it.

**Specific Comment #55**

Page 0-5, Table 0-3: Inhalation of volatiles from household use is presented. Please see attached supplemental guidance on this subject.

**Discussion**

Mr. Hudson stated that the table referenced should be TABLE 0-4, not TABLE 0-3. He further stated that the supplemental guidance on this subject could be discarded.

**Radioactive Contamination Comments-Comment #1**

The site has a history of widespread Radium-226 contamination. However, not all areas are being evaluated for radionuclides. To ensure that there are no undetected radionuclides in the "low potential" areas, all environmental samples should be screened for gross alpha and gross beta particles. Alpha levels above screening criteria of 5 picocuries per gram for soil or 5 picocuries per liter for water require additional analysis for radium. The beta screening criteria is 15 and 50 picocuries per liter (40 CPR 141.26). Beta particle activity between 15 and 50 picocuries per liter require analysis for Strontium-89 and Cesium-134. Levels above 50 picocuries per liter require beta isotopic analysis to identify the radionuclides detected. All buildings should undergo a walk through radiation screening survey utilizing a sensitive gamma radiation survey meter with a scintillation detector. These steps should provide an increased data base for risk assessment and an adequate confidence level for the workplan related to radioactivity.

### Discussion

Mr. Britton asked Mr. Hudson what was meant by widespread contamination at the site. Mr. Britton stated that neither he nor the facility personnel understood this comment. Radioactive contamination was discussed and it was noted that PSC 13 is part of radiation survey that is scheduled for completion in 1994. Mr. Hudson said to ignore this request for building screening. No reason also to do groundwater samples. It was agreed that Mr. Hudson would supply references (referred to in comment) to Mr. Redfern which in turn will be passed on to the facility.

### Comment

The plan should make clear that each grid will be investigated, but that sampling will extend beyond the grid boundaries if necessary.

### Discussion

In response to the final comment submitted from EPA, which referenced the sampling grids, Mr. Britton clarified that grids shown on the Figures in Chapter 6 of the workplan are only to represent the general areas where DPT will be used. The grids were developed only to identify general areas of investigation and to get an approximate number of DPT sampling points for costing purposes with Navy. ABB-ES will follow the plume, both inside or out of the boundaries as required, but every grid point will not necessarily have a DPT probe.

## III Conclusion

The telephone conference call held on August 4, 1994 will be followed by a memorandum of the understanding which will summarize the results of the conversations. This document will be sent to Mr. Hudson. Other subjects: Comment 17, 18 and 32 will be agenda items at an upcoming partnering meeting.

Mr. Redfern requested dropping the "Response to Comments Letter" as was suggested at a previous partnering meeting. Mr. Hudson said the Navy, to his knowledge, was the only one requesting this form of response. Mr. Redfern reiterated that the issues discussed in this teleconference will be followed up in writing and the workplan will be revised once all the review comments have been received. Mr. Hudson asked which issues were hindering finalization of document. These issues were identified as the draft cleanup goals, (Comments 17 and 18) and clarifications on risk assessment as it pertained to groundwater. The question was asked if Dynamac Corporation would be at the next partnering meeting since risk issues would be discussed? No decision was made at this time.

Mr. Britton stated that at the request of FDEP the Navy has agreed to do the full TAL/TCL scan at one of the background borings in the Fill area.

Mr. Hudson indicated that EPA has agreed to all responses-to-comments as presented in the teleconference today and that as far as he was concerned the Navy should be able to finalize the workplan.