

Investigation of potentially contaminated industrial sites in Serbia

Dragana Vidojević^a, Aleksandra Šiljić Tomić^b, Nemanja Jevtić^a

^a Ministry of Environmental Protection, Serbian Environmental Protection Agency

^b UN Environment

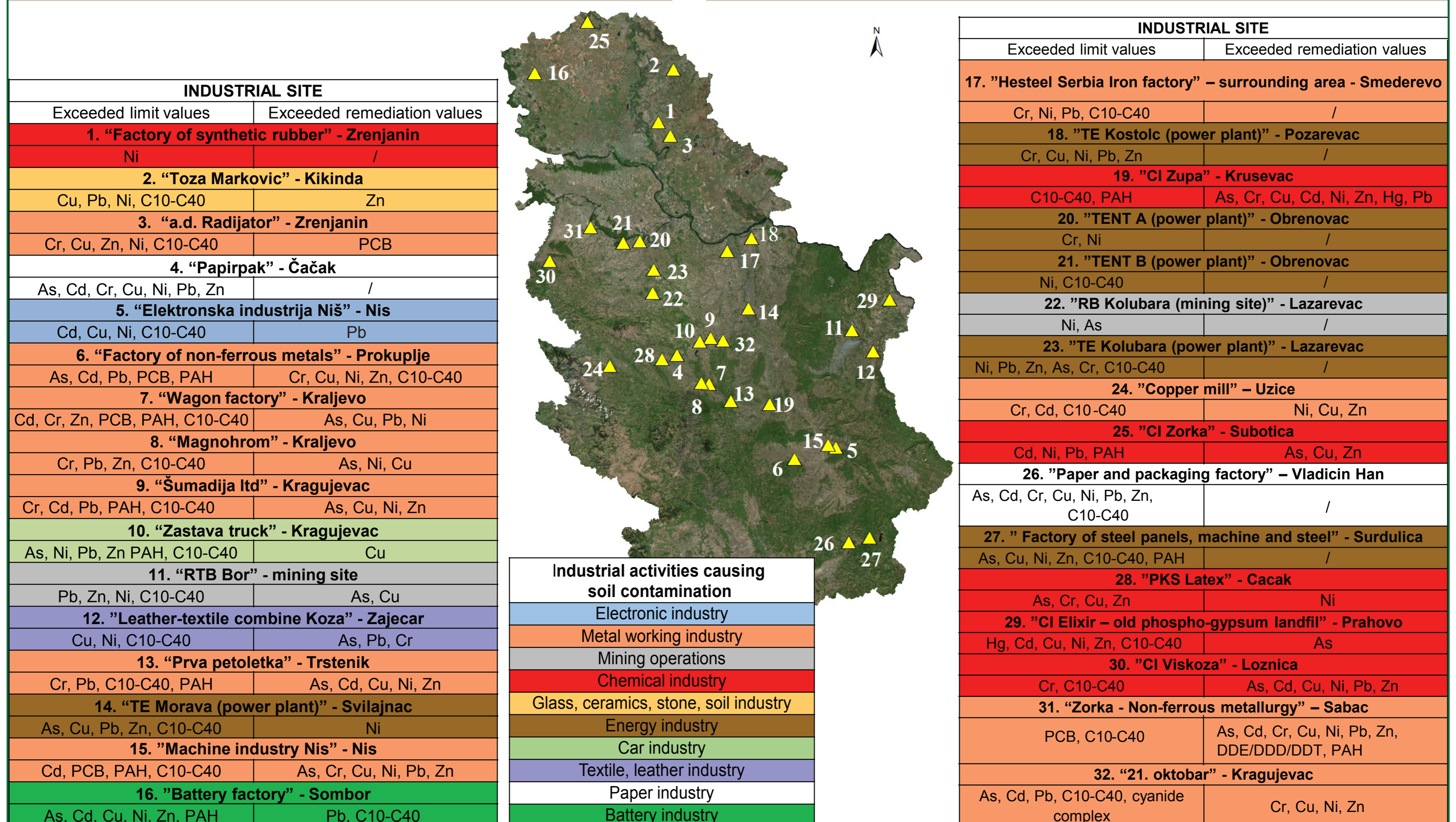
* Corresponding author: dragana.vidojevic@sepa.gov.rs

Introduction and context

Investigation of potentially contaminated industrial sites is a part of the GEF-funded project "Enhanced Cross-sectoral Land Management through Land Use Pressure Reduction and Planning" which is implemented by United Nations Environment Programme (UN Environment) with the support of the Italian Ministry of Environment, Land and Sea and in close cooperation with the Ministry of Environmental Protection of the Republic of Serbia and Serbian Environmental Protection Agency (SEPA) in the period 2015-2018.

Materials and approaches

32 potentially contaminated industrial sites have been selected from the database managed by SEPA. Data and information on previous land use, type of industry, surface area, type and quantity of hazardous substances at the location and on the surrounding area, soil and groundwater quality, as well as geological, pedological and hydrological features were collected from previous studies and through numerous consultations. In 2017, 264 soil samples were collected and undergone physical-chemical analysis, analysis of heavy metals content and specific pollutants such as: TPHs, PAHs, PCBs, cyanides, pesticides etc. (Figure)



Outcomes

The result of the project is the list of prioritized sites for clean-up and remediation. Out of 32, 14 locations need to be remediated according to the gathered information and investigation. For most of the remaining location, detailed investigation of the contamination extent is needed. It is expected that the next step forward will be the development of remediation projects for priority sites.

Transferability

Beside expected future detail investigation of contaminated locations and remediation projects, it is important to develop the National Strategy for Management of Contaminated Sites. Establishment of a legal framework for contaminated sites will be crucial in ensuring a faster and more efficient response to the problems related to the contaminated sites. It is also necessary to strengthen the institutional capacities to enable adequate management.

