

*physical and chemical attachment to other components of the PV panel means that even in worst-case scenarios, the health hazard it poses is insignificant. Lead in operating PV modules is not at risk of release to the environment”.*

#### Cadmium Telluride (CdTe)

- CdTe panels are constructed with a tempered glass front, an EVA layer, and a rear heat strengthened glass backing, ensuring tight protection from any possible breaks/leakages.
- EPA’s Toxic Characteristics Leaching Procedure (TCLP) test is a procedure used to determine whether hazardous elements are present in a waste and leachable into the soil and groundwater. EPA has determined maximum concentration limits for various contaminants that if surpassed, would be deemed as hazardous. Based on the TCLP test limit, CdTe panels passed EPA’s TCLP test. Cases of crushed panels in a landfill would not result in hazardous contaminants leaching into the groundwater.
- Only 7 grams of cadmium in one CdTe panel is in the form of a chemical compound cadmium telluride, which has 1/100<sup>th</sup> the toxicity of free cadmium
  - Cadmium telluride is non-volatile and non-soluble in water

Summary – Based on the information provided above, PV panels have been designed to efficiently encapsulate and keep intact potential hazardous components from leaking out and into groundwater. Additionally, these potentially hazardous metals in PV panels are below the EPA’s hazardous threshold and do not pose a threat to impact groundwater runoff.

#### **Contamination – Commentors have expressed concerns related to soil contamination around the places where steel and concrete will be installed in the ground**

There is no study or supporting documentation that steel or concrete placed in the ground would have any effect on the health of soil or groundwater. Steel and concrete are used in all kinds of construction projects, and the claim that their placement into the ground could contaminate soil or groundwater is baseless and illogical.

Certain soils may cause steel and concrete to corrode over long periods of time, and the design of the arrays at Morven will consider these corrosivity factors. However, this will be assessed to ensure the long-term integrity of the arrays themselves and will have nothing to do with the question of soil or groundwater contamination. There are no scientific data that we are aware of that presents any correlation between the corrosivity of steel and concrete and soil or groundwater contamination.