Limitations of VSEPR Theory:

Some significant limitations of the VSEPR theory include:

- This theory fails to explain isoelectronic species (i.e. elements having the same number of electrons). The species may vary in shapes despite having the same number of electrons.
- The VSEPR theory does not shed any light on the compounds of transition metals. The structure of several such compounds cannot be correctly described by this theory. This is because the VSEPR theory does not take into account the associated sizes of the substituent groups and the lone pairs that are inactive.
- Another limitation of VSEPR theory is that it predicts that halides of group 2 elements will have a linear structure, whereas their actual structure is a bent one.

REFERENCES

- Ine LibreTexts libraries
 "Concise Engg. Chemistry" by NeetuGoel and Sanjay Goel, AB. 13. Publisher
 Google content.
 chemed.chem.purdue.edu
 www.toppr.com
 Gillespie, R. J. Electron Manithes and the VSE R model of molecular geometry. Can. J. Chem. 20 VM (1992