

# Panel B – Corporate and Government Suppression of Research

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# EPA Policy Genesis

- | John Walker to Henry Longest, Sept 1978
- | *The goal of 405/4004 sludge regulations should be to promote low cost sludge management ... The application of some low levels of toxic substances to land for food crop production should not be prohibited; rather, it should be controlled by proper rates of sludge/toxic application, soil management, etc.*





# Pathogen Risks From Applying **Sewage Sludge** to Land

Despite complaints of related illnesses,  
little is known about the dangers of  
spreading biosolids on land.

DAVID L. LEWIS AND DAVID K. GATTIE

In the late 1980s, the U.S. Congress banned ocean dumping of municipal wastes. As an alternative, the EPA promulgated in 1993 what has become known as the 503 Rule (40 CFR Part 503), which

on page 290A is an example of a skin-related infection. However, a lack of risk assessments performed before or since the 503 Rule's implementation regarding public exposure to bacteria, viruses, and other disease-causing microorganisms found in most sludges hampers our ability to evaluate such com-

## Influence of environmental change on degradation of chiral pollutants in soils

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Numerous anthropogenic chemicals of environmental concern including some phenoxy acid herbicides, organophosphorus insecticides, polychlorinated biphenyls, phthalates, freonates and some DDT derivatives—are chiral. Their biological effects, such as toxicity, mutagenicity, carcinogenicity and endocrine disrupter activity, are generally enantioselective, and different enantiomers are preferentially degraded (transformed) by micro-organisms in various environments. Here we use field and laboratory experiments to demonstrate that the preferences shift owing to different environmental changes in soils can alter these preferences. In Brazilian soils, almost all pasture samples preferentially transformed the non-herbicidal enantiomer of propionic acid ((*RS*)-2-(2,4-dichlorophenoxy)propionic acid). In forest samples either transformed the herbicidal enantiomer readily or as rapidly as the non-herbicidal enantiomer. Nutrient enrichments shifted enantioselectivity towards chlorprop ((*RS*)-methyl 2-(2,4-dichlorophenoxy)propionate) towards preferentially removing the non-herbicidal enantiomer in soils from Brazil and North America, potentially increasing phytotoxicity of its residues relative to that of the herbicide. Assessments of the risks chemical pollutants pose to human health and the environment need to take into account the enantioselectivity of microbial transformation processes and the influence of environmental changes, especially for pesticides. Most pesticides are chiral.

Specific biological effects associated with the degradation of chiral pollutants in soils

# EPA GATEKEEPERS

- | Elliot Epstein, UM Conference 2000
- | *Thorough research efforts are the best way to address the various public health concerns and combat legal actions that have shut down biosolids programs across the country.*

# Augusta Cattle Deaths

- | 1998 Dairy farms sue Augusta. City claims analyses prove sludge was safe  
  
GA EPD investigates, concludes metals analyses were unreliable
- | 1999 EPA funds UGA study
- | 2001 UGA submits EPA-coauthored research article
- | 2002 NAS concludes no documented cases, cites pre-publication UGA paper
- | 2003 EPA Asst Administrator dismisses petition for moratorium, cites UGA study

# Termination

| Corporate Executive, Nov 2002

| *What we don't need are more so-called scientists whose research findings are predetermined by scientific or personal bias. These people will find their work rightly discredited and their funding will disappear while credible researchers continue to have funding.*

