

Method for assessing an environmental impact of seismic and air blast waves during mass explosions comprises short-delay blasting of a block from a series of individual borehole charges, which differ in design and mass of charges by up to 10 %, which is carried out together with blasting of an additional single borehole charge, which is initiated after blasting of a last charge in a series of an entire block with a 2-4 times increased delay interval. Vibration registration points are installed in a profile of the block. Recording of vibrations in a point from an explosion is carried out simultaneously with obtaining an oscillogram of the explosion. By decoding the oscillogram, a velocity of ground vibrations from blasting of the entire series of charges on the block and the single borehole charge is determined to obtain a system of equations, having values of a charge mass, a distance to an explosion site, a seismicity proportionality coefficient K_c is determined from a solution of the system of equations. After which, in a formula for a protected object with a given permissible vibration velocity, seismic safety of buildings is determined. In a point on a boundary of a nearest residential area, registration of an air blast wave is carried out simultaneously with seismic vibrations with obtaining an excess atmospheric pressure from an action of the explosion. By recording, a pressure at a front of the air blast wave and seismic vibrations at a base of a building from short-delay blasting of the entire series of charges are determined. After comparison with permissible values, a criterion for an action on glazing from the air blast wave is obtained. Furthermore, when comparing the ground vibration velocity with the permissible one, a main criterion of seismic safety at the base of the building from the action of the explosion is obtained.