Tetra Tech NUS, Inc.
Memorandum

Conference Call Summary
NAS Pensacola
Pensacola, Florida

Date: August 12, 2008
Time: 2:00 pm - 2:38 pm
Meeting ID: 3757

Participants:

Brian Caldwell (TtNUS)
Greg Campbell (Navy)
Gerry Walker (TtNUS)
Allison Harris (EnSafe)
Patty Whittemore (Navy)
Ronald Kotun (TtNUS)
Tracie Bolaños (FDEP)
Greg Fraley (USEPA)
Casey Hudson

Purpose: The purpose of the meeting was to discuss the secondary standards in the OU2 ROD.

Topics discussed:

- ✓ A significant change between 1997 data and 1999 & 2003 due to the low flow sampling can be seen in the concentrations reported.
- ✓ Using the Oak Ridge National Laboratory Regional Screening Levels (ORNL) and background levels as screening values, the reported concentrations were not a risk issue.
- ✓ The secondary standards (SMCLs) are based on aesthetics, not on a health based risk.
- ✓ Clarification was made regarding the classification of the surface water in nearby areas. It was agreed that the surrounding water bodies to OU2 are Class III. Class II, as mentioned in the Surface Water Classifications 62-302.400, does not include the OU2 area. Therefore there are no requirements for Manganese.
- ✓ USEPA and FDEP agreed that adding an explanation on the ROD section 2.6 would satisfy both agencies.

Consensus:

The Section 2.6 "Risk Assessment Summary" at the ROD for OU2 will be changed to include information discussed during this meeting. An explanation of the changes in risk assessment because of updated data will be included in the section mentioned.

Action Items:

- ✓ Mr. Walker will provide electronic and hard copy of the updated ROD by August 18, 2008.

Attachments:

- FDEP email
- Summary information from Mr. Ronald Kotun

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----Original Message-----
From: Bolanos, Tracie [mailto:Tracie.Bolanos@dep.state.fl.us]
Sent: Tuesday, August 12, 2008 12:29
To: Campbell, Gregory CIV NAVFAC SE, PWD Pensacola; Allison D. Harris (E-mail); Brian Caldwell (E-mail); epost_nwdwaste; Fraley.Gregory@epamail.epa.gov; Greg.Wilfley@CH2M.com; Walker, Gerald; Whittemore, Patty CIV NAVFAC SE
Subject: : rod My Response to comments from Allison Harris and Greg Campbell

I have reviewed the emails from both Greg Campbell and Allison Harris and I wanted to provide you with my thoughts prior to the teleconference call this afternoon at 2pm. I will be reorganizing the email to help us with this discussion

Issue 1, The Department's thoughts on Aluminum in the groundwater and Aluminum and Manganese being left in the risk assessment:

It was stated during the conference call today, that the background groundwater concentration for aluminum was significantly higher than the Groundwater Cleanup Target Level (GCTL) for the site. The Department can approve using the background number which should make this Contaminant of Concern (COC) not be an issue for this site. But we still need to discuss the aluminum being left in the risk assessment.
The Department would like to know if the background concentration for aluminum was taken into consideration when determining if aluminum should be left as a COC in the BRA?

Allison wrote the following in her email: "As I recall, the aluminum and manganese concentrations used in the risk assessment were samples collected using bailers and did exceed background concentrations. The risk assessors indicated that they had to use those higher concentrations, even though low-flow results were significantly lower, to be most conservative."

The Department's response: I think this explanation addresses our concerns, but we would need to give this reason as an explanation for removing the aluminum from the Contaminants of Concern (COC) list in the ROD.

Issue 2, The Department's thoughts on Manganese in the groundwater:

This issue will be resolved when we determine if the surface water bodies adjacent to OU 2 are class I or class II. If they are class II, than we have a surface water issue because the surface water standard for manganese is 50ppb and monitoring wells 11G109 and 11G110 are both located adjacent to a wetland and they have groundwater concentrations that exceed our surface water standard (11G109 230 ppb and 11G110 120 ppb).

Greg Campbell wrote the following: "Please note that Pensacola Bay and Bayou Grande are classified as Class III surface waters not I or II. In addition, the base master plan does not have any residential housing in the OU2 area and this area is to be utilized for commercial/industrial use only. Therefore I would not think the projected residential child residence risk would apply for aluminum or manganese."

The Department's response: to Greg state's that the surface water classification for Pensacola Bay and Bayou Grande is class III. I would like to know where you get this information because my sources do not concur, Per Surface Water Classifications 62-302.400 these water bodies are a class II.

17. Escambia County

Class II

Escambia Bay - Louisville and Nashville Railroad Trestle south to Pensacola Bay (Line from Emanuel Point east northeasterly to Garcon Point).

Pensacola Bay - East of a line connecting Emanuel Point on the north to the south end of the Pensacola Bay Bridge (U.S. Highway 98).

Santa Rosa Sound - East of a line connecting Gulf Breeze approach to Pensacola Beach (Bascule Bridge), and Sharp Point with exception of the Navarre Beach area from a north-south line through Channel Marker 106 to Navarre Bridge.

Which means that manganese still needs to be taken into consideration in this ROD. Why, because surface waters are ARARs and the concentrations found in the groundwater exceed our surface water standard. I think we will be able to clear this up by looking at a map of Pensacola for this....Greg, do you have anything that can help with this????

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NOTES

Overall, the noncarcinogenic risks associated with aluminum or manganese concentrations in groundwater at these sites is insignificant (i.e., the hazard quotients (HQ) are less than 1). The concentrations of the most recently collect groundwater samples are less than the ORNL RSLs. Moreover, aluminum was found to be detected at concentrations less than its reference concentration in the more recently collected samples. However, manganese is still detected at concentrations greater than its GCTL, which is based on organoleptic properties rather than being risk-based. The insignificant risks associated with aluminum and manganese renders the groundwater concentrations of these constituents "acceptable."

SITE 11

1997 Results are from turbid samples (not collected using low-flow sampling), thus providing elevated concentrations.
Risks were based on 1997 results.
More recent data show that maximum aluminum concentrations are less than reference concentration.
More recent aluminum and manganese maximum concentrations are less than ORNL RSLs (HQ < 1).
Aluminum and manganese do not pose a significant risk because hazard quotients (HQ) are less than 1.
Aluminum and manganese have different target organ effects; thus, if hazard index (HI) > 1, they would still not impact human health.
Hazard quotients (HQ) < 1 indicates that remediation is not needed to protect human health.
Maximum manganese concentration is still greater than the GCTL, which is a secondary standard (SMCL).
Manganese exceeds the GCTL in 11 of 24 samples in Phase I, 1 of 7 samples in Phase II, and 3 of 5 samples in Phase III.
The SMCL is not a risk-based criterion; it is based on aesthetic properties.

SITE 27

1997 Results are from turbid samples (not collected using low-flow sampling), thus providing elevated concentrations.
Risks were based on 1997 results.
More recent manganese maximum concentrations are less than ORNL RSLs (HQ < 1).
Manganese would not pose a significant risk to human health because HQ < 1.
Maximum manganese concentration is still greater than the GCTL, which is a secondary standard (SMCL).
Manganese exceeds the GCTL in

The SMCL is not a risk-based criterion; it is based on aesthetic properties.

SITE 30

1997 Results are from turbid samples (not collected using low-flow sampling), thus providing elevated concentrations.
Risks were based on 1997 results.
More recent manganese maximum concentrations are less than ORNL RSLs (HQ < 1).
Manganese would not pose a significant risk to human health because HQ < 1.
Maximum manganese concentration is still greater than the GCTL, which is a secondary standard (SMCL).
Manganese exceeds the GCTL in 15 of 45 samples in Phase I and in 2 of 13 samples in Phase II.
The SMCL is not a risk-based criterion; it is based on aesthetic properties.

ORNL RSLs (Oak Ridge National Laboratory Regional Screening Levels): These are risk-based screening levels that supersede Region 3 RBCs. These were recently issued on May 20, 2008.