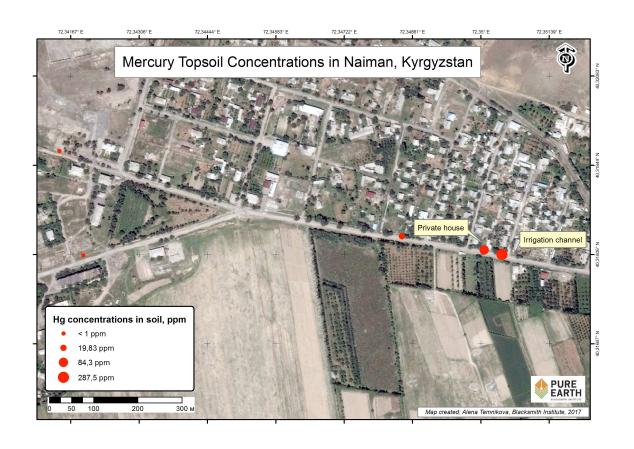


PROJECT COMPLETION REPORT

Mercury Cleanup Project Naiman, Kyrgyzstan



LocationNaiman, KyrgyzstanContaminantsMercuryProject DurationJuly 2017Project Cost\$2430.00Implementing PartnersPure earth/Blacksmith Institute, European Comission/UNIDO local administratorsAffected Population1000 people



PROJECT BACKGROUND

The town of Naiman was established as a workers' settlement for Uluu-Too mercury mining factory which is situated to 10 km to the northeast. Currently the population of Naiman is 1900 people. The factory has produced mercury and antimony for many years. Now the factory is closed. Some workers brought mercury to their houses from the factory hoping to sell it, but it did not work out so they just dumped mercury in the channel. This is how the irrigation channel in Naiman village got contaminated with mercury. The irrigation channel runs along the main road of Naiman Village. The mercury can be easily seen right in the bottom of it. The water from the channel is used for irrigation of gardens and for drinking by animals.

Danger to Public Health

The site was contaminated by the products of antimony and mercury production. According to local residents, plant workers brought home some mercury from the factory and, finding no use for it, disposed of it, merging it into irrigation channels of the village, where mercury settled on the bottom of the irrigation ditch, and caused pollution of vast areas. Water from the irrigation ditch entered the gardens and vegetable gardens of local residents. Children were observed near the channel or even digging out metallic mercury and playing with it.

Remediation plan

Based on the results of the assessment, which indicated that high levels of mercury were present in the irrigation channel a plan was adopted to clean up 650 meters of the channel along the street in length. The main purpose was to take out the upper contaminated layer from the bottom of the ditch (about 150 tons) of soil. Polluted soil was transported to the tailings of Uluu-Too mine.

The work was conducted on 18-22 of June 2017. Local residents were hired to perform the clean up, special equipment and labor from among the.

The Administration of Naiman Village was very supportive of the plan to clean up the area. The Direction of Kadamzhay Antimony Factory allowed the remediation team to use the tailings of the factory for the disposal of excavated contaminated soil.







Figure 1. Metallic mercury is visible in the soil during the excavation.\

Bodies Implementing the remediation and Project Results

The project was implemented by Pure Earth/Blacksmith Institute of the European Commission and UNIDO.

Recommendations and Lessons Learned

The project implementation revealed that a more thorough site assessment was necessary. Additional source of contamination was identified in conversations with local people. Turns out some old pipes from the factory were used by local residents as construction materials, particularly for irrigation. As a result several other places in town were contaminated with mercury. A more detailed assessment would be needed to determine the full scope of contamination in Naiman.

On the positive side – a good portion of the town was successfully cleaned up.

Project Summary

The project is about remediation of the irrigation channel contaminated with mercury in Naiman Village. The contaminated soil and sediments will be removed from the irrigation channel and transported to the tailings which are located about 18 km away from the site.