## **Chapter 2 Recommendation**

The Zacualpan area has massive sulfide deposits and vein type deposits that mainly consist of Pb and Zn. The massive sulfide deposits have similar characteristics as the Rey de Plata deposit. These deposits, which are distributed in the Aurora area in the central part of Zacualpan area, include the Manto Rico, Aurora, and Cruz Blanca deposits. The deposits are formed together with sedimentary rock in the upper zone of the Villa Ayala Formation during intervals of volcanic activities. However, the Zacualpan area is unlikely to have centralized ore bodies, thereby having small potentials for finding large-scale economical deposits.

Meanwhile, great Guerrero Terrene, including this Zacualpan area, is known as having many massive sulfide deposits and occurrences such as the Tizapa deposit and the Rey de Plata deposit although some areas in Guerrero Terrene have undergone no detailed geological surveys until today. Thus, further surveys could lead to finding blind deposits in the Guerrero Terrene

The relation (concept of deposit horizon) between volcanic activities in the Villia Ayala Formation and mineralization, which has been clear in our survey, can be applicable to explorations of massive sulfide deposits in Guerrero Terrene. Accordingly, we estimate that further review of the geology in Guerrero Terrene could lead to extracting areas with high potentials for deposits.

Small mining of vein type deposits, which mainly consisting of Zn, Ag, and Pb, is conducted in the vicinity of Zacualpan. Since similar mineralization is formed vein type deposit zones in the NW-SE system, small- and medium-sized high grade vein type deposit could be found in areas where no substantial exploration has been carried out yet.