$56.6600$ Loading practices.

If extraneous electricity is suspected in an area where electric detonators are used, loading shall be suspended until tests determine that stray current does not exceed $0.05$ amperes through a $1$-ohm resistor when measured at the location of the electric detonators. If greater levels of extraneous electricity are found, the source shall be determined and no loading shall take place until the condition is corrected.

$56.6601$ Grounding.

Electric blasting circuits, including powerline sources when used, shall not be grounded.

$56.6602$ Static electricity dissipation during loading.

When explosive material is loaded pneumatically into a blasthole in a manner that generates a static electricity hazard—

(a) An evaluation of the potential static electricity hazard shall be made and any hazard shall be eliminated before loading begins;

(b) The loading hose shall be of a semiconductive type, have a total of not more than $2$ megohms of resistance over its entire length and not less than $1000$ ohms of resistance per foot;

(c) Wire-countered hoses shall not be used;

(d) Conductive parts of the loading equipment shall be bonded and grounded and grounds shall not be made to other potential sources of extraneous electricity; and

(e) Plastic tubes shall not be used as hole liners if the hole contains an electric detonator.

$56.6603$ Air gap.

At least a $15$-foot air gap shall be provided between the blasting circuit and the electric power source.

$56.6604$ Precautions during storms.

During the approach and progress of an electrical storm, blasting operations shall be suspended and persons withdrawn from the blast area or to a safe location.

$56.6605$ Isolation of blasting circuits.

Lead wires and blasting lines shall be isolated and insulated from power conductors, pipelines, and railroad tracks, and shall be protected from sources of stray or static electricity. Blasting circuits shall be protected from any contact between firing lines and overhead powerlines which could result from the force of a blast.

$56.6700$ Nonsparking tools.

Only nonsparking tools shall be used to open containers of explosive material or to punch holes in explosive cartridges.

EXTRANEOUS ELECTRICITY

§ 56.6600 Loading practices.

If extraneous electricity is suspected in an area where electric detonators are used, loading shall be suspended until tests determine that stray current does not exceed $0.05$ amperes through a $1$-ohm resistor when measured at the location of the electric detonators. If greater levels of extraneous electricity are found, the source shall be determined and no loading shall take place until the condition is corrected.

§ 56.6601 Grounding.

Electric blasting circuits, including powerline sources when used, shall not be grounded.

§ 56.6602 Static electricity dissipation during loading.

When explosive material is loaded pneumatically into a blasthole in a manner that generates a static electricity hazard—

(a) An evaluation of the potential static electricity hazard shall be made and any hazard shall be eliminated before loading begins;

(b) The loading hose shall be of a semiconductive type, have a total of not more than $2$ megohms of resistance over its entire length and not less than $1000$ ohms of resistance per foot;

(c) Wire-countered hoses shall not be used;

(d) Conductive parts of the loading equipment shall be bonded and grounded and grounds shall not be made to other potential sources of extraneous electricity; and

(e) Plastic tubes shall not be used as hole liners if the hole contains an electric detonator.

§ 56.6603 Air gap.

At least a $15$-foot air gap shall be provided between the blasting circuit and the electric power source.

§ 56.6604 Precautions during storms.

During the approach and progress of an electrical storm, blasting operations shall be suspended and persons withdrawn from the blast area or to a safe location.

§ 56.6605 Isolation of blasting circuits.

Lead wires and blasting lines shall be isolated and insulated from power conductors, pipelines, and railroad tracks, and shall be protected from sources of stray or static electricity. Blasting circuits shall be protected from any contact between firing lines and overhead powerlines which could result from the force of a blast.

EQUIPMENT/TOOLS

§ 56.6700 Nonsparking tools.

Only nonsparking tools shall be used to open containers of explosive material or to punch holes in explosive cartridges.