

**TITLE:** Cumulative Adjustment for Lead and TPH

**DATE EFFECTIVE:** January 2003

**HISTORY:** Update of VA30008.09.004 - Revision was necessary to reflect changes in the rule citations that became effective in August 2014.

**KEYWORDS:** Cumulative risk, lead, multiple chemical adjustment, risk goals, total petroleum hydrocarbons, TPH

**RULE/ AUTHORITY:** OAC 3745-300-08(A)(2)(b); 3745-300-08(C)(3)(e); 3745-300-08(F)

**QUESTION:** Is it appropriate to include lead or total petroleum hydrocarbons (TPH) in the assessment of cumulative risk?

**ANSWER:** No, it is not appropriate to include lead or TPH in an assessment of cumulative risk. Each of the above-mentioned chemicals or chemical compounds, if present, should be evaluated independently as described in OAC 3745-300-08. Lead standards take into account other factors and assumptions in addition to the carcinogenic or noncarcinogenic risk (refer to OAC 3745-300-08(C)(3)(e)). Therefore, using the cumulative risk adjustment equations contained in OAC 3745-300-08(F) is not appropriate and is not required to be performed.

TPH criteria are based upon soil saturation and cannot be assigned either a carcinogenic or noncarcinogenic risk. Therefore, it would not be appropriate to include these values in an assessment of cumulative risk. However, please note that each of the individual hazardous chemical analyses required for petroleum compounds (e.g., benzene) do require assessment of cumulative risk (refer to OAC 3745-300-08(A)(2)(b)).

**OHIO EPA CONTACT:** For any questions concerning this issue, please contact the VAP central office at (614) 644-2924.