

FRED THORNHILL FOR THE TORONTO STAR

"I am scared to death," says Wendy Deavitt, of Warkworth, Ont., who is being treated by a Toronto toxicologist.

Site studies show 'no harm'

SLUDGE from A1

tonnes - is used by farmers and spread on 15,000 hectares of land. Most of it is given away free. (Biosolids are usually applied in liquid form but are measured in dry weight for consistency.)

But some rural residents who live near sludged properties complain they've been stricken with a range of maladies including respiratory problems, diarrhea, headaches, nausea, rashes, fatigue and pneumonia.

Municipalities have for years struggled with what to do with sludge and so it was incinerated, sent to landfills or simply dumped into the nearest Great Lake. Some has been land-applied since the 1970s.

Then in 1996 the Great Lakes Water Quality Agreement stiffened sewage treatment guidelines. This created more sludge and Ontario started recommending it for use as fertilizer for farm crops. Municipalities — faced with fast-filling landfills and a U.S. border that is slowly closing to Ontario's waste - have readily accepted

personal care products and pharmaceuticals.

There's a variety of reasons why no testing is required, including: None is readily available or even exists, or the province does not consider the substance a risk.

"I don't know how the (environment ministry) can believe regulated heavy metals are the only contaminants in sludge we need to worry about," says McBride, referring to tests the environment ministry actually requires.

"Sludge is a moving target."

The environment ministry and the Ontario Ministry of Agriculture,

Food and Rural Affairs actively promote using biosolids as a safe and free alternative to commercial fertilizer. Land application is regulated under the Environmental Protection Act and Nutrient Management Act.

Smith points to a 2001 report by the Water Environment Association of Ontario, a group comprised of water industry professionals and government representatives, that concludes using sludge presents little or no threat to health, the environment or water quality from composites such as regulated metals, dioxins, furans and certain organic compounds.

(Though the report also notes there

isn't "sufficient credible scientific information" about pathogens, unregulated metals, pharmaceuticals and estrogenic hormones.)

"I'm sitting here being continually

It started in the summer of 2006

The environment ministry approves applications considering factors such as site location, soil quality, slope of the land and separation distances from homes, wells and watercourses. It issues about 500 approvals each year.

Regulations and guidelines range from the treatment process to spreading rates and the waiting periods between application and grazing or harvesting.

It's how sludge keeps changing that should trigger red flags, according to McBride, the new director of Cornell Waste Management Institute in Ithaca, N.Y., where scientists have long questioned land application. He believes emerging contaminants have rendered Ontario's guidelines out of

date. Complicating the issue is that treatment plants were designed to clean the water itself, not the solids left be-

aind When the process is finished at

there yet, she says.

lead, barium and potassium.

down at 47 years old."

my life. My bowels are shutting

Deavitt and her husband, Wil-

liam, are one of four couples in the

area who are being treated by a To-

ronto toxicologist for everything

from chronic diarrhea to pneumo-

Dianne and Wayne Cooke have

spent \$6,000 on weekly infusions

of vitamins and minerals to help rid

mune systems have been compro-

mised since the wind first brought

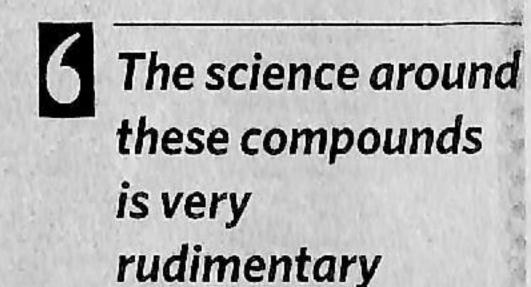
contaminants to their hilltop home

their bodies of toxins. Their im-

in the fall of 2005.

"I've never been this unhealthy in

Sonya Kleywegt, a scientist with standards development branch the environment ministry, ackno edges that "information gaps" exis For example, biosolids aren't test for pharmaceuticals or person care products (known together PPCPs) because there are few k



SONYA KLEYWEGT ENVIRONMENT MINISTRY SCIENTIST

that can do that kind of analysis accepted methodology, and benchmarks to say what is safe.

"The science around these c

