

Method for determination of dangerous zone at explosion of distributed external charge includes placement of external charge on free surface, its initiating and determination of radius of dangerous zone. Before implementation of blast operations with one of known methods one measures temperature and absolute humidity of the lower layers of atmosphere, with determination of relative humidity of air, and radius R of dangerous zone at explosion of distributed external charge one determines from expression

$$R = \frac{4}{\sqrt{k_n}} \sqrt[3]{\frac{Q}{\rho_o}}, n=1,2,3,4,5,$$

Q-total mass of distributed external charge, kg;

$\rho$  – density of atmosphere at normal conditions, kg/m<sup>3</sup>;

$k_n$  – coefficient of relative density of air, where n - 1,2,3,4,5;

$k_1 - 4 \cdot 10^{-3}$  at respective humidity of air 0%-20%;

$k_2 - 1,7 \cdot 10^{-3}$  at respective humidity of air 20%-40%;

$k_3 - 8 \cdot 10^{-4}$  at respective humidity of air 40%-60%;

$k_4 - 4 \cdot 10^{-4}$  at respective humidity of air 60%-80%;

$k_5 - 0,9 \cdot 10^{-4}$  at respective humidity of air 80%-100%.