

## **Waste Not**

### ***Selling carbon-rich crop residue will shortchange soil***

By Robert Whitescarver, for the Bay Journal News Service

Recently I attended the annual meeting of the Virginia Association of Soil and Water Conservation Districts in Roanoke, Va. One of the breakout sessions was a presentation by the Shandong Tranlin Paper Company, a Chinese corporation that plans to build a paper plant in Virginia.

I listened to the Chinese representative explain how environmentally friendly their \$2 billion facility will be, turning crop “waste” into paper. The facility will be built on the south side of the James River in Virginia’s Chesterfield County. According to a press release from Gov. Terry McAuliffe, it will be the largest Chinese investment in Virginia history and the largest “green field economic development” project by the Chinese in the United States. I had to look up “green field,” thinking it meant something environmentally friendly. It actually means any country directly investing in another country, building an operation from the ground up. There need not be anything environmentally “green” about it.

Shandong Tranlin Paper Company bought 850 acres of farmland and plans to have a plant operational by 2020. They say it will create 2,000 jobs and millions in tax revenue, and that they will purchase crop waste from farmers “from Virginia to Kansas.” These so-called waste products are wheat straw, rye straw, corn stalks and soybean stalks—all of which are moderately high in carbon, which is necessary in their paper-making process.

To me, it all sounded too good to be true. One thing that struck me as odd was that for every acre of “waste product” the farmer sells to the company, they have to buy a gallon of the byproduct from the paper-making process. This byproduct is supposed to be applied to the land as sort of a fertilizer. And here is where it gets even more troubling. For most of the session the representative had been very professional and had responded eloquently to questions from the audience (mostly soil and water professionals and officials from around the state). But when someone asked what is *in* the byproduct, he declined to answer. “It’s proprietary,” he said.

Hmmm...

I have a several concerns.

First, the Chinese have perhaps the worst environmental record of any country in the world, so I can’t help but be skeptical about their claims. Second, the so-called waste products from wheat, rye, corn and soybeans are not waste at all; they are integral to healthy soil. They are carbon-rich protectors of the soil and perhaps the most important ingredient for soil health. The carbon contained in these plant residues helps to make soil organic matter, which is responsible for retaining water, releasing nutrients and building what agronomists call soil structure. It’s the “glue” that holds soil particles together. The higher the amount of organic matter, the better the soil.

Third, removing plant residue makes cropland vulnerable to the impacts of weather, increasing erosion. Bare soil is defenseless against the forces of wind and precipitation, which dislodge soil particles. Once dislodged, soil moves downslope to the nearest ditch or stream. Soil particles in streams are the

largest pollutant by volume in any water body, including the stream nearest you and the Chesapeake Bay. In addition, those soil particles (better known as silt) carry other pollutants with them—phosphorus, nitrogen and pesticides, all of which end up in our streams, rivers and the Bay.

Thus, my grave concern is this: Farmers will sell their carbon, desperately needed in their soil, to Shandong Tranlin Paper Company, and then have to use or dispose of an unknown byproduct from the same company.

Does this make sense?

The company's paper-making process and products may be good for our environment and local economy. But before we sell our carbon-rich residues—and apply an unidentified proprietary substance to our soil—we should recognize the value of leaving that “waste product” where it lies, to protect our soil and water resources. And by all means, if we're going to be spreading a paper-manufacturing byproduct on our land, we should know what's in it.

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