POLLUTANS CONSIDEERED FOR CALCULATING EMISSIONS

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Open-pit mining has a negative impact on all the components of the habitual environment. The negative impact of transport operating openpit mining is developed as a result of alienation of the territories when creating transportation lines, water pollution by transportation set and service units. During the operation of road transport, pollution also occurs due to the emission of harmful substances when fuel is burned in internal combustion engines. In this case, aerosol and gaseous components enter the atmosphere with the exhaust gases. The most dangerous and harmful ones are the standardized pollutants: nitrogen oxides NO_x the sum of NO and NO₂ in terms of NO₂; carbon monoxide (II) - CO; hvdrocarbons CH - vapors of unburned fuel and lubricating oil in terms of CH_{1.88}; particles – solid filtrate (carbon) C and aerosols of unburned fuel and lubricating oil. Non-standardized harmful substances include: sulfur oxides SO_x – the sum of SO_2 and SO_3 in terms of SO_2 . The total mass of harmful substances released during the combustion of fuel by quarry vehicles depends on the operating mode of the engine of a vehicle during the haul cycle. Considering the operation of a motor vehicle in a quarry, three modes of engine operation can be: idle - for trucks during loading, waiting and moving downhills; full power - when moving uphill and when moving a loaded vehicle along the flat surface; partial (app.50% of full power) -when moving along the flat sections in unloaded condition and uploading. The mass of the annual emission of harmful substances from the combustion of fuel in the engines of vehicles depends on the total number of impurities emitted into the atmosphere, on the type of impurities emitted by the source, the mass of harmful substances emitted during the vehicle operation.