Table K.7
Response to USEPA Comments
Vapor Intrusion Model Input Parameters and Predicted Indoor Air Results for TCE based on Risk = 1 x 10^{-5}
Soil Vapor Pathway Assessment
Harley-Davidson Motor Company Operations, Inc.
York, Pennsylvania
On-Site Buildings

	Non-Residential (derived)	Sample ID	B01SB01A	B01SB01B	B08SB02
		Sample Depth Interval (ft)	5-10	10-15	12-15
		Depth Below Foundation (ft)	1	6	7
Depth below grade to enclosed space floor †		cm	200		
Soil gas sampling depth below grade		cm	228.6	381	411.48
Average soil temperature		°C	11.1		
Vadose zone soil vapor permeability		cm^2	1.34E-12	1.34E-12	7.07E-11
Vadose zone soil dry bulk density		g/cm^3	1.504	1.504	1.351
Vadose zone soil total porosity		unitless	0.429	0.429	0.523
Vadose zone soil water-filled porosity		unitless	0.336	0.336	0.323
Soil-building pressure differential		$g/cm\text{-}s^2$	40		
Enclosed space floor length		cm	1517	1517	16091
Enclosed space floor width		cm	13009	13009	1725
Indoor air exchange rate.		cm^3/sec	1.69E-04		
Trichloroethene					
Soil-Gas Concentration	3.7	Input	210	43	2300
Model Predicted Indoor Air Concentration	0.37	Output	0.0159	0.00318	0.201

NOTES:

The non-residential screening level for soil gas was derived using PA default non-residential exposure assumptions for risk = 10^{-5} with a soil atten. factor of 0.1.

The non-residential screening level for indoor air was derived using PA default non-residential exposure assumptions for risk = 10^{-5}

= Concentration exceeds the corresponding screening level.

All Concentrations are shown in ug/m^3.

NA - Not applicable, soil-gas concentration below respective USEPA screening value.

† Modeling conservatively assumed buildings had full basements though not necessarily true for all buildings.