

Review Summary;

1. In its current status I feel the paper needs revision and additional work before publishing. Primarily, the omission of dose recipients potentially more critical than those analysed, has been excluded from the scope. Secondly, there needs to be a review of the various dose units quoted throughout. Some of the dose effects (those lasting only for the duration of a fire) are more logically given as a dose; ingestion on the other hand is more logically given a dose rate. Adding up these effects as is done can cause misinterpretation, if one unit is a dose and the other a dose rate. Some units are quoted incorrectly.
2. The significant figure accuracy of the final doses/dose rates quoted is not at all realistic. For distances >25 km an order of magnitude accuracy would be very optimistic indeed, even if the Gaussian plume model was applicable.
3. Assumptions would be better collected in a list with discussion of why they can each be justified as conservative and with some estimate of the uncertainties involved, if a very conservative overall calculation is being claimed.
4. No comments are provided on cancer incidence and mortality model as the author is not experienced in these. The paper could be simplified perhaps if only doses are kept as the focus. Adding cancer predictions results in an additional measure of uncertainty on top of dose predictions with large uncertainties.

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