

## Florida Department of Environmental Protection

Southwest District Office 13051 North Telecom Parkway Temple Terrace, Florida 33637-0926 Charlie Crist Governor

Jeff Kottkamp Lt. Governor

Michael W. Sole Secretary

January 10, 2008

S. Lee Crouch Executive Corporation of Clearwater, Inc. 5260 South Landing Drive, Suite 704 Ft. Myers, FL 33919

Re: Site Assessment - Countryside Executive Golf Course

2506 Countryside Blvd. Clearwater, Florida

Dear Mr. Crouch:

The Florida Department of Environmental Protection (Department) has reviewed the Site Assessment Report (SAR) and subsequent addenda to the SAR prepared by HSA Engineers & Scientists (HSA) for the former Countryside Executive Golf Course site, and has the following comments:

- I. Arsenic has shown to be present in the groundwater at the site above the Groundwater Target Cleanup Level (GCTL) of 10 ug/L at several locations. The full extent of the contamination must be delineated.
- 2. Many locations sampled adjacent to off-site properties were not delineated to the residential Soil Cleanup Target Level (SCTL) for arsenic. For example, PLS-2, PLS-3, PLS-16, and PLS-18 as well as others, exceed the residential SCTL for arsenic at the 0-6" and 6"- 2 feet depth interval. This is especially important because many residential homes border the site. PLS-20 and PLS-22 exceed the commercial SCTL of 12 mg/kg for arsenic. Delineation should be continued outward until the residential SCTL of 2.1 mg/kg is reached.
- 3. Locations where high arsenic impacts were found should be tested for pesticides. Soil sample MW-2 North had arsenic at 36 mg/kg, but no analysis was done for pesticides. This location, as well as others with high arsenic concentrations should be included in the sampling and analysis for pesticides.
- 4. Soil samples taken around the maintenance building exceeded the residential SCTL for dieldrin at CSS-7 at the 0-6" depth interval. The leachability based SCTL was exceeded at CSS-40 from 0-6" and 6"-2". The full extent of contamination must be completed unless this area is included in any planned excavation, in which case dieldrin should be included in the analysis for post excavation confirmation samples.
- 5. SPLP testing may be conducted to establish a leachability SCTL for arsenic at the site. This will ensure that all soils with the potential to affect the groundwater at the site are removed or appropriately managed through an engineering control. A representative number of soil samples at various total arsenic concentrations

need to be collected and analyzed for both SPLP and total arsenic. Using these data, a correlation curve can be constructed so that the concentration of total arsenic that is acceptable to leave in place without engineering controls is known (leachability SCTL). This should be done before any excavation is done so that the leachability SCTL is known and remedial actions can be planned accordingly. The alternative to SPLP testing is groundwater monitoring to show that leaching is not occurring.

- 6. The Freshwater Surface Water Criteria of 50 ug/L for arsenic was exceeded at the pond located south of the maintenance area. Although a second sample (49 ug/L) from the pond indicated arsenic below the Surface Water Criteria, this may indicate that leaching is taking place from the soils adjacent to the pond. Surface water at the pond should be resampled after excavation activities are completed.
- 7. The interim source removal for the maintenance area, proposed in the December 2005 Site Assessment Plan/Remedial Action Plan, has not been performed as planned. The soil removal may help attenuate arsenic levels in the groundwater near this location. If an Interim Source Removal is not planned, then a remedy for contaminated soils will need to be included in a Remedial Action Plan.
- 8. Monitoring wells TW-1 and TW-5 had arsenic at concentrations above the Natural Attenuation Default Concentration of 100 ug/L as established in Chapter 62-777 Florida Administrative Code. Although excavation of the soils may aid in the reduction of arsenic in the groundwater near the maintenance facility, the full extent of the plume must be delineated.

Site assessment must be completed at the site following the guidelines established in Chapter 62-780 F.A.C. Please submit a Site Assessment Report Addendum (SARA) within 120 days of receipt of this letter. The SARA should include proposed remedial actions to address all contamination at the site. Groundwater and soil data collected to-date by HSA Engineers and Scientists may be incorporated in the Report, but additional assessment is needed to fulfill the requirements of the Rule.

Should you have any questions, please contact me at the letterhead address or at (813) 632-7600, ext. 373.

Sincerely Yours,

Robert Sellers, CHMM

Robert Sellers

Environmental Specialist III

Division of Waste Management