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April 9, 2007

Ligia Mora-Applegate
Bureau of Waste Cleanup
Florida Department of Environmental Protection
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Re: Titanium SCTL

Dear Ms. Mora-Applegate:

At your request we have developed soil cleanup target levels (SCTLs) for titanium (CAS #7440-32-6) protective of human health under residential and commercial/industrial exposure scenarios. Although titanium may be introduced into the environment in different forms (e.g., titanium dioxide is commonly used as a pigment), analytical methods typically used for environmental samples measure simply total titanium. Accordingly, the SCTLs developed here are intended to be applicable for titanium concentrations in soil as reported by the laboratory, i.e. total titanium. The SCTLs were calculated based on an oral RfD (4 mg/kg/day) and an inhalation RfD (8.6 E-03 mg/kg/day) for titanium developed by the U.S. EPA National Center for Environmental Assessment (NCEA).

Equations used to calculate the SCTLs were taken from Ch. 62-777, F.A.C. (Feb 2005). Titanium was assumed to be non-volatile, and therefore chemical-specific factors other than the toxicity values were not needed. **Titanium has a direct contact SCTL of 340,000 mg/kg for residential land use and >1,000,000 mg/kg for commercial/industrial use** meaning that titanium would not be considered a health concern for the latter commercial/industrial scenario. An SCTL for the protection of groundwater should be developed on a site-specific basis using SPLP.

Please let us know if you would like any additional information on this chemical.

Sincerely,

Stephen M. Roberts, Ph.D.

Leah D. Stuchal, Ph.D.