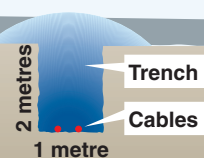


Magnetic Fields Around Buried HVDC Cables

International guideline for exposure to static (DC) magnetic fields: 400,000 mG

Earth's natural magnetic field: ~550 mG

The direction of current flow in a cable determines the direction of its magnetic field. Here the currents in the two DC cables flow in opposite directions so magnetic fields from each cable virtually cancel out. The resulting field minimally increases the earth's magnetic field. Unlike AC fields, DC fields do not produce currents or voltages in nearby objects.



At the edge of the trench, on the road surface, the static magnetic fields from the cables have diminished to less than the earth's magnetic field and are about 0.14% of the international guideline (International Commission on Non-Ionizing Radiation Protection).