

Alarm data research of Vehicle Radiation Portal Monitor (RPM)

Carry out various research experiments of Vehicle Radiation Portal Monitor (RPM) by truck which loads fertilizer and nuclear material. The detail content of experiments as follow:

- (1) Different load of natural radioactive material (fertilizer) experiment.
- (2) Different activity of nuclear material experiment.
- (3) Different vehicle speeds experiment.
- (4) Different loading locations of natural radioactive material (fertilizer) experiment.
- (5) Natural radioactive material (fertilizer) and nuclear material together load experiment.

According to the test data of these experiments, we can verify the relationship between the weight (activity) and the number of gamma counts of RPM, study the impact of various factors (speed and load location) to the alarm data of RPM and how the nuclear material affect the gamma counts of RPM from the natural radioactive material. Thus we can improve the assessment method of initial alarms from RPM, promote the effectiveness and efficiency of RPM, and ensure to prevent illicit trafficking of nuclear and radioactive material.

Gender

Male

State

China

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