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EMAIL REGARDING FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION COMMENTS ON DRAFT FEASIBILITY STUDY AND PILOT STUDY FIELD DATA FOR OPERABLE UNIT 9 (OU 9) SITE 59 NAS CECIL FIELD FL
5/26/2006
FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

FDEP Engineer's comments

CTO 359
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Grabka, David

From: Lockwood, Jeff
Sent: Friday, May 26, 2006 3:20 PM
To: Grabka, David
Subject: Cecil Field OU-9 Site 59, Draft Feasibility Study & Pilot Study Field Data

Dave,

I have reviewed the subject report, and also have received the field data from the pilot study via your E-mails. As I discussed with you earlier, it is far too early to come to conclusions about the effectiveness of the lactate/bicarbonate/inoculum recirculation system. (You mentioned EOS when you dropped by my officer earlier in the month, but this report makes no mention of emulsified oil). I understand the Navy is on a fast track with this project due to funding constraints, so it may be necessary to expand the pilot study to treat all the "orange" areas of the plume (those above TCE NADC) before any solid conclusions can be made.

It appears that ISB will become the selected alternative and it is just a matter whether they include the fringes of the TCE plume in the treatment implementation. Also, since the pilot test suggested that the northern "hot spot" was not as high in TCE as previously indicated, the "fringe" might end up being treated anyway. I would expect the alternatives analysis to change between 3, 4A, and 4B as more data becomes available from the pilot study. (Alternative 2 is well documented to not be a desirable alternative). So, for now, my recommendation is to proceed as though 4A or 4B will be the de facto remedy with the "fringe" being somewhat of a "moving target" as concentrations change. The $3M+ cost difference between 4A and 4B is therefore artificial and the actual cost for 4B could turn out to be a lot less simply by reducing the number of wells in the fringe area, as the spacing of these wells would be less critical than in the hot spots. Data from the pilot test could suggest that fewer wells could be employed in the full scale system if the aquifer transmissivity is sufficient (to allow full circulation and plume coverage with fewer injection points).

It should be noted that the only salient advantage of Alt. 4A/4B over Alt. 3 according to the Section 5 evaluation is the slightly greater contaminant mass reduction. Thus if the pilot test data is still not supportive of bio after 6 months or more, the logistics of converting the recirc system from bio to ISCO use should be discussed. With hardware installed in two of the hot spots, ISCO could proceed in the most contaminated areas in rather short order, then could be expanded as success is documented.

Those are my main thoughts at this point. I will be back in the office June 12 if you have further questions.

Jeff