JPCL REPRINT SSPC NEWS

May, 1996

SSPC Clarifies Statements On Additives for Stabilizing Leachable Lead

At several presentations of SSPC training programs on industrial deleading, there have been confusion and misunderstanding about the properties and use of additives with blasting abrasives, according to Dr. Bernard R. Appleman, Executive Director of the SSPC. SSPC has issued the following statements to clarify its position on these technologies.

- Proprietary lead stabilizer does not mask toxicity characteristic leaching procedure (TCLP): It is SSPC's position that proprietary non-metallic abrasive additives (such as Blastox, a TDJ Group product) do not mask or "fool" the TLCP. On the other hand, iron and steel abrasives or abrasive additives do not produce a permanent reduction in the leachability of the lead. The temporary plating of lead on iron will reverse when the iron rusts, so the process of iron or steel addition to leaded wastes has been referred to as masking. No such effect has been observed or is expected with Blastox. Data from a Federal Highway Administration study indicate that Blastox is effective in maintaining a low leachable level of lead under TCLP and the Environmental Protection Agency (EPA) multiple extraction procedure (a test intended to measure the long –term stability of waste in natural environments). Therefore, it is considered highly unlikely that Blastox-treated waste will result in a liability under Superfund.
- Effectiveness of calcium and lime in stabilizing lead waste: Calcium, a metal, has little or no lead-stabilizing function. Lime is made up of calcium oxide and also has been mentioned as a means to stabilize lead waste. In C-3, SSPC presents data that show that lime can be effective in stabilizing lead. However, it requires careful control of the lime concentration and the pH.

  Blastox uses calcium silicates- which are minerals, not metals- to stabilize lead wastes, a chemical reaction different than calcium oxide.
- Dilution of lead-contaminated wastes is not an appropriate way to comply with the TLCP: The EPA is quite explicit on this matter. Dilution of spent abrasive with sand or clean abrasive in order to reduce leachable lead is prohibited. ***JPCL***