



# The United Sludge-Free Alliance

## Home and Garden Risks

By Darree Sicher

### Bagged Fertilizer – Home Gardeners Beware

Sewage sludge looks innocent enough – just like any manure or fertilizer. And if it is turned into fertilizer pellets, the issue of the smell can be avoided. But the nose knows: the smell is just the indicator that something is not right. When sludge is given away or sold as “compost” - or termed into neat little pellets - it still contains the hazardous waste that was washed down the drain. Remember, toxins and heavy metals don't disappear because they are exposed to sun or rain – they build in your soil or travel by wind and water run-off into your home and community. The heavy metals and toxic waste also are absorbed in your vegetables, plants and livestock animals. Sludge can legally be “blended” into other bagged fertilizers and there is no labeling requirement. Sometimes the product is called “biosolids,” sometimes they're not. Remember, the term “biosolids” is the user friendly term for sewage sludge.

If the bag says topsoil, it is topsoil. If the bag says it is humus from a location, it is probably all humus. If the bag says compost and nothing else, it is a “crap shoot” at best. There are no federal or state regulations that require listing sludge as a component in bagged compost. Bagged fertilizer most often has the word compost somewhere on the label. There are no requirements by the EPA to list sewage sludge or biosolids as an ingredient in the material. If a bag lists the ingredient only as “compost” you can bet this is composted Class A sewage sludge. Once the sludge leaves the wastewater treatment facility, it is considered a “product” and no longer under any federal or state regulations. No tests are required for bacteria, metals, chemicals – nothing. The EPA regulations say that as long as the compost is on site at the wastewater treatment or generating facility, they must take pathogen tests every two weeks. But once off the site, no more testing is required - by anyone! Obviously, it is a financial and liability benefit to move the sludge/biosolids product off site as soon as possible.

Sometimes bagged fertilizer will list the compost generator such as St. Paul, MN, etc. - but not often. The big piles of compost you see in large nursery and garden centers will often contain sewage sludge--UNLESS the owner can give you the originating site of the compost and where it came from. Most garden centers and nursery owners have no idea what they are selling in bulk to landscape companies and homeowners.

If a landfill is offering really cheap compost, it will probably have Class B sewage sludge mixed with green waste such as grass clippings, wood chips, leaves and sawdust. It is indeed turned and composted. But bacteria are resistant and the exotoxin (outer shell of the bacteria) can rejuvenate and becomes full, live bacteria when the temperature is lowered. All regulations stop when the sludge is sold or leaves the treatment plant.

Sludge/biosolids are often marketed as a composted, Class A sludge which means the treatment levels are higher and the sludge is heated to 131 degrees F. If the toxic metals are above the EPA limit, it cannot be considered Class A. You will also hear that the compost sludge is “sterilized” or “pasteurized” or “sanitized”. All good words, but they have little meaning since bacteria are now thermo tolerant to temperatures about the 113 degree F. that is supposed to kill them. None of the regulations have been changed to require higher temperatures for the thermophilic or mesophilic process used – and they are certainly NOT 99% bacteria free. All you have to do is apply water and let the bagged compost mixed with sludge sit in a warm place, and you will smell the sludge which indicates the bacteria are alive. This is called a bacteria “bloom”.

The EPA and the Water Environment Research Foundation issued a report that said the re-growth of bacteria in Class A and B sludge after leaving the treatment plant was often explosive and they could not explain the cause. The most significant type of treatment that caused the explosive re-growth of bacteria was dewatering the sludge, a regular process for all types of Class A sewage sludge. E. coli and Salmonella are the two resistant bacteria tested for and they often do not show up on lab tests before the sludge leaves

the plant. However, the re-growth often doubles every 30 minutes. Their tests showed sludge bacterial re-growth up to the 6<sup>th</sup> power from the time it left the treatment plant until it was delivered to the composting or land application site. This is common and is called "viable but non-culturable bacteria"

There is a federal Right-To-Know Law, and the Consumer Protection Act which requires labeling, but the sludge industry and EPA have avoided both these regulations. When you buy a bag of 10-10-10 fertilizer, it has to tell you the predominant ingredients but it does not tell you what the other stuff might be. Be careful of that, too. If the granules are black or dark grey, they are mine tailings and probably toxic metals. Independent tests show the extreme variations of heavy metals when comparing animal manure to bagged fertilizer. Luckily, the sludge industry has strong lobbying involved in determining our laws. Who's protecting us?

Food for human and animal consumption can be grown on land that has been treated with sewage sludge. When you consume foods grown in sludge, you consume whatever the plant takes up from the soil. When you consume animals that are fed crops grown in sewage sludge, elements like heavy metals collect in the animal's meat, milk and fat. If sewage sludge is used as a fertilizer on crops, the food from these crops cannot receive USDA organic certification. US National Organic Standards prohibits the use of sewage sludge on organic crops but there is no federal rule that forbids non-organic fertilizers from using the term "organic." The grower must know what he or she is putting on his or her fields and gardeners also have to do some investigative work if they buy compost or fertilizer.

Ensure your food products are sludge free when you buy USDA certified organic – avoid other foods labeled "organic" if they don't have the USDA organic certification and beware of imports. When purchasing from local farms and markets, ask the farmer if they use sludge OR biosolids as a fertilizer (many farmers are only told the fertilizer is "biosolids"). Don't buy products from farms that use sludge/biosolids and let them know why you are no longer a client. Check our listing for commercial food distributors that pledge to be sludge free.

Check our listing of bagged fertilizer companies that are sludge-based and some that are sludge-free. Keep asking questions. Tell us if you find more sludge-based and sludge-free bagged fertilizer companies. Protect your family, pets and home garden by using sludge-free fertilizer. Tell your local officials you do not want sludge/biosolids on your parks and playgrounds. Tell your state and federal elected officials to change the laws - sewage sludge doesn't belong in our food, water and communities.