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<b><u>TITLE:</u></b>	<b>Recommended Toxicological Assessment of Dibenzofuran</b>
<b><u>DATE EFFECTIVE:</u></b>	1997
<b><u>KEYWORDS:</u></b>	Toxicity value, dibenzofuran, non-substituted dibenzofuran, substituted dibenzofurans, halogenated dibenzofuran, 2,4,5 trichlorophenol, quantitative risk assessment.
<b><u>RULE:</u></b>	OAC 3745-300-09(I)
<b><u>QUESTION:</u></b>	Is a toxicological assessment recommended for dibenzofuran?
<b><u>ANSWER:</u></b>	<p>The Ohio EPA Division of Emergency and Remedial Response (DERR) at this time does not recommend a toxicity value for the quantitative assessment of dibenzofuran. The risk posed by non-substituted dibenzofuran is not considered substantial and should be discussed qualitatively in an uncertainty analysis, which is part of the Risk Assessment report described OAC 3745-300-09(I), the Property-Specific Risk Assessment Rule.</p> <p>However, the presence of dibenzofuran may be indicative of the presence of substituted forms of dibenzofurans and related molecules. The VAP emphasizes the importance of <b>analysis</b> for substituted, halogenated dibenzofuran and dibenzodioxin compounds when the dibenzofuran is present at a location as the result of any of the following circumstances:</p> <ol style="list-style-type: none"><li>(1) The application of herbicides containing 2,4,5 trichlorophenol;</li><li>(2) The release of chemical wastes from processes for which 2,4,5 trichlorophenol was a synthetic intermediate;</li><li>(3) The incineration of municipal and industrial wastes.</li></ol> <p>These compounds, including mono-, di-, tri-, tetra-, penta-, hexa-, hepta- and octa-chloro-dibenzofurans and similarly substituted dibenzodioxins, are not listed on the target compound list of SW-846 methods, and may require special performance-based methods. If one or more above conditions described as favorable for the production of substituted dibenzofurans apply, analysis for these substituted forms should be performed, and a quantitative risk assessment performed, using Interim Procedures for Estimating Risks Associated with Exposures to Mixtures of Chlorinated Dibenzo-p Dioxins and Dibenzofurans (CDDs and CDFs) and 1989 Update</p>

(EPA/625/3-89/016; March 1989; the toxicity equivalency factors used should be those described as I-TEFs/89 in Table 2 of Part II, the 1989 update, of this document).

**SUMMARY:**

A toxicological assessment is not recommended for dibenzofuran. However, if conditions favorable for the production of substituted dibenzofurans apply, laboratory analysis for these substituted forms should be performed, and a quantitative risk assessment conducted.

**OHIO EPA  
CONTACT:**

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