

Dear Campbell County official,

We have been following your attempts to ensure that the citizens of Campbell County enjoy a safe and healthy and productive environment.

With regards to your recent efforts in effecting a robust ordinance for solar facilities, we thank your staff for its efforts in drafting the “Solar Energy Projects and Energy Storage Systems Guidance for Potential Applicants.” I understand you will discuss the merits of this plan at tonight’s meeting.

May I propose one addition to this guidance document? That no solar panel contain toxic heavy metals, such as Cadmium Telluride (CdTe), which could leach into soil and water. I attach a photograph of shattered solar panels in Desert Sunlight, a 550-MW solar facility located in the Mojave Desert in California. An EF-0 tornado with a windspeed above 80 mph hit a corner of the facility and destroyed 170,000 solar panels made of Cadmium Telluride.

There are also risks with toxic fumes during a fire, which the first responders should be aware of and prepared for. Fighting a fire in a solar facility presents some serious risks to firefighters since the panels can produce 1500 volts, and they cannot be shut off. If there is light on the panels (including headlights), then they will be producing electricity. That is an entire subject by itself. Several counties have come to the conclusion that it is too dangerous to send the fire department into a solar plant to fight a fire. They pushed for large equipment setbacks with perimeter roads so the fire department can protect neighboring properties via the perimeter roads.

Many developers of solar facilities ONLY utilize panels manufactured by First Solar, and First Solar ONLY manufactures thin-film panels that contain CdTe. I, therefore, ask you to follow the examples of Culpeper and Spotsylvania counties and prohibit the use of these panels that contain Cadmium Telluride. The risk of contamination of the soil and water is too great without clear scientific studies that prove that CdTe is effectively encapsulated in the solar panels after they are destroyed by a severe weather event.

[Study warns of environmental risks from solar modules.](#)