Hydraulic fracturing, an increasingly common method for its clean-burning and environmentally efficiency , is a relatively new industrial process, by which natural gas from a shale can be extracted. In order to do so, large amount of water and additives are needed for a fracture to be created. After flowback associated waters have to be disposed due to its potential environmental fate, such as fate in treatment systems and human health impacts. Characteristics of common HF additives were presented using chemical information databases. Most of HF additives are non-toxic.however a minority of them need further studies to understand potential issues.