The aim of this study is to determine the effect of different soil tillage depth using chisel plow on soil CO2 emission and some soil physical properties. The experiment was carried out using chisel plow at three depths of 15 (A), 25 (B), 35 (C) cm and control (D) treatment and three replications. According to the obtained results, carbon dioxide emissions are determined for A, B, C and D treatment as: 0.148, 0.172, 0.221 and 0.165 g m-2 h-1 respectively. The highest carbon dioxide emissions were obtained for C treatment and it is statistically significant (p < 0.01). Soil bulk density for A, B, C and D treatment are 1.33, 1.32, 1.24, and 1.39 g cm-3 respectively. The differences between soil bulk density, also porosity between treatments were not significant in statistical considerations (p > 0.01). Soil penetration resistance for A, B, C and D treatment found as 1.13, 1.12, 1.1, and 1.19 MPa respectively. The soil particle size also increased as the soil tillage depth increased. Soil evaporation for A, B, C, and D treatment found to be 4.51, 5.27, 5.76 and 5.26 g m-2 h-1 respectively.