

FROM
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DATE : May 9, 1984

SUBJECT : ELA for TCDD in Soil

REFERENCE :

TO : J. L. Henshaw - G2WB

cc: C. F. Callis - G5WA
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Over the last year several plants have requested guidance regarding an action level for 2,3,7,8-TCDD in soil. Both Luling and Nitro face the possibility of sometime having to excavate contaminated soil, e.g., to repair utilities. Therefore, would you please proceed to prepare an ELA for this situation, assuming episodic, limited contact with the soil? The Advisory should take the form of a soil concentration above which protective equipment should be used by those digging in it.

As you know, there is not agreement on a "no effect" dose for TCDD in humans; we believe that the one used by CDC is grossly over-conservative. Therefore, would you please carry out the exposure assessment part? That is, assume that the "action" dose is N gms TCDD per person per day, and calculate a soil concentration such that normal construction and maintenance activities involving soil will not exceed that dose. Assume further that 1% of TCDD adsorbed on a normal clay soil will transfer into the body through the skin, that 35% of TCDD on soil will become available if the soil is ingested, and that inhaling dust is the same as ingesting it.

Thank you.


J. D. Wilson

/hmv

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