

Field Report 2017
Huancavelica Heavy Metals Remediation Project
The Environmental Health Council

From July 1 to July 10, 2017, The Environmental Health Council (EHC) conducted assessment and remediation work in Huancavelica, Peru. The field work objectives were as follows:

- Assess several homes that had not been assessed prior to the event using field portable x-ray fluorescence (XRF) for total metals and mercury vapor
- Assess homes that had been remediated to assess performance of the remedy
- Remediate 2 homes by covering interior walls with stucco and floors with concrete
- Collect sediment samples from the Ichu River
- Conduct fieldwork with MINAM staff
- Coordinate with University of Huancavelica Chemistry Department to potentially conduct analysis of soil samples using atomic absorption spectroscopy (AAS).

Twenty homes were assessed for total metals with XRF and interior mercury vapor with a Lumex RA915+. Results were similar to those of the 2016 and 2015 events as well as the results presented in the Remedial Investigation (2015). The majority of the XRF results were above screening values. All vapor results were below screening values.

XRF results of stucco and concrete of remediated homes were far below screening values. Interior vapor of remediated homes was close to ambient outdoor vapor results. In several remediated homes, carpets and some areas of concrete flooring had elevated results, due to migration of outdoor dusts/soil into the home.

Two homes were remediated with stucco on interior walls and concrete over the earthen floors using the same method as previous field events.

Seven sediment samples were collected from the Ichu River and analyzed by XRF. Samples were collected upstream of tributaries potentially-impacted by the Santa Barbara mine, in the urbanized area of Huancavelica and downstream of the urbanized area of Huancavelica. Sediment sample results in the urbanized area of Huancavelica were elevated above background concentrations.

Two staff from MINAM provided XRFs and assisted in the collection and analysis of home samples during the field event. EHC staff subsequently met with MINAM staff in Lima to discuss the project and potential future collaboration.

EHC staff met with the Chemistry Department of the University of Huancavelica for potential future collaboration to conduct total metals analysis by AAS at the University.

For additional information, sample results, and other details about the 2017 field event, please contact the EHC via the “contact us” link on the EHC website.