

§ 57.22603 Blasting from the surface (II-A mines).

(a) All development, production, and bench rounds shall be initiated from the surface after all persons are out of the mine. Persons shall not enter the mine until the mine has been ventilated for at least 15 minutes and the ventilating air has passed over the blast area and through at least one atmospheric monitoring sensor.

(b) If the monitoring system indicates that methane in the mine is less than 0.5 percent, competent persons may enter the mine to test for methane in all blast areas.

(c) If the monitoring system indicates that methane in the mine is 0.5 percent or more, the mine shall be ventilated and persons shall not enter the mine until the monitoring system indicates that methane in the mine is less than 0.5 percent.

(d) If the monitoring system is inoperable or malfunctions, the mine shall be ventilated for at least 45 minutes and the mine power shall be deenergized before persons enter the mine. Only competent persons necessary to test for methane may enter the mine until the methane in the mine is less than 0.5 percent.

(e) Vehicles used for transportation when examining the mine shall be approved by MSHA under the applicable requirements of 30 CFR parts 18 through 36. Vehicles shall not be used to examine the mine if the monitoring system is inoperable or has malfunctioned.

§ 57.22604 Blasting from the surface (II-B mines).

All development, production, and bench rounds shall be initiated from the surface after all persons are out of the mine. Persons other than those designated by the mine operator to make methane tests shall not enter the mine until all blast areas have been tested for methane.

§ 57.22605 Blasting from the surface (V-A mines).

(a) All development and production blasting shall be initiated from the surface after all persons are out of the mine. Persons shall not enter the mine until ventilating air has passed over

the blast area and through at least one atmospheric monitoring sensor.

(b) If the monitoring system indicates that methane in the mine is less than 1.0 percent, persons may enter the mine, and all places blasted shall be tested for methane by a competent person before work is started.

(c) If the monitoring system indicates the presence of 1.0 percent or more methane, persons other than examiners shall not enter the mine until the mine has been examined by a competent person and the methane level is less than 1.0 percent.

(d) Vehicles used for transportation when examining the mine shall be approved by MSHA under the applicable requirements of 30 CFR parts 18 through 36.

(e) This standard applies only to mines blasting within an oil reservoir.

§ 57.22606 Explosive materials and blasting units (III mines).

(a) Mine operators shall notify the appropriate MSHA District Manager of all nonapproved explosive materials and blasting units to be used prior to their use. Explosive materials used for blasting shall be approved by MSHA under 30 CFR part 15, or nonapproved explosive materials shall be evaluated and determined by the District Manager to be safe for blasting in a potentially gassy environment. The notice shall also include the millisecond-delay interval between successive shots and between the first and last shot in a round.

(b) Faces shall be examined for proper placement of holes, possible breakthrough, and water. Ammonium nitrate blasting agents shall not be loaded into wet holes.

(c) Multiple-shot blasts shall be initiated with detonators encased in copper-based alloy shells. Aluminum and aluminum alloy-cased detonators, non-electric detonators, detonating cord, and safety fuses shall not be used. All detonators in a round shall be made by the same manufacturer.

(d) Nonapproved explosives shall be used only as primers with ammonium nitrate-fuel oil blasting agents. Such primers shall be placed at the back or bottom of the hole.

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(e) Blast holes shall be stemmed with a noncombustible material in an amount to confine the explosive charge. Breakthrough holes shall be stemmed at both ends.

(f) Mudcaps or other nonapproved unconfined shots shall not be blasted.

(g)(1) Blasting units shall be approved by MSHA under 30 CFR part 25; or

(2) Blasting units used to fire more than 20 detonators shall provide at least 2 amperes through each detonator but not more than an average of 100 amperes through one ohm for 10 milliseconds, and provide the necessary current for at least the first 5 milliseconds with a cutoff not to exceed 10 milliseconds.

[52 FR 24941, July 1, 1987, as amended at 52 FR 41397, Oct. 27, 1987]

§ 57.22607 Blasting on shift (III mines).

When blasting on shift, tests for methane shall be made in the mine atmosphere by a competent person before blasting. Blasting shall not be done when 1.0 percent or more methane is present.

§ 57.22608 Secondary blasting (I-A, II-A, and V-A mines).

Prior to secondary blasting, tests for methane shall be made in the mine atmosphere at blast sites by a competent person. Secondary blasting shall not be done when 0.5 percent or more methane is present.

APPENDIX I TO SUBPART T OF PART 57— STANDARD APPLICABILITY BY CATEGORY OR SUBCATEGORY

Subcategory I-A

57.22101	57.22222
57.22103	57.22224
57.22201	57.22227
57.22202	57.22228
57.22204	57.22229
57.22205	57.22234
57.22206	57.22237
57.22207	57.22301
57.22208	57.22302
57.22211	57.22306
57.22214	57.22401
57.22215	57.22501
57.22217	57.22601
57.22220	57.22608
57.22221	

57.22201	57.22231
57.22202	57.22232
57.22217	57.22234
57.22222	57.22238
57.22227	57.22401
	57.22501

Subcategory I-B

Subcategory I-C

57.22102	57.22222
57.22104	57.22225
57.22106	57.22227
57.22201	57.22228
57.22202	57.22233
57.22203	57.22235
57.22209	57.22241
57.22210	57.22303
57.22212	57.22310
57.22216	57.22313
57.22217	57.22501
	57.22602

Subcategory II-A

57.22101	57.22221
57.22103	57.22222
57.22201	57.22227
57.22202	57.22228
57.22204	57.22230
57.22205	57.22232
57.22206	57.22235
57.22207	57.22301
57.22208	57.22304
57.22212	57.22307
57.22214	57.22311
57.22215	57.22312
57.22219	57.22501
57.22220	57.22603
	57.22608

Subcategory II-B

57.22201	57.22235
57.22227	57.22238
57.22231	57.22501
57.22232	57.22604

Category III

57.22101	57.22221
57.22103	57.22222
57.22201	57.22223
57.22202	57.22224
57.22204	57.22227
57.22205	57.22228
57.22206	57.22229
57.22207	57.22234
57.22208	57.22237
57.22213	57.22305
57.22214	57.22308
57.22215	57.22501
57.22218	57.22606
57.22220	57.22607

Category IV

57.22105	57.22226
57.22201	57.22227