



# HHS Public Access

Author manuscript

*J Water Sanit Hyg Dev.* Author manuscript; available in PMC 2015 November 06.

Published in final edited form as:

*J Water Sanit Hyg Dev.* 2014 ; 4(4): 773–733.

## Letters to the Editor

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### Dear Editor

The authors of ‘Thermophilic co-composting of human wastes in Haiti’ (*Journal of Water, Sanitation and Hygiene for Development* 3(4): 649-654) refer to the results of a ‘collaboration with the US Centers for Disease Control and Prevention (CDC) that showed rapid pathogen die-off rates within the compost piles.’ CDC and Emory University researchers did carry out an evaluation of pathogen die-off in Sustainable Organic Integrated Livelihoods’ (SOIL’s) composting system in Haiti that found reductions in *Escherichia coli* levels to below detection levels within 8-14 weeks and rendering *Ascaris* ova not viable within 8 weeks, as cited by the authors. However, we have identified issues with the way that the authors portrayed these findings.

First, the authors state that ‘these analyses showed that ... *E. coli* levels were reduced to acceptable levels (below 1,000 CFU/g) within six weeks.’ The Class A sludge standard as defined by the U.S. Environmental Protection Agency is based on fecal coliforms, not *E. coli*, which are a subset of fecal coliforms. The Haitian Government does not currently have guidelines for sewage/sludge re-use. Therefore our data do not support the conclusion that *E. coli* levels in the compost were ‘acceptable’ by current standards.

The authors also claim that because ‘these tests indicated that given the similar die-off curves for *E. coli* and *Ascaris*, future pathogen testing can focus specifically on *E. coli* as an indicator and regular testing for *Ascaris* is not necessary.’ In our study, the time until *E. coli* and *Ascaris* reached undetectable levels was similar, but the starting concentrations of these organisms were likely different. Helminth ova are well-known to have different inactivation kinetics from vegetative bacteria. If *Ascaris* concentrations are higher at some point in the future or in waste from different communities, there is certainly a possibility that viable *Ascaris* ova could be present in SOIL-treated compost after 8 weeks.

Furthermore, while we provided SOIL with an internal report with the conclusions from our evaluation as a courtesy, we did not give the organization approval to disseminate the results of our study in a peer-reviewed journal. We are currently preparing a manuscript that will

detail the results of our study with interpretations and conclusions that we find more fitting of the data.

Thank you,

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