

**From:** [Diane](#)  
**To:** [Kelly Bacon \(CD\)](#)  
**Subject:** Brown & Jackson Application for Sewage Ponds  
**Date:** Tuesday, September 1, 2020 11:29:46 AM  
**Attachments:** [Top 10 Reasons Why Biosolids are Dangerous.pdf](#)

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This letter is regarding Brown & Jackson's application for sewage ponds in the Parke Creek drainage and wildlife area.

I understand that there is a need to use land for purposes such as waste material, but it should be a location that has the least amount of impact and only if no other option is available.

There is NO public need at the moment because there is already an available dumping option that is in use. If more space is needed these ponds should be much further out of town away from residential and farm areas.

We already went through this with the county way back when Pacific Clean wanted to bring Biosolids from Seattle into our county. I don't even think they are in business anymore so think of what a disaster that would have been to our environment. Much research was done on the dangers and problems to farmers and homeowners. I will attach a pdf with research on biosolids.

I understand this is for our county waste but again we already have a sufficient disposal area currently used.

This area is zoned AG 20 which doesn't allow for sewage ponds because of the problems for our farmers, families, and wildlife in the area. This is going to be detrimental to our farmers who are already going through tough times. This may also endanger any organic farming in the area. Farmers who grow organic may lose that label with sewage ponds in the area.

If you allow these ponds to be put in such proximity to farms, homes, and wildlife it will have a serious detrimental impact on our freshwater and soil that will never be able to be reversed. It could end up being an environmental disaster for our county, not to mention the smell when the ever blowing winds pickup.

I am not in favor of granting a variance to Brown & Jackson for the above and other reasons.

Also, in the future it would be nice if the public had more time to respond. I believe this was just released on August 17<sup>th</sup> if my information is correct.

Sincerely,

Diane Roznik  
Ellensburg, WA

## Top 10 Reasons Why Biosolids are Dangerous

Chances are you've never heard of biosolids. However, you have probably heard of it in its original form, sewage sludge. Yes, "biosolids" are the treated waste sent from households, hospitals, and industry, and then used as fertilizer. Cleverly rebranded with a more PC name, this processed people poop has seemed to stay fairly under the radar. But, is it something you should be concerned about?

A study by the university of Georgia showed people living near areas where land was fertilized with Class B biosolids experienced a number of symptoms. They reported illness, burning in the eyes and lungs, and skin rashes. So what is actually in this treated sewage? Well I'm lifting the lid on biosolids to expose 10 hidden things that make this sewage sludge dangerous.

### 1. Heavy Metals

In a sampling of sewage sludge, 27 metals were found in every single sampling. A 28th was found in 72 of the samples. This was in a report from the EPA based on the results of the Targeted National Sewage Sludge Survey. Just some of the metals indicated were thallium, cadmium, molybdenum, mercury, and lead.

Thallium is not regulated in sewage sludge, which means the levels are not required to be within an acceptable range. Thallium is a rat poison that, even in small doses, is toxic to humans. Another heavy metal, cadmium, is associated with damage to the proximal tubule of the kidney. Although cadmium and molybdenum are regulated in biosolids, this didn't stop the molybdenum poisoning of dairy cows due to consuming plants fertilized with biosolids. As a result the farm's dairy milk was contaminated with molybdenum. It wasn't just the cows that got sick, the farmer also got ill from breathing in the dust of the biosolids.

Mercury and lead are known to cause numerous health problems. Mercury can affect the nervous, digestive and immune systems, as well as the lungs, kidneys, skin and eyes. As for lead, there is no known level of lead that is shown to be safe. Lead poisoning in children has been linked to a number of health problems. Toxic metals and other chemicals could be contaminating the food you eat. A number of crops have been shown to accumulate toxic metals, such as lettuce, spinach, cabbage, Swiss chard, and carrots.

## 2. Triclosan

It's not just metals that are contaminating plants fertilized with biosolids. The endocrine disrupter, triclosan, was shown to be in soybean plants which were planted in soil containing this toxin. The chemical was actually in the beans. Triclosan is also an added danger because it breaks down into dioxins, which are highly toxic and can cause cancer.

Triclosan can be found in antibacterial products, soaps, and even toothpaste—All things that can end up in waste products. The FDA has decided to take another look at triclosan after further research has shown it's risks outweigh the antibacterial benefits. This new data has caused companies such as Avon, L'Oreal, and Johnson & Johnson to vow to remove triclosan from their products or adopt policies against the substance.

## 3. Pharmaceuticals

The pharmaceutical industry is a multi-billion dollar industry. That means a lot of people are consuming prescription and over the counter drugs. This also means there is a lot of human waste that contains pharmaceuticals. In the tests results shared by the EPA, samples contained 23 drugs and 49 antibiotics and their degradation products. There is no research showing what happens when these drugs combine, or when they are mixed with many of the other chemicals found in biosolids. Therefore, the safety cannot be assured.

## 4. Asbestos

Another toxin not regulated in sewage sludge is asbestos. It has been found in as much as two-thirds of sewage sludge. The farmers applying biosolids are at risk/ So are their neighbors, and children playing where biosolids contaminated with asbestos have been applied. Asbestos does damage when it is inhaled into the lungs and the effects may not be known for decades.

## 5. Arsenic

Arsenic is classified as carcinogenic to humans and can cause a number of other health problems. Low levels of exposure to arsenic in the long term can cause liver and kidney damage. It can also cause increase risk of infection. Applying biosolids as fertilizer on crops could result in long term exposure to low levels of arsenic and the other toxins on this list.

## 6. Increase in Dioxin

In 2001 the EPA surveyed the level of dioxins in sewage sludge. It was concluded from this survey that the dioxin found was below levels of concern, so they are no longer regulated in biosolids. However, long term effects of dioxins in the soil are concerning. A study by the Scientists at the Metropolitan Water Reclamation District of Greater Chicago showed an increase in the dioxin level in soil when a heavy application of biosolids was used. As use of biosolids continues, dioxins accumulate in the the soil. Although levels may have been below concerning in 2001, where are they now? Where will they be in another decade? The concern is that crops planted in soil with a high dioxin content will result in a transfer of these dioxins to humans, just as with the soybeans mentioned above.

## 7. Polychlorinated Biphenyls (PCBs)

The manufacture of PCBs was banned in 1979 due to their toxicity. Although they were banned, they were used in production of vast number of products for 50 years. Biosolids samples contained PCBs, which have been shown to cause cancer as well as harmful effects on the nervous, reproductive and immune systems. PCBs are also endocrine disrupters, which affects the thyroid, ovaries, testes, and many other parts of the body.

## 8. Hormones

Among the long list of of substances found in biosolids, there were 15 hormones detected. Hormone free food is something people have been showing an increasing desire for by switching to organic meats and dairy. With biosolids being used as fertilizer, there are trace hormones being deposited into the soil. That means crops could be picking up these hormones as well. If children play on or near land treated with biosolids, they are in direct contact with sewage sludge.Hormones can be damaging to their developing bodies.

## 9. Flame-Retardants (and other household chemicals)

According to research from Duke University about flame retardants and other substances in sewage sludge, it was concluded “these contaminants of emerging concern in biosolids suggests that these chemicals have the potential to migrate out of consumer products and enter the outdoor environment. Furthermore, land application of these contaminated biosolids may result in soil contamination and enhance the bioaccumulation and long-range transport potential of these compounds.” Not only could they be in the soil, but also run off into waterways or into the food supply.

## 10. Steroids

Just as with hormones, pharmaceuticals, and the other contaminants in sewage sludge, steroids pose a health risk as well. The EPA identified 10 steroids in biosolids with the latest survey results. As an endocrine disrupter, like triclosan, steroids can affect the body's hormones and reproductive systems. Steroids also seem to take a long while to degrade, and in some cases the steroids actually regenerate. The persistence means they are in the soil, and therefore our environment, longer.

### What Can You Do to Avoid Biosolids?

There are a couple of ways to avoid biosolids in your food and soil. Organic farming doesn't use them because they aren't approved for certified organic foods. Choosing to purchase USDA organic foods will ensure what you buy is biosolids free. If you have your own garden, you can look for soils without biosolids to feed your plants. The packages might not disclose biosolids directly. Look for soils that are certified by OMRI (Organic Materials Review Institute). You can also find a list of fertilizers that do contain biosolids here.