

Other comments,

\*L. 29 I think a “d” is missing in “foo security”

\*L. 80 “Articles that provided background information on the PXRF and heavy metal pollution l. 82 was also used in this review.” I think it’s were instead of was.

\* L.82 “During the search, there were articles that appeared via search engine - particularly on Google Scholar - that produced a number of articles that did not meet the criteria set and therefore was not relevant to the stud” sentence not clear

\* Figure 1 : not sure about the relevance of 1 flow chart for Wos and 1 for google scholar when the words searched are the same. The horizontal line between urban soil and HM in the WOS flow chart is not horizontal. Please complete the lines or the legend by “and” or “or” or any other logical link they represent.

\*Fig. 2 Not sure about the relevance of Fig.2. Maybe a chart with number of studies employing each type of XRF or at least each type of XRF with different specificity as described in paragraph 2.2 would be better?

\*L. 262 “Researchers concluded that while XRF measurements can be reliable for certain elements like Pb, Ni, Zn, and Cu, they may not be as accurate for elements like Hg, Cd, Cr, and As, “ same sentence than l. 258 ;

\* I’m a bit confused about the conclusion for table 1. You mentioned that Ni measurements with ICP and XRF are in close proximity while there is a factor 3 and no R2 ; same for Pb and Zn with a factor 2 between ICP and XRF.

\* L. 280 “with Cd showing a slightly increasing trend at higher concentrations” Isn’t that Cu rather than Cr?

\* L. 294 “Cubist modelling, which helped them obtain predictions of the results. The resulting data exhibited high skewness, with the PXRF having higher values for Lin’s Concordance correlation coefficient” please define or explain “cubist modelling” and “lin’s concordance”

\* L.300 “ The results obtained in research conducted by Schmidt et al. (2024) [...] PXRF measurements for As and Pb”, this look like a list of studies that performed or not ... I’m not sure about the relevance of this paragraph after the table and fig.3. Maybe rephrase or complete to highlight the interest of detailing this study? Besides, l.263 the author wrote that method does not perform well for As ....

\* Table 2 not sure about “in situ r2” and “ex situ r2” is it the r2 between PXRF and ICP for in-situ (or ex situ) measurements? please detail the legend

\* Is paragraph 3.3 a “conclusion” about how to perform measurements ?

\* l. 390 “Portable XRF is effective and economic [...] for each heavy metal individually using traditional laboratory methods.” Is that a concluding paragraph ? why an other paragraph of example after this one

\* L.430 and 432 comments about the moisture and organic matter content have been wrote before