Invention relates to the field of nuclear energy, specifically to methods for dismantling and disassembling equipment that has been contaminated with radioactivity. Dismantling method of heat exchanger of a nuclear facility, comprising a cylindrical housing and a heat exchange tube with arc-shaped and straight sections housed therein, which includes placing the heat exchanger on a support frame so that the central axis of the housing is positioned horizontally. The support frame is then moved to introduce the arc-shaped section of the heat exchanger into a dismantling chamber equipped with radiation shielding and a holding device. Next, the arc-shaped section of the heat exchanger tube is removed from the housing and cut using a circular saw inside the dismantling chamber. In the final stage, the arc-shaped section is cut into short tubes sequentially, starting from the point of the initial cut made by the circular saw. The technical result consists of reducing leakage and minimizing the impact of radioactive substances on the environment, improving the efficiency of removing the arc-shaped section of the heat exchanger tube, and saving workspace.