ADOPTED REGULATION OF THE DIVISION OF INDUSTRIAL

RELATIONS OF THE DEPARTMENT OF

BUSINESS AND INDUSTRY

LCB File No. R109-00

Effective September 6, 2001

EXPLANATION - Matter in *italics* is new; matter in brackets formitted material is material to be omitted.

AUTHORITY: §§1-16 and 21-28, NRS 618.295 and 618.890; §§17-20, NRS 618.295 and 618.898; §§29 and 30, NRS 618.295; §§31 and 32, NRS 618.295, 618.760 and 618.765.

- **Section 1.** Chapter 618 of NAC is hereby amended by adding thereto the provisions set forth as sections 2 to 28, inclusive, of this regulation.
- Sec. 2. As used in sections 2 to 28, inclusive, of this regulation, unless the context otherwise requires, the words and terms defined in sections 3 to 13, inclusive, of this regulation, have the meanings ascribed to them in those sections.
- Sec. 3. "Barricade" means a barrier that effectively screens a building containing explosives from other buildings, public ways or magazines from the force of an explosion.
- Sec. 4. "Binary explosive" means an explosive material that is made by combining two nonexplosive materials.
 - Sec. 5. "Division 1.1 explosives" means explosives that have a mass explosion hazard.
- Sec. 6. "Division 1.2 explosives" means explosives that have a projection hazard but not a mass explosion hazard.
- Sec. 7. "Division 1.3 explosives" means explosives that have a fire hazard and a minor blast hazard or a minor projection hazard but not a mass explosion hazard.

- Sec. 8. "Explosives manufacturing building" means a building in which explosives are manufactured.
- Sec. 9. "Explosives manufacturing plant" means a place of employment where explosives are manufactured or where explosives are used, processed, handled, moved on-site or stored in relation to their manufacture. The term does not include a place of employment where there is on-site mixing of a binary explosive if that explosive is used on the same day at the same site.
- Sec. 10. "Ground level" means the level of the primary construction entrance to a building or structure.
- Sec. 11. "Magazine" means a building or structure, other than an explosives manufacturing building, used for the storage of explosives materials.
- Sec. 12. "Mass explosion" means an explosion that affects almost the entire load of explosives instantaneously.
- Sec. 13. "Provider of training related to explosives" means a person who holds a certificate of competency issued by the enforcement section to provide annual explosives training and testing to employees who work at an explosives manufacturing plant.
- Sec. 14. An employer that manufactures explosives must comply with the requirements set forth in 29 C.F.R. § 1910.119, relating to process safety management of highly hazardous chemicals, which is hereby adopted by reference. A copy of 29 C.F.R. Parts 1900-1910 may be obtained for \$42 from the Superintendent of Documents, P.O. Box 371954, Pittsburgh, Pennsylvania 15250-7954, or by phone at (202) 512-1800.
- Sec. 15. An employer that manufactures explosives must comply with the requirements relating to the storage of explosives that are set forth in 27 C.F.R. §§ 55.201 et seq., which is hereby adopted by reference. A copy of 27 C.F.R. Parts 1-199 may be obtained for \$57 from

the Superintendent of Documents, P.O. Box 371954, Pittsburgh, Pennsylvania 15250-7954, or by phone at (202) 512-1800.

- Sec. 16. 1. In addition to any other requirement set forth in subsection 2 of NRS 618.383 or in NAC 618.540, an employer that manufactures explosives shall establish and carry out safety procedures and a written safety program. The safety procedures and program must include:
- (a) Work rules to prevent the exposure of employees to hazards and accidental explosions in the workplace.
- (b) A program concerning personal protective equipment that is in compliance with 29 C.F.R. § 1910.132.
- (c) If the employer manufactures any explosive containing trinitrotoluene, a program for medical surveillance of the employees who manufacture the explosives that is under the direction of a licensed physician.
- (d) If the employer manufactures division 1.1, 1.2 or 1.3 explosives, or any combination thereof, the provision of a change room and shower facility that conforms with 29 C.F.R. § 1910.141.
- (e) Provisions for the security of the site to ensure that only designated persons enter the explosives manufacturing plant.
- (f) Procedures that are to occur during the approach and duration of an electrical storm that suspend manufacturing operations and allow for the safe withdrawal of the employees working in the explosives manufacturing plant.
 - (g) An emergency evacuation plan, which must be tested at least once each year.

- (h) Procedures for the safe movement of explosives materials within the explosives manufacturing plant.
 - (i) Procedures for testing explosives and for quality control operations.
- (j) The limits for the number of personnel and amount of explosives for each explosives manufacturing building, which must be posted on each such building.
- (k) The limit of the amount of explosives materials for each magazine, which must be posted on the magazine.
- (l) Procedures to ensure that foreign matter that could cause an accidental explosion does not enter the process of manufacturing the explosives.
- (m) Operating rules and standard operating procedures, which must be posted for each operation involving explosives materials.
- (n) Procedures to ensure that personnel do not enter, remain in or go near explosives manufacturing buildings unless it is necessary for the personnel to enter, remain in or go near such a building in the performance of their duties.
- (o) Procedures to ensure that only approved tools are used for construction, maintenance and repairs in explosives material operations.
- 2. An employer that manufactures explosives shall make available to its employees copies of the initial explosives training program and annual training programs which those employees are required to take.
- Sec. 17. 1. To obtain a permit for the construction or alteration of an explosives manufacturing plant, a person must submit an application form to the enforcement section and make the following information available for review by the administrator or his representative:

- (a) A copy of the safety plan and procedures for the explosives manufacturing plant;
- (b) A copy of the written safety program for the explosives manufacturing plant;
- (c) A copy of the program for process safety management of highly hazardous chemicals;
- (d) A map of a 1-mile radius surrounding the area of the explosives manufacturing plant, which identifies all:
 - (1) Inhabited buildings;
 - (2) Roadways;
 - (3) Railways; and
- (4) Other buildings and areas where there may be people, including, without limitation, ranching operations;
 - (e) A plot plan of the explosives manufacturing plant that includes:
 - (1) A general layout of the explosives manufacturing plant;
- (2) The location of each explosives manufacturing building within the explosives manufacturing plant with a description of:
 - (I) The types of explosives present in the building;
 - (II) The maximum quantity of each identified type of explosive; and
- (III) The maximum number of employees who are present during the manufacturing operations;
 - (3) The location of each magazine in the explosives manufacturing plant;
- (4) The location of all buildings, other than explosives manufacturing buildings, within the explosives manufacturing plant and a description of the uses of each such building; and
- (5) The location and dimensions of all barricades within the explosives manufacturing plant;

- (f) A copy of the building plans for each explosives manufacturing building within the explosives manufacturing plant, which include:
- (1) Details and diagrams describing the materials used to construct the floors, walls, ceilings and roofs of each building, including the location and setup of revetment and blast walls;
- (2) Electrical installations and fixtures, and diagrams describing locations, type and code designations of those installations and fixtures;
 - (3) Diagrams of the plumbing, including water supply, drains and grey water;
- (4) Plans and diagrams of the ventilation of each building, including heating, ventilation and air-conditioning systems and local exhaust systems;
 - (5) Fire suppression systems, if installed;
 - (6) Lightning protection systems, if installed;
 - (7) Steam plant and steam distribution systems, if installed; and
 - (8) Detailed diagrams of the electrostatic discharge system, if installed; and
- (g) A copy of the building plans for all buildings, other than explosives manufacturing buildings.
- 2. If the enforcement section receives incomplete or inaccurate documentation in an application package for a construction permit, the enforcement section shall notify the applicant for the permit in writing and inform him of the deficiencies. An applicant must correct the deficiencies within 30 days after being notified of the deficiencies.
- Sec. 18. The enforcement section may suspend or revoke a permit issued pursuant to NRS 618.898 if the enforcement section finds that:

- 1. The holder of the permit is in violation of any federal or state statute or regulation that governs activities for the safe manufacture of explosives; and
 - 2. The violation constitutes an imminent danger.
- Sec. 19. 1. Before the enforcement section may suspend or revoke a permit pursuant to section 18 of this regulation, the enforcement section shall notify the holder of the permit of the suspension or revocation by delivering, by certified mail, a notice of suspension or revocation to the holder at the address indicated on the application for the permit.
 - 2. A notice of suspension or revocation issued pursuant to this section must include:
- (a) A statement indicating the legal authority and jurisdiction of the division to suspend or revoke the permit; and
- (b) A statement of the reasons for the suspension or revocation, including a citation of the federal or state statutes or regulations that support the suspension or revocation.
- Sec. 20. 1. A holder of a permit issued pursuant to NRS 618.898 may appeal the suspension or revocation of the permit by filing an appeal with the administrator within 15 days after the date on which the permit is suspended or revoked.
- 2. An appeal filed pursuant to this section must be made in writing and describe in particular the matters to be appealed. An appeal must be accompanied by:
 - (a) All documents that are applicable to the appeal;
 - (b) The names of any witnesses who may be called at the hearing on the appeal; and
 - (c) The expected time needed to present the appeal.
- 3. If a holder of a permit who is appealing the suspension or revocation of the permit alleges that the division does not have legal authority or jurisdiction to act with regard to the suspension or revocation of the permit, the holder of the permit must so indicate on his appeal.

- 4. The administrator or his designee shall set a date for hearing an appeal filed pursuant to this section within 30 days after the date on which the appeal is received by the division. A holder of a permit may request that the hearing be held on an earlier date by submitting a written request to the administrator. A request for an earlier date must demonstrate that the holder of the permit will suffer a substantial hardship if the date of the hearing for his appeal is not changed and must include a proposed date for the hearing. The holder of the permit has the burden of establishing the existence of a substantial hardship.
- 5. The administrator or his designee shall hear all appeals filed pursuant to this section and give each party to such an appeal notice of the hearing on the appeal and an opportunity to participate in the hearing. The administrator or his designee shall issue his decision on the appeal within a reasonable time after the conclusion of the hearing. The decision of the administrator or his designee issued pursuant to this section is a final decision for the purposes of judicial review.

Sec. 21. 1. Except as otherwise provided in this section, a building that contains division 1.1, 1.2 or 1.3 explosives, or any combination thereof, must be separated from all other buildings, including magazines, that are within the confines of the explosives manufacturing plant by a distance as follows:

Pounds of explosives over	Pounds of explosives not over	Distance in feet when building is barricaded	Pounds of explosives over	Pounds of explosives not over	Distance in feet when building is barricaded
2	5	16	12,000	<i>14,000</i>	220
5	<i>10</i>	20	14,000	16,000	230
<i>10</i>	20	25	16,000	18,000	238
20	<i>30</i>	28	18,000	20,000	245
<i>30</i>	40	<i>31</i>	20,000	25,000	265

Pounds of explosives over	Pounds of explosives not over	Distance in feet when building is barricaded	Pounds of explosives over	Pounds of explosives not over	Distance in feet when building is barricaded
<i>40</i>	<i>50</i>	<i>34</i>	25,000	30,000	280
<i>50</i>	75	38	30,000	35,000	295
<i>75</i>	100	42	35,000	40,000	<i>310</i>
<i>100</i>	125	45	40,000	45,000	<i>320</i>
125	<i>150</i>	4 8	45,000	50,000	<i>330</i>
<i>150</i>	200	53	50,000	55,000	<i>340</i>
200	250	57	55,000	60,000	<i>350</i>
250	300	<i>60</i>	60,000	65,000	360
<i>300</i>	400	<i>66</i>	65,000	70,000	<i>370</i>
400	500	<i>71</i>	70,000	75,000	380
<i>500</i>	600	<i>76</i>	75,000	80,000	<i>390</i>
600	700	80	80,000	85,000	395
700	800	84	85,000	90,000	400
800	900	87	90,000	95,000	410
900	1,000	90	95,000	100,000	<i>420</i>
1,000	1,200	<i>96</i>	100,000	110,000	<i>430</i>
1,200	1,400	<i>101</i>	110,000	120,000	445
1,400	1,600	106	120,000	130,000	455
1,600	1,800	110	130,000	140,000	465
1,800	2,000	113	140,000	150,000	475
2,000	2,500	122	150,000	160,000	485
2,500	3,000	130	160,000	170,000	495
3,000	4,000	143	170,000	180,000	505
4,000	5,000	154	180,000	190,000	515
5,000	6,000	164	190,000	200,000	525
6,000	7,000	172	200,000	210,000	535
7,000	8,000	180	210,000	230,000	555
8,000	9,000	190	230,000	250,000	575

Pounds of explosives over	Pounds of explosives not over	Distance in feet when building is barricaded	Pounds of explosives over	Pounds of explosives not over	Distance in feet when building is barricaded
9,000	10,000	200	250,000	275,000	600
10,000	<i>12,000</i>	210	275,000		<i>635</i>

- 2. If a building or magazine that contains explosives does not have a barricade as prescribed by section 22 of this regulation, the required distance between the building or magazine and other buildings and magazines as determined by this section must be doubled.
- Sec. 22. A barricade for a building or magazine containing explosives materials must effectively screen the building from the other buildings, public ways and magazines in the explosives manufacturing plant. A barricade that is made of mounds of revetted walls of earth must be not less than 3 feet in thickness. A barricade for a building or magazine containing explosives materials will be considered to be in compliance with this section if a straight line from the top of any side wall of the building or magazine to the eave line of any other building, or to a point that is 12 feet about the center line of a public way, passes through the barricade for the building or magazine.
- Sec. 23. A person shall not provide annual explosives training or testing of employees who manufacture explosives unless he has first obtained a certificate of competency from the enforcement section.
- Sec. 24. To receive a certificate of competency, a person must provide to the enforcement section:
 - 1. A completed application on a form provided by the enforcement section;
 - 2. A description of his qualifications;

- 3. A copy of the lesson plans and course materials that the applicant will be using to instruct the explosives training course; and
- 4. A copy of the examinations, including answers, that the applicant will be using to instruct the explosives training course.
- Sec. 25. A certificate of competency must be renewed by the holder of the certificate annually, and at any other time that the explosives training which the holder is instructing is updated. To renew his certificate of competency, the holder of the certificate must submit an application for renewal to the enforcement section. Such an application must include a copy of all new and updated materials to be used in the explosives training.
- Sec. 26. An employee must participate in an explosives training course and pass an examination from that course before an employer may assign the employee to any duties relating to the manufacturing of explosives. An employee who is assigned to any duties relating to the manufacturing of explosives shall annually participate in a refresher explosives training course.
- Sec. 27. A holder of a certificate of competency must, at least 10 days before he conducts an explosives training course, notify the enforcement section so that the enforcement section may audit the course if it so chooses.
- Sec. 28. 1. The enforcement section may, at any time, upon a showing of good cause and after notice and an opportunity to be heard, suspend or revoke a certificate of competency.
- 2. The enforcement section shall provide notice of the suspension or revocation of a certificate of competency to the holder of the certificate at least 48 hours before the time set by the enforcement section for a hearing on the matter.

- 3. Service of a notice of suspension or revocation of a certificate of competency must be made by personal service or by certified mail to the holder of the certificate. Such a notice must specify the reason for the suspension or revocation of the certificate to allow the holder of the certificate to prepare for the hearing on the matter.
- 4. A hearing on the suspension or revocation of a certificate of competency must be held at the office of the enforcement section as soon as possible after the enforcement section determines that the certificate should be suspended or revoked. The chief or his designee shall preside over such a hearing.
- 5. At a hearing held pursuant to this section, the enforcement section has the burden of establishing the existence of good cause for the suspension or revocation of the certificate of competency. Good cause shall be deemed to exist if the enforcement section establishes that the holder of the certificate did not provide the required explosives training or examination.
- 6. The chief or his designee, as appropriate, shall issue his decision on the matter within a reasonable time after the conclusion of the hearing. A decision by the chief or his designee is a final decision for the purposes of judicial review.
 - **Sec. 29.** NAC 618.494 is hereby amended to read as follows:
 - 618.494 1. "Construction project" means a project which involves:
- [1. A new or renovated building or structure that has a floor level which is more than 30 feet above or below ground level;
- 2. A new building or structure which has an initial
 - (a) A total construction cost of \$10,000,000 or more
- 3.1, not including costs for any related highway construction project;

- (b) A new building or structure which, when completed, will be 50,000 square feet or more; or
- [4.] (c) A new building or structure which, when completed, will be more than 60 feet above the ground [, excluding] or more than 48 feet below ground level.
 - 2. For the purposes of this section:
- (a) The height of a building or structure must be determined by measuring from the ground level to the highest structural level of the building or structure, including any parapet wall, mechanical room, stair tower or elevator penthouse structure, but not including any antenna, smokestack, flagpole or similar attachment.
- (b) The depth of a building or structure must be determined by measuring from the ground level to the lowest floor level of the building or structure. The lowest level of a building or structure does not include any local depression such as a sump or an elevator pit.
- (c) In computing the height of a building or structure, the depth of the building or structure must not be considered, and in computing the depth of a building or structure, the height of the building must not be considered.
 - **Sec. 30.** NAC 618.6434 is hereby amended to read as follows:
 - 618.6434 1. [The inspector is in charge of inspections and the questioning of persons.
- 2. At the beginning of an inspection, [the inspector shall confer with the employer and:] an inspector shall:
- (a) Present his credentials to the owner, operator or agent in charge at the place of employment to be inspected;
 - (b) Explain the nature [, purpose and scope] and purpose of the inspection; [.

(b) State the legal authority for the inspection and the right of the employer to deny entry for routine inspections of the areas of the establishment which are not open to the public.] (c) Indicate generally the scope of the inspection; and (d) Designate the records he wishes to review, but such a designation does not preclude access to additional records. (d) State that he may question the employer and any employees during the inspection. (e) Inform the employer that he may identify areas in the establishment which contain or might reveal a trade secret. — (f) State that an employee or representative of the employees may accompany the inspector during the inspection. 3. During the inspection, an inspector may: (a) Take samples to show or determine the environment at the establishment. (b) Use devices to measure employees' exposure to radiation, chemical substances or physical agents. (c) Attach sampling devices such as dosimeters, pumps and filters or badges to employees to measure their exposure. (d) Take or obtain photographs related to the purpose of the inspection. (e) Question any employer or employee of the establishment. — (f) Use any other reasonable investigative techniques. 4. In taking photographs and samples, an inspector shall: (a) Take reasonable precautions to ensure that such actions are not hazardous; (b) Comply with the employer's rules and practices for safety and health; and

— (c) Wear appropriate protective clothing and use appropriate equipment.

- 5. Whenever possible, an inspector shall conduct the inspection so as to preclude unreasonable disruption of the operations of the employer's establishment.
- 6. An inspector may deny the right of accompaniment to any person whose conduct interferes with a full and orderly inspection.
- 7. At the conclusion of an inspection, the inspector shall inform the employer and employees' representative of:
- (a) Each violation he has noted, the reason the condition does not comply with the applicable standard and the time fixed for abatement of the violation.
- (b) Any potential problems concerning industrial hygiene.
- (c) The fact that notices of violations and citations may be issued and monetary penalties may be proposed for such violations.
- (d) Any requirements for posting citations and notices of violations.
- (e) The procedures for contesting citations, penalties or orders for abatement and for requesting informal conferences.
- (f) Letters of abatement, extensions and procedures for requesting variances.
- (g) Procedures which may be used in case of willful or repeated violations or any failure to abate.]
- 2. An inspector may take environmental samples and take or obtain photographs related to the purpose of the inspection, employ other reasonable investigative techniques in conducting the inspection, and question privately any employer, owner, agent or employee of the place of employment being inspected. As used in this subsection, the phrase "employ other reasonable investigative techniques" includes, without limitation, the use of devices to measure the exposure of employees to hazardous elements and the attachment of personal

sampling equipment such as dosimeters, pumps, badges and other similar devices to employees to monitor the exposure of the employees.

- 3. In taking photographs and sampling, an inspector shall take such reasonable precautions as are necessary to ensure that his actions with any flash, spark-producing or other type of equipment is not hazardous. An inspector shall comply with all safety and health rules established by the employer for that place of employment, and shall wear and use appropriate protective clothing and equipment.
- 4. An inspection must be conducted in such a manner as to preclude unreasonable disruption of the operations of the place of employment being inspected.
- 5. At the conclusion of his inspection, an inspector shall confer with the employer or his representative to advise the employer or representative informally of any apparent safety or health violations disclosed by the inspection. During such a conference, the inspector shall afford the employer or his representative the opportunity to bring to the attention of the inspector any pertinent information regarding conditions at the place of employment.
 - **Sec. 31.** NAC 618.894 is hereby amended to read as follows:
- 618.894 "Project for the abatement of asbestos" means any activity for the abatement of asbestos involving more than 25 linear feet of material containing asbestos located on pipes or ducts or more than 10 square feet of any other material containing asbestos. The term includes activities for the abatement of asbestos, but does not include [emergency asbestos projects or] projects for spot repairs if the number of procedures can be predicted within 1 year and the material containing asbestos to be disturbed exceeds these limits.
 - **Sec. 32.** NAC 618.946 is hereby amended to read as follows:
 - 618.946 Any person who performs a project for spot repairs:

- 1. Is not required to be licensed as a contractor.
- 2. Must be [licensed as an abatement worker or] appropriately trained for the duties to be performed and supervised by a licensed supervisor.