several peer-reviewed scientific papers.[26] The PHAST-UDM has also been approved by PHMSA for analyzing LNG vapor dispersion exclusion zones.[27]

PHAST model calculations assume that the terrain is completely flat and do not account for any obstructions (either natural or nearby equipment) on the dispersion distance of flammable clouds. In many cases, this assumption produces a conservative overestimate of the distance to hazardous outcomes.

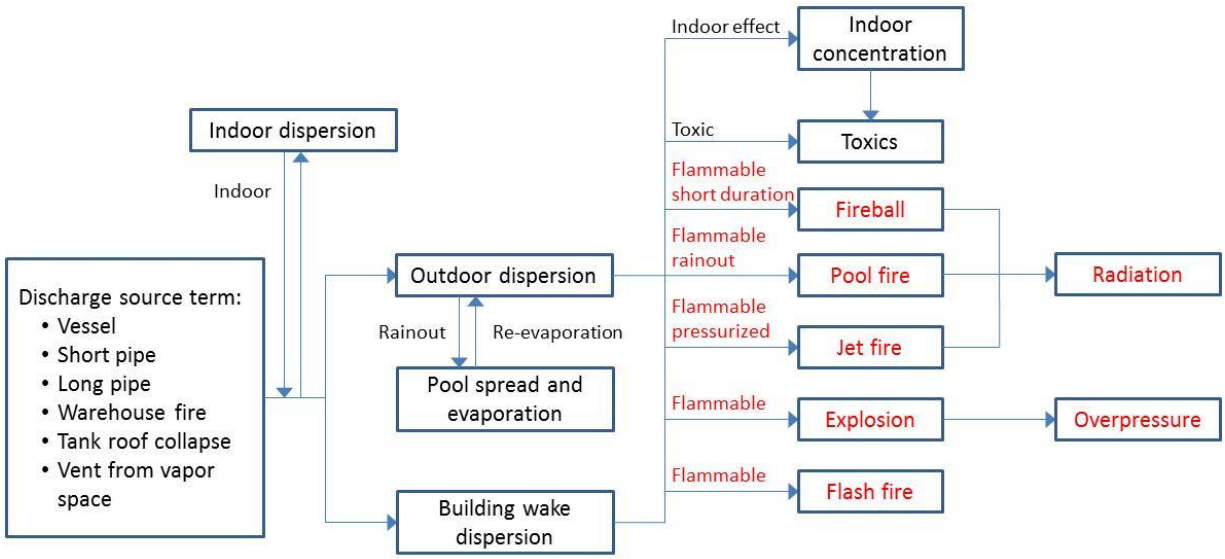

Figure 6. Block diagram for PHAST.

[26] Witlox, H.W.M. and Holt, A., 1999, A unified model for jet, heavy and passive dispersion including droplet rainout and re-evaporation, International Conference and Workshop on Modeling the Consequences of Accidental Releases of Hazardous Materials, CCPS, San Francisco, California, September 28-October 1, pages 315–344.

[27] PHMSA Docket No. 2011-0075, October 11, 2011.