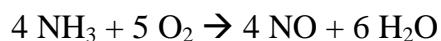


The equation for this reaction is next:

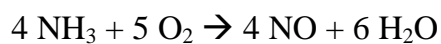


As you can see volume and mole ratio between NH_3 and O_2 is 4:5.

For example 40 L of NH_3 reacts with 50 L of O_2 . In your case, where volume of ammonia is 60 L and volume of oxygen is 50L, the last one is definitely in shortage, so it is limiting reactant.

If you have 60 L of ammonia you need X L of oxygen for its complete reaction:

$$60 \text{ L} \quad x$$



$$4 \quad 5$$

$x = 60 * 5 / 4 = 75 \text{ L}$ but you have only 50 L, oxygen is limiting agent.