



## **Mercury concentrations in lichen near Drake Cement LLC.**

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### **Abstract**

With the commissioning of Drake Cement LLC a Portland cement manufacturing facility in the Verde Valley, there is a new source of atmospheric mercury released from Drake Cement LLC. It is unclear how mercury concentrations within the Verde Valley watershed will be affected, but mercury has been found to accumulate in local food webs. When there is a lack of air quality instrumentation biological methods can be used to derive quantitative data. We proposed to use lichen, which is found in the Verde Valley, as a bio-indicator to establish baseline mercury concentrations. Lichen mercury concentrations in the future can be compared to this research study findings to see if any effects on air quality can be determined. We propose to use laboratory methods to determine the concentrations of mercury in the lichen we sample. Results from this study will be a vital source of information on the impact Drake Cement LLC could have on the regions environmental quality.