Isparta city center is selected as a work area in this study because the public believes that the tap water is dirty and harmful. In this study, the city’s drinking water in the distribution system and other spring waters which are used as drinking water in this region were investigated from the point of water quality and health risk assessment. Water samples were collected from major drinking water springs, tap waters, treatment plants and dam pond in the Isparta province center. Ca-Mg-HCO$_3$, Mg-Ca-HCO$_3$, Ca-Na-HCO$_3$, Ca-HCO$_3$, Ca-HCO$_3$-SO$_4$ and Ca-Mg-HCO$_3$-SO$_4$ are dominant water types. When compared to drinking water guidelines established by World Health Organization and Turkey, much greater attention should be paid to As, Br, Fe, F, NH$_4$, PO$_4$ through varied chemicals above the critical values. The increases of As, Fe, F, NH$_4$ and PO$_4$ are related to water–rock interaction. In tap waters, the increases of As and Fe are due to corrosion of pipes in drinking water distribution systems. The major toxic and carcinogenic chemicals within drinking water are As and Br for both tap water and spring water. Also, F is the non-carcinogenic chemical for only spring waters in the study area.