

The rate and extent of biodegradation a contaminant of concern [such as benzene] in soil gas is controlled by the supply of molecular oxygen.

The supply of oxygen is limited by the competing demands for oxygen to support the biodegradation of methane and total petroleum hydrocarbons in soil gas.

You must know the oxygen demand of methane and total petroleum hydrocarbons in soil gas to be able to predict the biodegradation of a contaminant of concern.