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NAS KEY WEST
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LETTER REGARDING FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
COMMENTS ON CORRECTIVE MEASURES STUDY FOR SOLID WASTE MANAGEMENT
UNIT 9 JET ENGINE TEST CELL NAS KEY WEST FL
7/7/1999
FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION



N7046-3.1 - 0059

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Department of Environmental Protection

Jeb Bush
Governor

Twin Towers Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

David B. Struhs
Secretary

RECEIVED
7-16-99

July 7, 1999

Mr. Dudley Patrick
Code 1858
SOUTHDIV
2155 Eagle Drive
North Charleston, South Carolina 29406

RE: Corrective Measures Study for SWMU 9. NAS Key West,
Florida

Dear Mr. Patrick:

I have completed the review of the above referenced document dated May 1999 (received May 13, 1999) and have the following comments.

1. Page 5-3, Alternative No.3: it is unclear where did the 1,000 and 500 pounds of ORC and HRC that will be needed to dehalogenate the plume came from. If there are mass calculations that indicate that such quantity is adequate to treat the mass of chlorinated solvents, please attach them to the CMS; otherwise, please indicate case studies/specific references of ORC/HRC utilization that have achieved MCLs.
2. Page 5-3, Alternative No. 3: please indicate the expected rate of dechlorination achieved by ORC/HRC. The text mentions a total of 5 years of monitoring. Is this the time frame that the proposed remedial system is expected to achieve MCLs? Or a percentage reduction coupled with monitoring/natural attenuation until year 20 is the objective?
3. Has the feasibility of utilizing HRC in highly carbonate-enriched waters been investigated? The buffering capacity of carbonate enriched waters may not produce the expected dehalogenation objectives. Also, what is the effect of severe hydraulic flushing on these compounds? Will additional quantities of the material be needed if a large storm event hits the area?

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Mr. Dudley Patrick

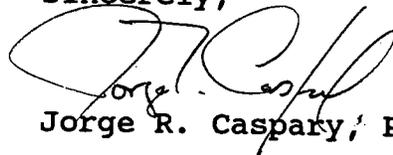
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4. While the NA Study recommended four alternatives, was restarting the pump and treat system (which apparently had reduced TCE to 37 ug/L) considered? Can the ORC/HRC compound be injected utilizing the horizontal well installed as part of the pump and treat? Depending on the status of the system, and given the fact that TCE is absent, the capital cost of restarting the pump and treat system plus O & M and groundwater monitoring for a limited amount of time would probably have been an economic alternative.
5. Based on the May 1998 sampling event, it appears that TCE rebounded after shutting down the pump and treat system (from 37 to 350 ug/L). However, the November 1998 sampling event shows that only cis and trans-DCE are the constituents of concern. A new round of sampling and analysis of groundwater, coupled with the requested information from comments 1 and 2, would provide a more definitive set of data upon which to justify the selected alternative.
6. The economic analysis presented in Appendix D is confusing. For instance, the estimated cost of item Natural Attenuation with Long Term Monitoring Analysis for Year 1 is \$ 4,500. The same item cost for Alternative 2 is \$ 8,000. Explain the difference.
7. For Alternative 3, only the Present Worth (PW) cost until year 5 is presented; however, the previous table indicates that \$ 20,000 will be spent every five years until year 20. As in Alternative 2, this cost should also be part of the PW calculation.

If I can be of any assistance in this matter, please contact me at 904/488-3935.

Sincerely,



Jorge R. Caspary, P.G.

cc: Chuck Bryan, TTNUS Aiken
Ron Demes, NAS Key West
Turpin Ballard, EPA-Atlanta

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