

AggRite: Components and Soil

Information Sources:

Penn State University – Average soil concentrations of trace elements

B&B Envir.Svcs. study for American Ash – Ash Analytical Results Jan-Jun 2002

Average natural soil contents for (8-16" depth)	Copper	Lead	Zinc	Mercury (mg/kg)
	24.2	13.1	82.1	.05
Ash analysis 2002				
Jan	1610	569	4150	3.1 (mg/kg)
Feb	4470	667	2530	1.4
Mar	29,200	1110	8420	1.4
Apr	2080	1870	5230	2.3
May	1030	2800	7300	2.0
Jun	1590	3260	5120	2.4

Cadmium – exceeds the General Permit limit of .25 in:

Jan - .296

June - .435

Conclusions:

1. AggRite differs greatly from soil; trace elements far exceed those of normal soil.
2. **AggRite is an unpredictable product with regard to its components. This is expected, due to variables of its origin, incinerator ash waste.**

Questions:

1. How much attenuating soil is needed (soil depth between AggRite & groundwater table) to disperse trace elements to normal soil levels?
2. Can better recycling of source metals decrease these levels in the product?
3. Why is there no long term monitoring for environmental/health risks?
4. Why is there no tracking of usage/PLACEMENTS if human contact is to be avoided?
5. **ADDING TO THESE QUESTIONS: HOW MUCH ADDITIVE IS NEEDED TO DILUTE THE COMPOSITION TO BRING MATERIAL TO COMPATIBILITY W/ EXISTING SOILS? SAMPLE PROVIDED WERE ONLY 20% treated ash aggregate and 80% natural aggregate**