



Ohio Administrative Code

Rule 3745-104-09 Hazard assessment: offsite consequence analysis parameters.

Effective: January 8, 2010

[Comment: For dates of non-regulatory government publications, publications of recognized organizations and associations, federal rules, and federal statutory provisions reference in this rule, see paragraph (C) of rule 3745-104-01 of the Administrative Code titled "Referenced materials."]

(A) Endpoints. For analyses of offsite consequences, the following endpoints shall be used:

(1) Toxics. The toxic endpoints provided in the appendix to this rule.

(2) Flammables. The endpoints for flammables vary according to the scenarios studied:

(a) Explosion. An overpressure of pounds per square inch.

(b) Radiant heat/exposure time. A radiant heat of five kilowatts per square meter for forty seconds.

(c) Lower flammability limit. A lower flammability limit as provided in NFPA documents or other generally recognized sources.

(B) Wind speed/atmospheric stability class. For the worst-case release analysis, the owner or operator shall use a wind speed of 1.5 meters per second and F atmospheric stability class. If the owner or operator can demonstrate that local meteorological data applicable to the stationary source show a higher minimum wind speed or less stable atmosphere at all times during the previous three years, these minimums may be used. For analysis of alternative scenarios, the owner or operator may use the typical meteorological conditions for the stationary source.

(C) Ambient temperature/humidity. For worst-case release analysis of a regulated toxic substance, the owner or operator shall use the highest daily maximum temperature in the previous three years and average humidity for the site, based on temperature/humidity data gathered at the stationary source or at a local meteorological station; an owner or operator using the "RMP Offsite



Consequence Analysis Guidance" may use twenty-five degrees Celsius and fifty per cent humidity as values for these variables. For analysis of alternative scenarios, the owner or operator may use typical temperature/humidity data gathered at the stationary source or at a local meteorological station.

(D) Height of release. The worst-case release of a regulated toxic substance shall be analyzed assuming a ground level (zero feet) release. For an alternative scenario analysis of a regulated toxic substance, release height may be determined by the release scenario.

(E) The owner or operator shall use either urban or rural topography as applicable as defined in 40 CFR Part 51, Appendix W: "Guideline on Air Quality Modeling, section 8.2.8 Urban/Rural Classification."

(F) Dense or neutrally buoyant gases. The owner or operator shall ensure that tables or models used for dispersion analysis of regulated toxic substances account for gas density.

(G) Temperature of released substance. For worst case, liquids other than gases liquified by refrigeration only shall be considered to be released at the highest daily maximum temperature, based on data for the previous three years appropriate for the stationary source, or at process temperature, whichever is higher. For alternative scenarios, substances may be considered to be released at a process or ambient temperature that is appropriate for the scenario.