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### Authority

The provisions of this Subchapter A issued under act of December 27, 1951 (P. L. 1793, No. 475) (35 P. S. §§ 1321—1329), unless otherwise noted.

#### Source

The provisions of this Subchapter A adopted September 1, 1956, amended through March 26, 1969), unless otherwise noted.

# GENERAL PROVISIONS

# § 13.1. Definitions.

The following words and terms, when used in this subchapter, have the following meanings, unless the context clearly indicates otherwise:

ASME—The American Society of Mechanical Engineers, Three Park Avenue, New York, New York, 10016-5990 or its current address.

ASME Code—"The Boiler and Pressure Vessel Code," as adopted under the Boiler and Unfired Pressure Vessel Law, and any published cases and interpretations adopted by the Industrial Board under § 3a.4 (relating to adoption of National standards).

Act—The Propane and Liquefied Petroleum Gas Act (35 P. S. §§ 1329.1—1329.19).

Authorized attendant—An employee of a manufacturer, distributor or user of LPG who was trained, in a manner approved by the Department, in the proper performance of duties and who was officially recognized by the LPG facility operator to perform those duties.

Boiler and Unfired Pressure Vessel Law—35 P. S. §§ 1331.1—1331.19.

Bulk plant-

- (i) An LPG storage facility which has the primary purpose of distribution of LPG and which has:
  - (A) A bulk storage capacity of more than 2,000 gallons.
  - (B) Container-filling or tank-loading facilities on the premises.
- (ii) The term includes a consumer of LPG that uses storage tanks to refill the consumer's own containers if the consumer's storage LPG facility has a bulk storage capacity of less than 2,000 gallons and the storage tanks are not owned by a distributor.

Certified Employee Training Program—The "Certified Employee Training Program," available from the Propane Education and Research Council, 1140 Connecticut Ave. NW, Suite 1075, Washington, DC 20036 or its current address.

Container—A vessel such as a cylinder, a tank, a portable tank and a cargo tank used for the transporting or storing of LPG.

Cylinder—A container constructed in accordance with United States Department of Transportation regulations, 49 CFR Part 178, Subpart C (relating to specifications for cylinders).

Cylinder exchange cabinets—A lockable and ventilated metal locker or rack for the storage of LPG cylinders that prevents tampering with valves and pilferage to the cylinders.

Department—The Department of Labor and Industry of the Commonwealth. Dispensing station—Fixed equipment with an aggregate of 2,000 or less gallons of water capacity where LPG is stored and dispensed into portable containers.

Distributor—

- (i) A person authorized by the Department to sell or transfer LPG.
- (ii) The term includes the owner of a cylinder exchange cabinet or a dispensing station.

GPS—Global positioning system.

Gallons—The term shall be measured in terms of water capacity.

Industrial Board—The Industrial Board of the Department established under sections 445 and 2214 of The Administrative Code of 1929 (71 P. S. §§ 155 and 574), which hears requests for variances and extensions of time and appeals of Department interpretations regarding LPG matters.

*Industrial user*—A person who is the consumer of LPG and who maintains a total storage capacity at a site of more than 2,000 gallons and whose storage tanks are not registered under a distributor. This consumer may be a residential or a commercial location.

*LPG—Liquefied petroleum gas*—A material in liquid form that is composed predominately of any of the following hydrocarbons or their mixtures:

- (i) Propane.
- (ii) Propylene.

- (iii) Normal butane or isobutane.
- (iv) Butylenes.

LPG facility—Distributors, bulk plants and industrial users.

NFPA—National Fire Protection Association, 1 Batterymarch Park, Quincy, Massachusetts 02269.

NFPA 54—The "National Fuel Gas Code," 2009 edition, issued by the NFPA.

NFPA 58—The "Liquefied Petroleum Gas Code," 2008 edition, issued by the NFPA.

*NPGA*—National Propane Gas Association, 1150 17th Street, NW, Suite 310, Washington, DC 20036-4523 or its current address.

*National Board*—National Board of Boiler and Pressure Vessel Inspectors, 1055 Crupper Avenue, Columbus, Ohio 43229 or its current address.

National Board Inspection Code.—The "National Board Inspection Code," as adopted under the Boiler and Unfired Pressure Vessel Law, issued by the National Board of Boiler and Pressure Vessel Inspectors.

*Person*—An individual, firm, partnership, unincorporated association, corporation, political subdivision or authority, including the Commonwealth.

*Secretary*—The Secretary of Labor and Industry of the Commonwealth or an authorized deputy or representative.

*Tank*—A portable or stationary ASME-approved vessel used to store lique-fied petroleum gas.

*Transfer*—To cause LPG to pass from any pipeline, tank, container, tank truck, receptacle or storage location to a similar or different type of pipeline, tank, container, tank truck, receptacle or storage location.

#### Authority

The provisions of this § 13.1 amended under section 16 of the Propane and Liquefied Petroleum Gas Act (35 P. S. § 1329.16).

#### Source

The provisions of § 13.1 amended October 27, 1978, 8 Pa.B. 2907; amended August 27, 2010, effective August 28, 2010, 40 Pa.B. 4927. Immediately preceding text appears at serial pages (220112) to (220113).

# § 13.2. Scope.

This chapter applies to:

- (1) The registration and permitting of bulk plants, distributors, industrial users, dispensing stations and cylinder exchange cabinets.
  - (2) The storage, transfer, sale and use of LPG.
- (3) The design, construction, location, operation and inspection of tanks, cylinders, equipment, piping and appliances used in the handling, storage and use of LPG.

The approval of training programs for authorized attendants who transfer LPG.

### Authority

The provisions of this § 13.2 amended under section 16 of the Propane and Liquefied Petroleum Gas Act (35 P. S. § 1329.16).

The provisions of § 13.2 amended August 27, 2010, effective August 28, 2010, 40 Pa.B. 4927. Immediately preceding text appears at serial page (220113).

# § 13.3. Fees.

- (a) The following fees apply to LPG facility applications, plan approvals,
- permits and training program certifications. Fees are nonrefundable. Annual permit and registration fees: Bulk plants with the following storage capacities: (i) (A) 30,000 gallons or less.....\$ 90 (B) 30,001 to 90,000 gallons .....\$135 (C) 90,001 gallons or more .....\$180 Industrial users with the following storage (ii) capacities: (C) 180,001 gallons or more ......\$180 (iii) Distributors, other than cylinder exchange cabinets, having the following number of customers: (A) Less than 1,000.....\$112.50 (B) 1,000 to 2,999.....\$235 (C) 3,000 to 5,999.....\$337.50 (iv) Retail cylinder exchange cabinet location . . . . . . . . . \$ 50 (per physical address) (2) Application and plan review, including Fire
  - Safety Analysis review, for new LPG facilities

exceeding 400,000 gallons and existing LPG

facilities expanded to exceed 400,000 gallons

in total capacity ......\$500

- (3) Application and plan review fee:
- (i) For a LPG facility 4,001 to 400,000 gallons
- For a LPG facility less than 4,001 gallons

(5)	Authorized attendant training program
approv	al\$200
(6)	Request for Industrial Board variance, appeals

(b) The Department will invoice bulk plant owners, industrial users and distributors annually for each location of usage. Payment is due within 30 days of invoice date.

and extensions of time ......\$100

#### Authority

The provisions of this § 13.3 amended under section 16 of the Propane and Liquefied Petroleum Gas Act (35 P. S. § 1329.16).

#### Source

The provisions of this § 13.3 amended August 27, 2010, effective August 28, 2010, 40 Pa.B. 4927. Immediately preceding text appears at serial page (220113).

#### **Cross References**

This section cited in 34 Pa. Code § 13.5 (relating to registration and annual permits); 34 Pa. Code § 13.20 (relating to application process and plan approval); 34 Pa. Code § 13.21 (relating to LPG facilities over 400,000 gallons); 34 Pa. Code § 13.41 (relating to training program approval); and 34 Pa. Code § 13.51 (relating to suspension of annual permit for an owner or operator).

# § 13.4. Adoption of National standards.

- (a) The Department adopts the following standards and any of the standards' published cases, interpretations or tentative interim amendments approved by the Industrial Board under this chapter and the act. Other authorities referenced in these standards are adopted if the authority is not excluded in subsection (b):
  - (1) NFPA 54.
  - (2) NFPA 58.
  - (b) The Department will not adopt the following NFPA 58 provisions:
    - (1) Chapter 9 (relating to vehicle transportation).
    - (2) Chapter 13 (relating to marine shipping and receiving).
- (c) The following NFPA 58 provisions which will take effect on the enumerated dates:
  - (1) Chapter 5, section 5.2.3 regarding the requalification of cylinders filled onsite, effective January 1, 2013.
  - (2) Chapter 6, section 6.25.3.2 regarding fire safety analysis for existing installations, effective January 1, 2012.
  - (3) Chapter 5, section 5.7.4.2(D) regarding the installation of valves for existing installations, effective January 1, 2018.
  - (4) Chapter 6, section 6.11 regarding the installation of internal valves for existing installations, effective January 1, 2018.

(d) The Industrial Board may also approve any NFPA 54 and 58 published cases, interpretations or tentative interim amendments as standards for use under the act and chapter. Provisions enumerated in subsection (b) may not be approved.

#### Authority

The provisions of this § 13.4 amended under section 16 of the Propane and Liquefied Petroleum Gas Act (35 P. S. § 1329.16).

#### Source

The provisions of this § 13.4 amended October 27, 1978, 8 Pa.B. 2907; amended August 27, 2010, effective August 28, 2010, 40 Pa.B. 4927. Immediately preceding text appears at serial page (220113).

# § 13.5. Registration and annual permits.

- (a) An operator of an LPG bulk plant, a distributor and an industrial user shall annually register with the Department on a registration form provided by the Department. The Department will make the necessary form available on its web site at www.dli.state.pa.us.
- (b) An applicant for registration shall submit a completed registration form, the annual fee required under § 13.3 (relating to fees) and a valid copy of an industry standard insurance certificate equal to or greater than the amount of liability insurance required under § 13.6 (relating to insurance).
- (c) The Department will issue an annual permit. The permit shall be posted at the location of each bulk plant, distributor and industrial user.

# Authority

The provisions of this § 13.5 amended under section 16 of the Propane and Liquefied Petroleum Gas Act (35 P. S. § 1329.16).

#### Source

The provisions of this § 13.5 amended August 27, 2010, effective August 28, 2010, 40 Pa.B. 4927. Immediately preceding text appears at serial page (220114).

#### **Cross References**

This section cited in 34 Pa. Code § 13.20 (relating to application process and plan approval); and 34 Pa. Code § 13.21 (relating to LPG facilities over 400,000 gallons).

# § 13.6. Insurance.

LPG facilities shall obtain and maintain policies of liability insurance in the following amounts:

- (1) An LPG facility with a storage capacity of not more than 9,000 gallons shall maintain minimum liability coverage of \$250,000.
- (2) An LPG facility with a storage capacity in excess of 9,000 gallons shall maintain minimum liability coverage of \$1 million per incident and \$2 million in the aggregate.

### Authority

The provisions of this § 13.6 amended under section 16 of the Propane and Liquefied Petroleum Gas Act (35 P. S. § 1329.16).

#### Source

The provisions of this § 13.6 adopted October 27, 1978, 8 Pa.B. 2907; amended August 27, 2010, effective August 28, 2010, 40 Pa.B. 4927. Immediately preceding text appears at serial page (220114).

#### **Cross References**

This section cited in 34 Pa. Code § 13.5 (relating to registration and annual permits).

# § 13.7. Transfer by authorized attendant and supply.

Both of the following apply to LPG transfer and supply:

- (1) Only authorized attendants may transfer LPG.
- (2) A distributor may not supply LPG to any bulk plant, industrial user or other distributor unless the distributor has a current annual permit.

#### Authority

The provisions of this § 13.7 amended under section 16 of the Propane and Liquefied Petroleum Gas Act (35 P. S. § 1329.16).

#### Source

The provisions of this § 13.7 adopted October 27, 1978, 8 Pa.B. 2907; amended August 27, 2010, effective August 28, 2010, 40 Pa.B. 4927. Immediately preceding text appears at serial page (220114).

# § 13.8. Transfer of LPG and removal of containers.

- (a) A person may not transfer, sell, fill, deliver or permit to be delivered any LPG or use an LPG container unless authorized to do so by the owner of the LPG container and authorized by the Department to do so or authorized to do so by emergency response agencies.
- (b) A person acting on behalf of an authorized emergency response agency who transfers LPG or disconnects any LPG container shall notify the container owner within 5 days after that action.
- (c) A person who disconnects an LPG container shall secure the LPG container in a safe fashion.
- (d) Owners or distributors of LPG containers shall remove the containers within 30 days of notification from the property owner to do so.

#### Authority

The provisions of this § 13.8 issued under section 16 of the Propane and Liquefied Petroleum Gas Act (35 P. S. § 1329.16).

#### Source

The provisions of this § 13.8 adopted August 27, 2010, effective August 28, 2010, 40 Pa.B. 4927.

# **GENERAL REQUIREMENTS**

# § 13.11. [Reserved].

#### Authority

The provisions of this § 13.11 reserved under section 16 of the Propane and Liquefied Petroleum Gas Act (35 P. S. § 1329.16).

#### Source

The provisions of this § 13.11 reserved August 27, 2010, effective August 28, 2010, 40 Pa.B. 4927. Immediately preceding text appears at serial pages (220114) to (220115).

# §§ 13.12—13.14. [Reserved].

# Authority

The provisions of these §§ 13.12—13.14 reserved under section 16 of the Propane and Liquefied Petroluem Gas Act (35 P. S. § 1329.16).

#### Source

The provisions of these §§ 13.12—13.14 reserved August 27, 2010, effective August 28, 2010, 40 Pa.B. 4927. Immediately preceding text appears at serial page (220115).

# § 13.15. [Reserved].

# Authority

The provisions of this § 13.15 reserved under section 16 of the Propane and Liquefied Petroleum Gas Act (35 P. S. § 1329.16).

#### Source

The provisions of this § 13.15 reserved August 27, 2010, effective August 28, 2010, 40 Pa.B. 4927. Immediately preceding text appears at serial pages (220115) to (220116).

# § 13.16. [Reserved].

# Authority

The provisions of this § 13.16 reserved under section 16 of the Propane and Liquefied Petroleum Gas Act (35 P. S. § 1329.16).

# Source

The provisions of this  $\S$  13.16 reserved August 27, 2010, effective August 28, 2010, 40 Pa.B. 4927. Immediately preceding text appears at serial pages (220116) to (220117).

# § 13.17. [Reserved].

### Authority

The provisions of this § 13.17 reserved under section 16 of the Propane and Liquefied Petroleum Gas Act (35 P. S. § 1329.16).

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The provisions of this § 13.17 reserved August 27, 2010, effective August 28, 2010, 40 Pa.B. 4927. Immediately preceding text appears at serial page (220117).

# § 13.18. [Reserved].

#### Authority

The provisions of this  $\S$  13.18 reserved under section 16 of the Propane and Liquefied Petroleum Gas Act (35 P. S.  $\S$  1329.16).

#### Source

The provisions of this § 13.18 reserved August 27, 2010, effective August 28, 2010, 40 Pa.B. 4927. Immediately preceding text appears at serial pages (220117) to (220118).

# § 13.19. [Reserved].

#### Authority

The provisions of this § 13.19 reserved under section 16 of the Propane and Liquefied Petroleum Gas Act (35 P. S. § 1329.16).

#### Source

The provisions of this § 13.19 reserved August 27, 2010, effective August 28, 2010, 40 Pa.B. 4927. Immediately preceding text appears at serial page (220118).

# REQUIREMENTS FOR FACILITIES, TANKS AND CYLINDERS

# § 13.20. Application process and plan approval.

- (a) The following shall submit an application to the Department before installation:
  - (1) An owner or operator of an LPG tank exceeding 2,000 gallons capacity.
  - (2) An owner or operator of a fixed location with aggregate capacity exceeding 4,000 gallons.
  - (3) An owner or operator of a dispensing station or a cylinder exchange cabinet location.
  - (b) The application must contain the following:
  - (1) A completed registration form and proof of valid insurance required under § 13.5 (relating to registration and annual permit).
    - (2) The appropriate fee required under § 13.3 (relating to fees).
    - (3) Plans that contain the following information:
      - (i) Equipment to be installed.
      - (ii) Distances of equipment to buildings and property lines.
      - (iii) Security measures provided.
      - (iv) Fire protection measures provided.
      - (v) Vehicle protection measures provided.
    - (4) A fire safety analysis required by NFPA 58, Chapter 6, section 6.25.
  - (5) A manufacturer's data report (U1-A) or Pennsylvania special number for each unfired pressure vessel.

- (c) A Department-provided notice of intent to install form may be submitted instead of the plans required under subsection (b)(3) for the following:
  - (1) A distributor installing or expanding a bulk plant with a capacity of less than 9,000 gallons.
  - (2) An industrial user with a total storage capacity of less than 9,000 gallons.
- (d) The Department will inspect applicants under subsection (a) and (c) for compliance with the plans or notice of intent to install before issuance of the initial annual permit.
- (e) If the inspection reveals a violation of the act or this chapter, the Department will issue a written notice of deficiency to the owner or operator. The written notice of deficiency will contain a certification to be completed by the owner or operator certifying that the deficiencies were corrected. The Department will not issue an annual permit unless the certification is executed by the owner or operator and returned to the Department after the deficiencies are corrected.
- (f) An owner or operator may not operate an LPG tank, fixed location, dispensing station or cylinder exchange cabinet until it receives an annual permit issued by the Department.
- (g) A manufacturer shall register a data report (U1-A) for each unfired pressure vessel with the National Board. If an U1-A is not available, the manufacturer shall obtain a Pennsylvania special number in accordance with section 7 of the Boiler and Unfired Pressure Vessel Law (35 P. S. § 1331.7) and Chapter 3a (relating to boiler and unfired pressure vessel regulations).

# Authority

The provisions of this § 13.20 amended under section 16 of the Propane and Liquefied Petroleum Gas Act (35 P. S. § 1329.16).

#### Source

The provisions of this § 13.20 amended August 27, 2010, effective August 28, 2010, 40 Pa.B. 4927. Immediately preceding text appears at serial page (220118).

#### **Cross References**

This section cited in 34 Pa. Code § 13.21 (relating to LPG facilities over 400,000 gallons).

# § 13.21. LPG facilities over 400,000 gallons.

- (a) The owner or operator of a new LPG facility in excess of 400,000 gallons or an existing LPG facility expanded to exceed 400,000 gallons shall submit an application to the Department which includes the following:
  - (1) A completed registration form required under § 13.5 (relating to registration and annual permits) and a completed application required under § 13.20 (relating to application process and plan approval).
    - (2) Documentation and plans providing the following information:
      - (i) Storage quantities.

- (ii) Proximity to populated areas and public ways.
- (iii) The impact of any rejection from the Department upon the LPG facility's ability to service current and anticipated consumer needs and upon the LPG facility's business investment.
  - (iv) The risk to and from existing adjacent facilities.
  - (v) Topography of the site.
  - (vi) Access for emergency vehicle response.
  - (vii) Public and private utilities.
  - (viii) Requirements for receipt or shipment of products.
  - (ix) Compliance with local land use ordinances.
- (x) The safety plan proposed by the LPG facility, such as emergency systems, spill containment, fire protection, fencing and lighting.
- (3) Proof of notification to the municipality required in subsection (b). The Department will accept a copy of the notification and signed certified mail receipt card as proof of notification to the municipality.
  - (4) The appropriate fee required under § 13.3 (relating to fees).
- (b) The applicant shall notify the municipality where the LPG facility is located by certified mail that an application is being filed with the Department.
- (c) The Department will publish notice of the application in the *Pennsylvania Bulletin* within 10 business days of receipt of the application. An aggrieved party may file a protest with the Department 45 days from the publication of the notice. A municipality or county may file written comment with the Department within 45 days from publication of the notice.
- (d) Within 90 days of publication of the notice, the Department will issue a written determination containing the approval or disapproval of the application. The Department will send a copy of the determination by certified mail to the applicant and to all parties who filed a notice of protest or submitted written comments.
- (e) The LPG facility owner or operator may not install or operate the LPG facility or the expanded portion of the LPG facility until it has received an annual permit issued by the Department.

#### Authority

The provisions of this § 13.21 amended under section 16 of the Propane and Liquefied Petroleum Gas Act (35 P. S. § 1329.16).

#### Source

The provisions of this § 13.21 amended August 27, 2010, effective August 28, 2010, 40 Pa.B. 4927. Immediately preceding text appears at serial page (220118).

# § 13.22. Underground tanks.

(a) Underground tanks shall be installed in accordance with NFPA 58.

(b) A distributor shall keep records of installation locations, including their location by GPS coordinates, for individual underground LPG tanks exceeding 2,000 gallons water capacity.

#### Authority

The provisions of this § 13.22 amended under section 16 of the Propane and Liquefied Petroleum Gas Act (35 P. S. § 1329.16).

#### Source

The provisions of this § 13.22 amended August 27, 2010, effective August 28, 2010, 40 Pa.B. 4927. Immediately preceding text appears at serial page (220118).

# § 13.23. Repairs and alterations to ASME vessels.

Repairs and alterations to ASME vessels shall be performed in accordance with the National Board Inspection Code.

#### Authority

The provisions of this § 13.23 amended under section 16 of the Propane and Liquefied Petroleum Gas Act (35 P. S. § 1329.16).

#### Source

The provisions of this § 13.23 amended August 27, 2010, effective August 28, 2010, 40 Pa.B. 4927. Immediately preceding text appears at serial pages (220118) to (220119).

# § 13.24. Cylinder exchange cabinets.

- (a) A retailer or location using a cylinder exchange cabinet shall comply with section 8.4.1 of NFPA 58.
- (b) The term "busy thoroughfares or sidewalks" contained in section 8.4.1.2(3) of NFPA 58 includes sidewalks, concrete aprons and parking lots at retail establishments.

#### Authority

The provisions of this § 13.24 amended under section 16 of the Propane and Liquefied Petroleum Gas Act (35 P. S. § 1329.16).

#### Source

The provisions of this § 13.24 amended August 27, 2010, effective August 28, 2010, 40 Pa.B. 4927. Immediately preceding text appears at serial page (220119).

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# §§ 13.25—13.27. [Reserved].

#### Authority

The provisions of these  $\S\S$  13.25—13.27 reserved under section 16 of the Propane and Liquefied Petroleum Gas Act (35 P. S.  $\S$  1329.16).

#### Source

The provisions of these §§ 13.25—13.27 reserved August 27, 2010, effective August 28, 2010, 40 Pa.B. 4927. Immediately preceding text appears at serial page (220119).

# §§ 13.28—13.29. [Reserved].

#### Authority

The provisions of these  $\S\S$  13.28—13.29 reserved under section 16 of the Propane and Liquefied Petroleum Gas Act (35 P. S.  $\S$  1329.16).

#### Source

The provisions of these §§ 13.28—13.29 reserved August 27, 2010, effective August 28, 2010, 40 Pa.B. 4927. Immediately preceding text appears at serial page (220120).

# § 13.31. [Reserved].

#### Authority

The provisions of this § 13.31 reserved under section 16 of the Propane and Liquefied Petroleum Gas Act (35 P. S. § 1329.16).

#### Source

The provisions of this § 13.31 reserved August 27, 2010, effective August 28, 2010, 40 Pa.B. 4927. Immediately preceding text appears at serial pages (220120) to (220121).

# § 13.32. [Reserved].

#### Authority

The provisions of this § 13.32 reserved under section 16 of the Propane and Liquefied Petroleum Gas Act (35 P. S. § 1329.16).

#### Source

The provisions of this § 13.32 reserved August 27, 2010, effective August 28, 2010, 40 Pa.B. 4927. Immediately preceding text appears at serial page (220121).

# § 13.33. [Reserved].

### Authority

The provisions of this § 13.33 reserved under section 16 of the Propane and Liquefied Petroleum Gas Act (35 P. S. § 1329.16).

# 13-15

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The provisions of this § 13.33 reserved August 27, 2010, effective August 28, 2010, 40 Pa.B. 4927. Immediately preceding text appears at serial pages (220121) to (220122).

# §§ 13.34—13.35. [Reserved].

#### Authority

The provisions of these §§ 13.34—13.35 reserved under section 16 of the Propane and Liquefied Petroleum Gas Act (35 P. S. § 1329.16).

#### Source

The provisions of these §§ 13.34—13.35 reserved August 27, 2010, effective August 28, 2010, 40 Pa.B. 4927. Immediately preceding text appears at serial page (220122).

# §§ 13.36—13.37. [Reserved].

# Authority

The provisions of these § 13.36—13.37 reserved under section 16 of the Propane and Liquefied Petroleum Gas Act (35 P. S. § 1329.16).

#### Source

The provisions of these §§ 13.36—13.37 reserved August 27, 2010, effective August 28, 2010, 40 Pa.B. 4927. Immediately preceding text appears at serial page (220123).

# § 13.38. [Reserved].

# Authority

The provisions of this § 13.38 reserved under section 16 of the Propane and Liquefied Petroleum Gas Act (35 P. S. § 1329.16).

# Source

The provisions of this § 13.38 reserved August 27, 2010, effective August 28, 2010, 40 Pa.B. 4927. Immediately preceding text appears at serial pages (220123) to (220124).

# TRAINING PROGRAMS

# § 13.40. Training programs for authorized attendants.

- (a) An individual shall satisfactorily complete a Department-approved training program to become an authorized attendant to transfer LPG.
  - (b) Programs must include training on the following:
    - (1) Physical properties and combustion characteristics of propane.
    - (2) Propane industry standards, safety codes and regulations.
    - (3) Basic parts of propane tanks, cylinders and bulk storage installations.
    - (4) Proper use of safety and protective equipment.
    - (5) Maintenance of safe working environment.

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- (c) Programs for attendants who will deliver LPG must include the following training in addition to the training enumerated in subsection (b):
  - (1) Proper inspection, maintenance and operation of bulk propane delivery vehicles.
    - (2) Proper inspection and filling of propane storage containers.
  - (3) Proper delivery of propane, including exchange and filling of LPG containers.
- (d) Programs for attendants who are employed in bulk plant operations must include the following training in addition to the training enumerated in subsection (b):
  - (1) Identification and installation of valves in propane storage containers.
  - (2) Identification and installation of gauges in propane storage containers.
  - (3) Safe removal of propane from tanks and cylinders at the plant and at the container site.
  - (4) Inspection, maintenance and filling of propane tanks and cylinders at the plant and at the container site.
  - (5) Proper unloading of propane transports and rail cars, if the employee is responsible for this activity.

#### Authority

The provisions of this § 13.40 issued under section 16 of the Propane and Liquefied Petroleum Gas Act (35 P. S. § 1329.16).

#### Source

The provisions of this § 13.40 amended August 27, 2010, effective August 28, 2010, 40 Pa.B. 4927.

## Cross References

This section cited in 34 Pa. Code § 13.41 (relating to training program approval).

# § 13.41. Training program approval.

- (a) The Department will approve LPG facility operator-provided training programs. An LPG facility operator that has individuals who transfer LPG shall submit a completed application for training program approval to the Department with a detailed description of its training program for authorized attendants and the appropriate fee under § 13.3 (relating to fees).
- (b) The Department will issue a program approval to each approved training program or inform the LPG facility operator in writing of its reasons for rejecting a training program.
- (c) An LPG facility operator shall notify the Department in writing of changes in an approved training program.
- (d) Instead of developing and submitting a training program for authorized attendants, an LPG facility operator may utilize the Propane Education and

Research Council training programs. The LPG facility shall notify the Department in writing that it is using a Propane Education and Research Council training program.

- (e) An LPG facility operator shall maintain training records for an authorized attendant as long as the authorized attendant is employed by the LPG facility. The records must contain the following information:
  - (1) The date of training.
  - (2) The name of authorized attendant.
  - (3) The name of course.
  - (4) The name of trainer or supervisor.
- (f) The Department may revoke approval of any training program that does not comply with § 13.40 (relating to training programs for authorized attendants) or this section. Actions will be taken subject to the right of notice, hearing and adjudication in accordance with 2 Pa.C.S. (relating to administrative law and procedure).

#### Authority

The provisions of this § 13.41 amended under section 16 of the Propane and Liquefied Petroleum Gas Act (35 P. S. § 1329.16).

#### Source

The provisions of this § 13.41 amended August 27, 2010, effective August 28, 2010, 40 Pa.B. 4927. Immediately preceding text appears at serial pages (220124) to (220125).

# §§ 13.42—13.44. [Reserved].

# Authority

The provisions of these §§ 13.42—13.44 reserved under section 16 of the Propane and Liquefied Petroleum Gas Act (35 P. S. § 1329.16).

# Source

The provisions of these §§ 13.42—13.44 reserved August 27, 2010, effective August 28, 2010, 40 Pa.B. 4927. Immediately preceding text appears at serial page (220125).

# § 13.45. [Reserved].

## Authority

The provisions of this § 13.45 reserved under section 16 of the Propane and Liquefied Petroleum Gas Act (35 P. S. § 1329.16).

### Source

The provisions of this § 13.45 reserved August 27, 2010, effective August 28, 2010, 40 Pa.B. 4927. Immediately preceding text appears at serial pages (220125) to (220126).

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# **ADMINISTRATION**

# § 13.50. Suspension of annual permit for container.

The Department will suspend the annual permit for an LPG container and seal an LPG container that is unsafe or when there are violations of this act or chapter. A person, firm, partnership or corporation operating an LPG container with a suspended annual permit or system containing an LPG container with a suspended annual permit is subject to the penalties of section 17 of the act (35 P. S. § 1329.17).

#### Authority

The provisions of this § 13.50 issued under section 16 of the Propane and Liquefied Petroleum Gas Act (35 P. S. § 1329.16).

#### Source

The provisions of this § 13.50 adopted August 27, 2010, effective August 28, 2010, 40 Pa.B. 4927.

#### **Cross References**

This section cited in 34 Pa. Code § 13.53 (relating to notice and hearing).

# § 13.51. Suspension of annual permit for an owner or operator.

- (a) The Department may suspend an owner's or operator's annual permit for any of the following reasons:
  - (1) Failure to pay the required registration fee in § 13.3 (relating to fees).
  - (2) Violation of the act or this chapter.

#### Authority

The provisions of this § 13.51 amended under section 16 of the Propane and Liquefied Petroleum Gas Act (35 P. S. § 1329.16).

#### Source

The provisions of this § 13.51 amended August 27, 2010, effective August 28, 2010, 40 Pa.B. 4927. Immediately preceding text appears at serial page (220126).

## Cross References

This section cited in 34 Pa. Code § 13.53 (relating to notice and hearing).

# § 13.52. Notice of deficiency.

- (a) The Department will use the following procedures to suspend an annual permit or for alleged violations of the act or this chapter:
  - (1) The Department will issue a written notice of deficiency to the owner or operator of the container or LPG facility. The notice will contain a description of the deficiency, an order requiring repairs and correction of the deficiency and a compliance date. The notice will contain a certification to be

completed by the owner or operator certifying that the required repairs were completed and the deficiency was corrected.

- (2) The owner or operator shall execute the certification and submit it to the Department immediately after the required repairs are completed and the deficiency is corrected.
- (3) If the owner or operator does not correct the deficiency within the period of time allowed in the notice of deficiency or fails to return the certification, the Department may issue an order to show cause under 1 Pa. Code § 35.14 (relating to orders to show cause).
  - (i) The order to show cause will contain a statement of the grounds for the action, the alleged violations of the act and this chapter and notification that the container or LPG facility may be placed out of service. The order to show cause will contain notification that the owner or operator shall submit a written answer within 30 days. The Department will serve the order to show cause upon the owner or operator.
  - (ii) The owner or operator may file a written answer to the order to show cause with the Department within 30 days following service of the order to show cause under 1 Pa. Code § 35.37 (relating to answers to orders to show cause). The answer must contain specific admissions or denials of the allegations contained in the order to show cause and set forth the specific facts, matters of law or regulation interpretation relied upon by the owner or operator. The answer may contain a request for a variance, an extension of time for compliance or an appeal. The Department will forward requests for variances, extensions of time or appeals regarding interpretations of this chapter to the Industrial Board.
- (b) The Department will consider the request for variance, extension of time or appeal as a stay to an enforcement action.
- (c) The Department will inspect the container or LPG facility at the expiration of an extension of time or other time period granted for compliance under this section. If the container or LPG facility violates the act or this chapter following inspection, the Department may seal the container or LPG facility.
- (d) The Department will issue an order to discontinue operation to the owner or operator for a violation that was not corrected. The Department will serve the order upon the owner or operator by certified mail or personal service. The order to discontinue operation will require the owner or operator to discontinue the use of the container or LPG facility within 24 hours.
- (e) After the container or LPG facility is sealed, it may not be returned to service until the violations have been corrected, the repairs have been made and the Department removes the seal.
- (f) A party aggrieved by a notice of deficiency or a notice to discontinue operation may appeal the order to the Industrial Board within 30 days of the issuance of the order. Appeals from the Industrial Board's order may be filed with the Commonwealth Court within 30 days of the date of the order.

(g) This section supplements 1 Pa. Code §§ 35.14 and 35.37.

#### Authority

The provisions of this § 13.52 amended under section 16 of the Propane and Liquefied Petroleum Gas Act (35 P. S. § 1329.16).

#### Source

The provisions of this § 13.52 amended August 27, 2010, effective August 28, 2010, 40 Pa.B. 4927. Immediately preceding text appears at serial page (220126).

#### **Cross References**

This section cited in 34 Pa. Code § 13.53 (relating to notice and hearing).

# § 13.53. Notice and hearing.

Actions of the Department relating to notice of deficiency, a notice to discontinue operation or suspension of annual permit under §§ 13.50—13.52 (relating to suspension of annual permit for container; suspension of annual permit for an owner or operator; and notice of deficiency) will be taken subject to the right of notice, hearing and adjudication under 2 Pa.C.S. (relating to administrative law and procedure). Proceedings will be conducted under 1 Pa. Code Part II (relating to the General Rules of Administrative Practice and Procedure).

#### Authority

The provisions of this § 13.53 amended under section 16 of the Propane and Liquefied Petroleum Gas Act (35 P. S. § 1329.16).

# Source

The provisions of this § 13.53 amended August 27, 2010, effective August 28, 2010, 40 Pa.B. 4927. Immediately preceding text appears at serial page (220126).

# § 13.54. Municipal preemption.

The Department has the sole right and ability to regulate all matters related to the operation of the LPG industry under section 15 of the act (35 P. S. § 1329.15).

- (1) A municipality or other political subdivision may not adopt or enforce an ordinance or regulation which differs from or conflicts in whole or in part with the act or this chapter regarding permits, licensing standards, fees, construction, installation, maintenance, operation, inspection, location or placement of LPG containers or LPG facilities or any other matters related to this industry within this Commonwealth.
- (2) A municipality may not prohibit placement of any LPG container in any existing yard setback area except to establish an absolute setback of 10 feet from a residential property line.
- (3) A municipality may retain the right, under local zoning ordinances, to require an LPG facility to locate within approved residential, industrial com-

mercial or other zones and to require an LPG facility to obtain zoning permits, pay zoning fees and undergo inspections related to the zoning of the LPG facility. Any building at an LPG facility must be in compliance with the municipal standards applied to primary structures.

#### Authority

The provisions of this § 13.54 amended under section 16 of the Propane and Liquefied Petroleum Gas Act (35 P. S. § 1329.16).

#### Source

The provisions of this § 13.54 amended August 27, 2010, effective August 28, 2010, 40 Pa.B. 4927. Immediately preceding text appears at serial page (220126).

# § 13.55. [Reserved].

### Authority

The provisions of this § 13.55 reserved under section 16 of the Propane and Liquefied Petroleum Gas Act (35 P. S. § 1329.16).

#### Source

The provisions of this § 13.55 reserved August 27, 2010, effective August 28, 2010, 40 Pa.B. 4927. Immediately preceding text appears at serial page (220126).

# § 13.56—13.58. [Reserved].

### Authority

The provisions of these §§ 13.56—13.58 reserved under section 16 of the Propane and Liquefied Petroleum Gas Act (35 P. S. § 1329.16).

# Source

The provisions of these §§ 13.56—13.58 reserved August 27, 2010, effective August 28, 2010, 40 Pa.B. 4927. Immediately preceding text appears at serial page (316911).

## LOADING, UNLOADING, AND TRANSPORTATION

# § 13.61. [Reserved].

# Authority

The provisions of this § 13.61 reserved under section 16 of the Propane and Liquefied Petroleum Gas Act (35 P. S. § 1329.16).

#### Source

The provisions of this § 13.61 reserved August 27, 2010, effective August 28, 2010, 40 Pa.B. 4927. Immediately preceding text appears at serial page (316911).

# § 13.62. [Reserved].

### Authority

The provisions of this § 13.62 reserved under section 16 of the Propane and Liquefied Petroleum Gas Act (35 P. S. § 1329.16).

#### Source

The provisions of this § 13.62 reserved August 27, 2010, effective August 28, 2010, 40 Pa.B. 4927. Immediately preceding text appears at serial pages (316911) to (316912).

# § 13.63—13.66. [Reserved].

#### Authority

The provisions of these  $\S\S$  13.63—13.66 reserved under section 16 of the Propane and Liquefied Petroleum Gas Act (35 P. S.  $\S$  1329.16).

#### Source

The provisions of these §§ 13.63—13.66 reserved August 27, 2010, effective August 28, 2010, 40 Pa.B. 4927. Immediately preceding text appears at serial page (316912).

# § 13.67—13.68. [Reserved].

#### Authority

The provisions of these §§ 13.67—13.68 reserved under section 16 of the Propane and Liquefied Petroleum Gas Act (35 P. S. § 1329.16).

#### Source

The provisions of these §§ 13.67—13.68 reserved August 27, 2010, effective August 28, 2010, 40 Pa.B. 4927. Immediately preceding text appears at serial page (220129).

# BULK FILLING PLANTS, INDUSTRIAL ESTABLISHMENTS, AND UTILITIES

# §§ 13.71—13.73. [Reserved].

#### Authority

The provisions of these §§ 13.71—13.73 reserved under section 16 of the Propane and Liquefied Petroleum Gas Act (35 P. S. § 1329.16).

#### Source

The provisions of these §§ 13.71—13.73 reserved August 27, 2010, effective August 28, 2010, 40 Pa.B. 4927. Immediately preceding text appears at serial page (220129).

# § 13.74. [Reserved].

### Authority

The provisions of this § 13.74 reserved under section 16 of the Propane and Liquefied Petroleum Gas Act (35 P. S. § 1329.16).

# 13-23

(351963) No. 432 Nov. 10

The provisions of this § 13.74 reserved August 27, 2010, effective August 28, 2010, 40 Pa.B. 4927. Immediately preceding text appears at serial page (220130).

# STORAGE OF DISCONNECTED RESERVED CYLINDERS

# § 13.81. [Reserved].

#### Authority

The provisions of this § 13.81 reserved under section 16 of the Propane and Liquefied Petroleum Gas Act (35 P. S. § 1329.16).

#### Source

The provisions of this § 13.81 amended June 10, 1977, 7 Pa.B. 1591; reserved August 27, 2010, effective August 28, 2010, 40 Pa.B. 4927. Immediately preceding text appears at serial page (220130).

# § 13.82. [Reserved].

### Authority

The provisions of this § 13.82 reserved under section 16 of the Propane and Liquefied Petroleum Gas Act (35 P. S. § 1329.16).

# Source

The provisions of this § 13.82 amended June 10, 1977, 7 Pa.B. 1591; reserved August 27, 2010, effective August 28, 2010, 40 Pa.B. 4927. Immediately preceding text appears at serial pages (220130) to (220131).

# MOBILE LIVING AND OTHER MOBILE UNITS

# §§ 13.91—13.94. [Reserved].

# Authority

The provisions of these §§ 13.91—13.94 reserved under section 16 of the Propane and Liquefied Petroleum Gas Act (35 P. S. § 1329.16).

## Source

The provisions of these §§ 13.91—13.94 reserved August 27, 2010, effective August 28, 2010, 40 Pa.B. 4927. Immediately preceding text appears at serial page (220131).

# § 13.95. [Reserved].

### Authority

The provisions of this § 13.95 reserved under section 16 of the Propane and Liquefied Petroleum Gas Act (35 P. S. § 1329.16).

# 13-24

(351964) No. 432 Nov. 10

The provisions of this § 13.95 reserved August 27, 2010, effective August 28, 2010, 40 Pa.B. 4927. Immediately preceding text appears at serial pages (220131) to (220132).

# § 13.96. [Reserved].

#### Authority

The provisions of this § 13.96 reserved under section 16 of the Propane and Liquefied Petroleum Gas Act (35 P. S. § 1329.16).

#### Source

The provisions of this § 13.96 reserved August 27, 2010, effective August 28, 2010, 40 Pa.B. 4927. Immediately preceding text appears at serial page (220132).

# **INSTALLATION**

# § 13.101. [Reserved].

### Authority

The provisions of this § 13.101 reserved under section 16 of the Propane and Liquefied Petroleum Gas Act (35 P. S. § 1329.16).

# Source

The provisions of this § 13.101 reserved August 27, 2010, effective August 28, 2010, 40 Pa.B. 4927. Immediately preceding text appears at serial page (220132).

# § 13.102. [Reserved].

# Authority

The provisions of this § 13.102 reserved under section 16 of the Propane and Liquefied Petroleum Gas Act (35 P. S. § 1329.16).

#### Source

The provisions of this § 13.102 adopted October 27, 1978, 8 Pa.B. 2907; reserved August 27, 2010, effective August 28, 2010, 40 Pa.B. 4927. Immediately preceding text appears at serial page (220133).

### **HEATERS**

# § 13.111. [Reserved].

### Authority

The provisions of this § 13.111 reserved under section 16 of the Propane and Liquefied Petroleum Gas Act (35 P. S. § 1329.16).

# 13-25

The provisions of this § 13.111 reserved August 27, 2010, effective August 28, 2010, 40 Pa.B. 4927. Immediately preceding text appears at serial page (220133).

# Subchapter B. LEAD CORRODING AND OXIDIZING

# **GENERAL PROVISIONS**

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# **SPECIFICATIONS**

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13.149.	Carter process.
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13.151.	Manufacturing.
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13.153.	Dry grinding, sieving and packing.
13.154.	Posting of lead poisoning law.

# Authority

The provisions of this Subchapter B issued under section 2 of the act of July 26, 1913 (P. L. 1363, No. 851) (43 P. S. § 471), unless otherwise noted.

# Source

The provisions of this Subchapter B adopted August 1, 1917; amended through July 1, 1968, unless otherwise noted.

# **Cross References**

This subchapter cited in 34 Pa. Code § 11.85 (relating to applicable provisions of other regulations).

13-26

(351966) No. 432 Nov. 10

# **GENERAL PROVISIONS**

# § 13.131. Purpose.

This subchapter sets forth rules to safeguard the lives, limbs and health of workers, and places the responsibility of complying with the provisions of this subchapter upon both the employer and employe.

# § 13.132. Penalty.

Any person who violates any of the provisions of this subchapter and interferes with the Department or its duly authorized representative in the enforcement of such provisions or regulations shall be penalized under the provisions of section 15 of act of May 18, 1937 (P. L. 654, No. 174), (43 P. S. § 25-15).

#### **SPECIFICATIONS**

# § 13.141. Place.

- (a) Every employer shall, without cost to his employes, provide and maintain for the protection of his employes who are engaged in the work or process of the corrosion of metallic lead into carbonate of lead, by any and all processes, or who are engaged in any work or process in the manufacture of red lead, litharge, basic lead sulphate (sublimed white lead), nitrate of lead and nitrate of soda, workrooms which shall be as follows:
  - (1) Adequately lighted.
  - (2) So ventilated and arranged that there is a continuous and sufficient change of air.
  - (3) Separated by walls and doors composed of fire resisting material from all departments in which the work or process is of a nondusty character.
  - (4) Provided with a smooth floor permitting an easy removal of dust by any of the following methods:
    - (i) Vacuum cleaning.
    - (ii) Flushing the floor with water.
    - (iii) Sweeping after the floor has been thoroughly sprinkled with a sufficient quantity of wet sawdust to lay all dust.
  - (b) Dry sweeping of the floors and walls is prohibited.

- (c) The walls of all rooms shall be smooth and either painted or whitewashed at frequent intervals. Dust should be prevented from accumulating upon the walls either by vacuum cleaning or by flushing the walls with water.
- (d) The daily removal of all dust from floors and walls by vacuum cleaning is recommended as the best and most economical method of cleaning.

### **Cross References**

This section cited in 34 Pa. Code § 13.147 (relating to physical examination).

# § 13.142. Physical examination—age.

Persons engaged in occupations involving exposure to lead dusts, lead fumes, or lead solutions in any volume shall be at least 18 years of age and shall be physically examined at the expense of the employer by a licensed physician at least once every 30 days. Records of such examination shall be kept on file and shall be available to inspectors of the Department.

#### Source

The provisions of this § 13.142 amended through June 10, 1977, Pa.B. 1592. Immediately preceding text appears at serial page (13413).

# § 13.143. Age.

No employes less than 18 years of age shall engage in the following work or process:

- (1) Stripping the stacks.
- (2) Making repairs to ventilating systems.
- (3) Working in the dry packing of any of the following:
  - (i) Carbonate of lead.
  - (ii) Litharge.
  - (iii) Red lead.
  - (iv) Basic sulphate of lead.
  - (v) Sublimed white lead.

#### Source

The provisions of this § 13.143 amended June 10, 1977, 7 Pa.B. 1592. Immediately preceding text appears at serial page (13413).

## § 13.144. Habits of employes.

Because the use of alcoholic liquors and chewing tobacco undermines the health and predisposes to lead poisoning and industrial accidents, it is recommended that employers exclude such persons who habitually use alcoholic liquors or who chew tobacco from employment in any capacity in the lead corroding and lead oxidizing industries.

# § 13.145. Safety.

- (a) The following shall conform to the safety standards of the Department:
  - (1) Power transmission machinery.
  - (2) Railings and toe boards.
  - (3) Stationary steam engines.
  - (4) Boilers.
  - (5) Ladders.
  - (6) Fire prevention plans and equipment.
  - (7) Elevators.
  - (8) Artificial lighting.
- (b) When the provisions of this subchapter require it, the employer shall provide and renew when necessary, without cost to the employe, at least one reasonably effective respirator for each and every employe, and it shall be the duty of the employe to keep clean the respirator provided by the employer and to use such respirator at all times while at work.
- (c) A respirator shall be considered efficient only when it fits the contour of the face and allows no air to enter the mouth or nose except air which has passed through the respirator. At least three thicknesses of gauze or cheese-cloth shall be considered an efficient respirator if such gauze or cheese-cloth is thoroughly washed every day.

# § 13.146. Sanitation.

- (a) *Purpose*. This section sets out the sanitary requirements for employes who handle dry lead or dry compounds containing lead in excess of 10%.
- (b) Washrooms. The employer shall provide a washroom, or rooms, which shall be separate and apart from the workrooms, kept clean and equipped with any of the following:
  - (1) At least one lavatory basin for every five employes, fitted with waste pipes and two spigots conveying hot and cold water.
  - (2) Basins placed in troughs fitted with waste pipes and for each basin two spigots conveying hot and cold water, at least one basin for every five employes.
  - (3) Troughs of enamel or similar smooth impervious material, fitted with waste pipes and for every 2 feet of trough length two spigots conveying hot and cold water, and at least 2 feet of trough length for every five employes; or troughs of enamel or similar smooth impervious material, fitted with waste pipes without plugs, and a continuous spray of warm water.
- (c) Nailbrush, soap and towels. The employer shall also furnish nailbrushes and soap and shall provide at least three clean fabric towels per week for each employe, or a sufficient number of sanitary paper towels.

- (d) *Time allowance*. A time allowance of not less than 10 minutes, at the expense of the employer shall be made to each employe for the use of such washroom before the lunch hour and at the close of each work day.
- (e) *Shower bath*. The employer shall provide at least one shower bath for every ten employes. The baths shall be as follows:
  - (1) Approached by wooden runways.
  - (2) Provided with movable wooden floor gratings.
  - (3) Supplied with hot and cold water controlled within each individual bath.
    - (4) Kept clean.
- (f) Use of bath. The employer shall provide at least two clean fabric bath towels per week for each employe. An additional time allowance of not less than 10 minutes, at the expense of the employer shall be made to each employe for the use of such baths at least twice a week at the close of each work day. The employer shall keep a record of such time that such baths are used by each employe. Such record shall be open at all reasonable times to inspection by inspectors of the Department.
- (g) Washing facilities. All employes shall use the washing facilities furnished by the employer.
- (h) *Urinals*. Urinals and water closets shall be provided in accordance with the provisions of Chapter 41 (relating to sanitation) and all other rules of the Department.
- (i) Locker room. The employer shall provide a dressing room or rooms, which shall be as follows:
  - (1) Adequately heated when necessary.
  - (2) Separate from the workrooms.
  - (3) Furnished with a double sanitary locker or two single sanitary lockers for each employe.
    - (4) Kept clean and sanitary.
- (j) Wire baskets. Wire baskets for clothes may be provided in lieu of lockers. If so provided, they shall be attached to a rope passing through a pulley and pulled up to the ceiling when containing clothing.
- (k) Eating rooms. The employer shall provide eating rooms which shall be as follows:
  - (1) Separate from the workrooms.
  - (2) Furnished with a sufficient number of tables and seats.
  - (3) Kept clean and sanitary.
- (1) *Prohibition*. No person shall be permitted to take any food or drink of any kind into any workroom, nor shall any employe remain or be permitted to remain in any workroom during the time allowed for meals.
- (m) *Drinking fountains*. The employer shall provide and maintain either a sufficient number of sanitary drinking fountains readily accessible or individual drinking cups for the use of all employes.

- (n) *Overalls*. The employer shall provide at least one pair of overalls and one jumper for each employe, and repair and renew such clothing when necessary, and wash the same at least once each week, all without cost to the employe.
- (o) *Notice*. The employer shall post in a conspicuous place in every work-room, in all washrooms, dressing rooms and eating rooms the following notice, or similar notices calling attention to the known dangers from such work or process, and simple instructions for avoiding as far as possible such dangers:

### DANGERS OF LEAD

Lead is a poison.

With proper care you can handle it with no danger.

If handled carelessly it will almost without fail cause sickness.

This sickness, commonly called lead poisoning, may be only slight or it may be very severe.

It may show itself as headache; cramps; constipation; loss in weight; paralysis; disease of the heart, blood vessels, or kidneys; insanity; and may cause death.

#### AVOID LEAD POISONING

# Keep lead dust out of your nose

Wear a respirator when working in lead dust.

Do no dry sweeping. Clean floors and walls with a vacuum cleaner, wash them with water, or sweep only when dust has been laid with wet sawdust or similar material.

# Keep lead dust out of your mouth

Before eating and before leaving work wash hands, arms, and face with soap and warm water, and rinse mouth thoroughly.

Keep fingernails short and clean, scrub hands with a brush, soap and warm water.

Keep beard and mustache cut short; or better still be clean shaven as it is hard to wash dust from hair.

Bathe often, every day if possible.

Take no food into the workroom; it will gather dust that you will eat later on.

Chew no tobacco while at work; lead is sure to reach your mouth when you handle your tobacco with unwashed hands.

# Keep yourself in good health

Eat a hearty meal before starting work.

Drink plenty of milk.

Use no alcoholic drinks.

Have a good bowel movement every day; take an occasional dose of Epsom or Glauber's salts or other laxative if necessary.

If not feeling well consult your plant doctor or your family physician at once. Every case of lead poisoning can be cured if treated early.

By taking home remedies or by depending on the advice of fellow workers or friends you lose valuable time, causing your sickness to last longer and to be more severe.

Additional copies of this notice, Form I-117, suitable for posting, will be furnished without charge upon written request to the Department of Labor and Industry, Harrisburg, Pennsylvania 17120.

# § 13.147. Physical examination.

- (a) The employers shall cause every employe who is exposed to lead dusts, lead fumes, or lead solutions, to be physically examined at least once a month by a licensed physician for the purpose of ascertaining if symptoms of lead poisoning appear in any employe. The employe shall submit himself to the monthly examination, and to examination at such other times and places as he may reasonably be requested by the employer, and he shall fully and truly answer all questions in regard to his physical condition asked him by the examining physician. These examinations shall be made by a licensed physician, designated and paid by the employer, and shall be made during the working hours. A time allowance at the expense of the employer shall be made to each employe so examined.
- (b) Every physician making an examination pursuant to this section and finding what he believes to be symptoms of lead poisoning, shall enter, in a book kept for that purpose in the office of the employer, a record of such examination, which shall contain all of the following:
  - (1) The name and address of the employe so examined.
  - (2) The particular work or process in which the employe is engaged.
  - (3) The place, date, and finding of such examination.
  - (4) Directions given in each case by the physician.
- (c) The record shall be open to inspection at all reasonable times by inspectors of the Department.
- (d) If the examining physician believes that lead poisoning is present, he shall send a report in duplicate within 48 hours to the Department and a report to the Pennsylvania Department of Health.
- (e) The examining physician shall within 48 hours report such examination and finding in writing to the employer, and upon receipt of such report the employer shall not continue the employe in any work or process where he may be exposed to lead dust, fumes, or solutions included in § 13.141 (relating to place).

# § 13.148. Carbonate of lead or white lead; Old Dutch Process.

- (a) Melting pot. The melting pot of the buckle casting machine shall be provided with a hood connected with an efficient air exhaust.
- (b) Lead dust. The work of stripping the stacks shall be so conducted, and such adequate devices provided and maintained by the employer as to protect the employe as much as possible from lead dust.
- (c) Other equipment. The employer shall equip the crane bucket, box, barrel, car or other receptacle into which the corroded buckles are dumped, with a hood or other tight-fitting cover connected with an efficient air exhaust, which shall be connected with an efficient dust collecting system. Such system shall be regulated by the discharge of air from a fan, pump or other apparatus through an enclosed cloth dust collector, having an area of not less than one square foot of cloth to every cubic foot of air passing through it per minute. If this cloth dust collector is not of the portable type, it shall be placed in a separate room or in a permanent dust house equipped with baffles or such other appartus to adequately take care of all dust which it may receive. The dust collector shall be provided with adequate means, so that the dust can be removed by an employe or employes who are outside the room or dust house, and no employe shall be required or allowed to enter such room or dust house except for the making of essential repairs, and then only when the dust-collecting machinery is not in operation.
- (d) Gas escape. The employer shall equip the crane bucket, barrel, box, car or other container in which the corroded buckles are transported from the stack to the place where they are dumped with a cover to prevent the escape of dust.
- (e) Discharge point. The dump, hopper, chute or other point at which the corroded buckles are discharged from the crane bucket, barrel, box or other receptacle which contains them, shall be equipped with a hood having connection with an efficient air exhaust and dust-collecting system, as provided for in subsection (c).
- (f) Separator screens. Separator screens and their vents shall be dust tight and shall be connected with an efficient air exhaust and dust-collecting system, as provided for in subsection (c).
- (g) *Drag boxes*. All drag boxes shall be so constructed that the dry lead shall enter under the water and not on top of the water.
- (h) *Dry pans*. All dry pans shall be enclosed and so equipped with mechanical exhaust ventilation that dust cannot enter the workroom. The efficacy of such mechanical exhaust ventilation shall be approved, in writing, by the Department or its authorized representative. It is recommended that all employes engaged in the work of emptying a dry pan should wear respirators.
- (i) Chasers, pulverizers and mills. All chasers, pulverizers and mills shall be properly encased with covers, and connected with an efficient air exhaust and dust-collecting system, as provided for in subsection (c).

- (j) *Hoppers, chutes and dumps.* All hoppers, chutes and dumps, not otherwise mentioned, shall be connected with an efficient air exhaust and dust-collecting system, as provided for in subsection (c).
- (k) Conveyors, elevators and mills. All conveyors, elevators, and mills, where lead is handled dry, shall be connected with an efficient air exhaust and dust-collecting system as provided for in subsection (c).
- (l) *Packing by machine*. All packing of dry white lead, red lead, litharge, or any other dry substance containing lead in packages over 100 pounds in weight shall be carried on by means of an approved type of enclosed packing machine.
- (m) *Packing by hand*. All packages 100 pounds or less in weight may be packed by hand under a hood equipped with an efficient air exhaust and dust-collecting system as provided for in subsection (c).

#### Cross References

This section cited in 34 Pa. Code § 13.149 (relating to Carter process); 34 Pa. Code § 13.151 (relating to manufacturing); and 34 Pa. Code § 13.153 (relating to dry grinding, sieving and packing).

# § 13.149. Carter process.

- (a) *Melting pot*. The melting pot shall be provided with a hood connected with the chimney stack or with other efficient air exhaust.
- (b) *Blow chamber*. The blow chamber shall be so enclosed as to be dustproof and means shall be provided to empty it mechanically. The blow chamber shall not be entered when blowing is in progress. It may be entered when blowing is not in progress only for the making of repairs or to clean the chamber. The employes so engaged shall wear respirators.
- (c) *Conveying equipment.* The employer shall convey the blown lead to the cylinders or reels either by a screw conveyor with dustproof cover, or the crane bucket, barrel, box, car or other conveyor equipped with a dustproof cover.
- (d) *Reels*. Care shall be taken in conveying the blue lead into the reels to create as little dust as possible. Employes engaged in this work shall wear respirators.
- (e) *Pipes to reels*. The pipes conveying the carbon dioxide to the reels shall be tight and inspected daily for leaks. A record of such inspection shall be kept in a book.
- (f) *Emptying reels*. Care shall be taken in emptying the reels to create as little dust as possible. Employes engaged in this work shall wear respirators.
- (g) *Dry thrasher.* The dry thrasher shall be enclosed and connected with an efficient air exhaust and dust collector, as provided for in § 13.148(c) (relating to carbonate of lead or white lead; Old Dutch Process).

### § 13.150. Sublimed white lead.

(a) Furnance. The furnace shall be tight so that dust or fumes cannot escape into the workrooms.

- (b) *Pipes*. All pipes leading from the furnace shall be tight so that dust or fumes cannot escape into the workrooms.
- (c) *Bag house*. The bag house shall be in a closed room, separate and apart from the workrooms, and no employe or other person shall be required or permitted to enter such room or bag house unless wearing a hood or such other protective device as shall be authorized by the Department or his authorized representative.
- (d) *Protectors*. It shall be the duty of the employer to provide such authorized device for the use of all employes without expense to the employes, and all employes and other persons who enter the bag house shall wear such devices.

# § 13.151. Manufacturing.

- (a) *Purpose*. This section sets out the requirements for the manufacture of all of the following:
  - (1) Litharge or massicot.
  - (2) Flake litharge.
  - (3) Red lead.
  - (4) Minium.
  - (5) Orange mineral.
- (b) Furnace. The furnace, at the point of discharge, shall be equipped with a hood or such other device as shall efficiently remove all dust and fume that is generated, and all apparatus shall be approved by the Department or its authorized representatives.
- (c) *Dust.* Employes shall be instructed to take care in removing the contents of the furnace so as not to create dust. The employer shall equip all trucks, cars, barrels or other containers into which the litharge, flake litharge, red lead or orange mineral is raked or otherwise brought from the furnace, either with a hinged cover so that when one side of this top is being depressed to allow material to enter the container the other side will be closed, or equip the receptacle with a hood or other dust tight cover connected with an effecient air exhaust and dust-collecting system, as provided for in § 13.148(c) (relating to carbonate of lead or white lead; Old Dutch Process). The provisions of this subsection do not apply to that type of mechanical furnace in which the oxidized material is deposited either mechanically or by hand beneath the oxidizing hearth.
- (d) *Melting pot*. In the manufacture of flake litharge the melting pot shall be provided with a hood connected with an efficient air exhaust.
- (e) Falling material. It is prohibited to rake or otherwise cause material containing lead to fall from the furnace to the floor of the workroom.
- (f) Separate room. In the manufacture of litharge by means of a cupellation furnace it is permitted to dump the litharge in a separate room if all employes entering such rooms wear a hood or such other protective device as shall be authorized by the Department or its authorized representative.

- (g) *Protectors*. The employer shall provide such authorized devices for the use of all employes without expense to the employes, and all employes shall wear such devices, and no employe or other person shall be permitted to enter the workroom unless wearing such device.
- (h) *Storage*. Scrap lead and tailings shall not be stored or otherwise left on the floor of the workroom. All such material shall be either kept in boxes with dustproof covers or kept thoroughly damp at all times while so stored.

#### § 13.152. Nitrate of lead and of soda.

- (a) The lead melting pot shall be provided with a hood connected with a stack or other efficient air exhaust.
- (b) All employes handling these materials shall wear suitable gloves which shall be furnished by the employer without expense to the employe.

#### § 13.153. Dry grinding, sieving and packing.

All crushing mills, grinding mills and sieving machines, operating on material in a dry state, if containing lead in any form shall be connected with an efficient air exhaust and dust-collecting system as provided for in § 13.148(c) (relating to carbonate of lead or white lead; Old Dutch Process).

# § 13.154. Posting of lead poisoning law.

- (a) The employer shall post an abstract of the lead poisoning law wherever employes are exposed to the following:
  - (1) Lead dust.
  - (2) Lead fumes.
  - (3) Lead solutions in the manufacture of white lead.
  - (4) Red lead.
  - (5) Litharge.
  - (6) Sugar of lead.
  - (7) Arsenate of lead.
  - (8) Lead chromate.
  - (9) Lead sulphate.
  - (10) Lead nitrate.
  - (11) Fluosilicate of lead.
- (b) Such abstracts are printed in several languages and are available upon application to the Department.

# Subchapter C. MANUFACTURE OF NITRO AND AMIDO COMPOUNDS

# **GENERAL PROVISIONS**

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# TRINITROTOLUOL

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## **CHEMICALS**

13.221. Scope. 13.222. Heating.

#### Authority

The provisions of this Subchapter C issued under act of June 2, 1913 (P. L. 396, No. 267) (71 P. S. § 1441); and act of May 18, 1937 (P. L. 685, No. 174) (43 P. S. §§ 25-1—25-15), unless otherwise noted

#### Source

The provisions of this Subchapter C adopted August 1, 1917; amended through July 1, 1968, unless otherwise noted

#### GENERAL PROVISIONS

# § 13.161. Purpose.

- (a) This subchapter sets forth rules to safeguard the lives, limbs and health of workers in the manufacture of nitro and amido compounds.
- (b) The employer and the employe engaged in the manufacture of nitro and amido compounds shall have the responsibility of complying with the provisions of this Subchapter.

#### § 13.162. Penalty.

Any person who violates any of the provisions of this subchapter and any regulations of the Department or who interferes with the Department or its duly authorized representative in the enforcement of such provisions or regulations shall be penalized under the provisions of section 15 of act of May 18, 1937 (P. L. 396, No. 267) (43 P. S. § 25-15).

#### **SPECIFICATIONS**

#### § 13.171. Buildings.

- (a) The buildings in which nitro and amido compounds are manufactured or are regularly recovered in considerable quantities shall be properly ventilated.
- (b) Buildings in which twice or more nitrated compounds of benzol, toluene or phenol are manufactured shall be of fire-resistive material or separated from other buildings.

# § 13.172. Platforms.

(a) *Use.* It is recommended that platforms be so erected in a free space at least equal in surface to a quarter of the floor space of the building. It is recommended to leave between platforms and the outer walls either a free space or a space covered by slats 2 to 3 feet wide, which is calculated by adding the area of this space to the free space.

- (b) *Distance*. The distance of the larger platforms from the floor and from each other shall be 10 feet in so far as is possible and practicable. For smaller platforms a shorter distance is permitted, if it does not interfere with the ventilation of the building.
- (c) *Kettles*. On top of melting kettles and distilling apparatus, only such platforms shall be built as are absolutely necessary for the proper handling of the apparatus. It is recommended that care be taken in constructing an apparatus so that vapors and gases cannot escape and injure those obliged to be upon the platform.
- (d) *Construction*. Platforms on which work is regularly carried on with nitro and amido compounds shall be light and easy to clean, and covered with sheet lead where advisable.
- (e) Railings and toe boards. Platforms shall be equipped with railings and toe boards in accordance with the provisions of Chapter 47, Subchapter G (relating to railings, toeboards, open-sided floors, platforms and runways).

#### § 13.173. Floors.

The floor of the workroom and the storage room shall be nonabsorbent, smooth, and easy to clean. Where necessary, wood or cement floors are permissible.

#### § 13.174. Walls.

The walls of the workroom shall be kept clean. If painted with calcimine they shall be repainted at least once a year. Windows which may be opened shall be provided on at least two sides.

# § 13.175. Roof.

If necessary the roof shall have a sufficient number of ventilators or other appliances which allow sufficient ventilation of the workroom and which may be kept open, even when it rains. Windows or skylights shall be constructed to permit operation from the floor or platform. Skylights in the roof shall be constructed of wire glass.

# § 13.176. Manufacture.

- (a) *Pipe lines*. The work in the factories shall be regulated to avoid direct physical contact to the employes of nitro and amido compounds. It is recommended, when practicable, that liquid nitro and amido compounds be transported through closed pipe lines either by pumping, blowing, suction or by gravity.
- (b) *Spent air.* Gravity or suction is recommended because in the use of compressed air fine parts of the compounds go off with the air. Spent compressed air shall be vented outside, but if this is obnoxious to persons in the neighborhood, it is recommended that the spent air be purified before it is expelled. This also

applies to the air which is expelled from vacuum pumps of distilling apparatus, as it frequently contains small quantities of anilin, and other similar substances.

- (c) Covered apparatus. Liquid nitro and amido compounds shall be kept and stored only in covered vessels. Whenever the nitro and amido compounds are handled in such manner that dust, gases, or vapors are generated, especially in powdering, sifting and packing operations, the work shall be carried on when practicable in covered or closed apparatus. The vapors from receivers of distillates shall be excluded from work buildings.
- (d) *Chiseling*. Chiseling out of solid nitro and amido compounds that are explosive is strictly forbidden and when such compounds are poisonous chiseling is permitted only if proper precautions are taken.
- (e) *Drying*. It is recommended that drying be done in separate buildings used for drying only, or in properly constructed apparatus. Frequently drying may be avoided by melting the nitro and amido compounds and breaking them up when they are cold.
- (f) Safety valves. When boilers are fed with water containing anilin, the boiler shall be fitted with suitable safety valves and water glasses which prevent the entering of steam or water containing anilin into the workroom.
- (g) Exhaust systems. When the Department or its authorized representative, deems it necessary, all apparatus and machinery in which nitro and amido compounds are manufactured, transported, treated, distilled, centrifuged, filtered, dried, ground, mixed, packed or filled, shall be fitted with a reliable attachment that removes such dust, gases or vapors which may be generated.
- (h) Disposition of vapors. When the Department or its authorized representative deems it necessary, special care shall be taken to dispose of all vapors which are generated in the opening, discharging, and filling of dry rooms, melting kettles, autoclaves and other pressure vessels.

# § 13.177. Cleanliness.

The workroom shall be kept free from nitro and amido compounds. If any compounds are spilled they shall be removed immediately. The floor shall be cleaned at least once every 24 hours.

# § 13.178. Health precautions.

- (a) *Process men.* This term as used in this section shall mean those employes whose work brings them into immediate contact with nitro and amido compounds, either in the manufacture of those compounds or in the repair of apparatus used in their manufacture. The term does not include employes whose duty is in the power plant or other employes whose work does not bring them into such contact.
- (b) Information. The employer shall inform all employes engaged in the manufacture or other handling of nitro and amido compounds of the poisonous

quality of these products and the necessity for strict compliance with all health precautions enumerated in this section.

- (c) *Clothing*. Shirts, overalls, caps, stockings, shoes, gloves and other wearing apparel which have become saturated with poisonous nitro and amido compounds in such manner that the skin comes in immediate contact with them, shall be immediately taken off, the skin washed with vinegar and then with water, and the employe shall then put on clothing which has not been in contact with these substances.
- (d) *Liquor and smoking*. Employes shall be warned that the use of alcoholic liquors and chewing tobacco is harmful to their health. Smoking in the workroom is strictly forbidden.
- (e) Dining, washing, and dressing rooms. Food shall not be kept or eaten in the workroom. A suitable dining room absolutely separate from the workroom shall be provided. Employes shall not be allowed to enter this room until they have washed both face and hands. The washing and dressing rooms, and bathrooms, shall be separate from the workrooms. These rooms shall be suitably fitted, kept clean, and properly heated. No one shall be allowed to keep any wearing apparel in the workroom. All process men shall dress in the dressing room or washroom. Each process man shall have two lockers, one for his working and one for his street clothing, or a properly divided double locker or such method for storing clothing as the Department may approve or its authorized representative. A proper number of washing appliances shall be provided. Soap and towels shall be furnished in suitable numbers and free of charge.
- (f) Bath. Every workman who comes in contact with the nitro and amido compounds shall take a bath daily before he leaves the factory.
- (g) *Disability*. It is recommended that men who suffer from inflammation of the bladder not be employed in factories where nitro and amido compounds are made.
- (h) Alcoholic liquor. Men who are addicted to the use of alcoholic liquors shall not be employed and no employe upon whom the odor of alcoholic liquor is detected shall be allowed to enter the factory.
- (i) Age. It is recommended that process men be between the ages of 22 and 50 years. It is also recommended that applicants for employment presenting evidences of anemia or of emaciation not be employed as process men because of their increased susceptibility.
- (j) Women. Application for permission to employ women in the manufacture of nitro and amido compounds shall be filed with the Department. It may be granted to women over 18 years of age after scientific investigation by the Department has determined conclusively that exposure to the compounds in question does not exist.
- (k) *Toilets*. Toilets shall be provided in accordance with the provisions of Chapter 41 (relating to sanitation).

- (1) Drinking fountains. The employer shall provide and maintain a sufficient number of sanitary drinking fountains readily accessible for the use of all employes.
- (m) Eating. It is recommended that all process men be alerted to the danger of
  - (2) The process.
- (n) *Excessive perspiration*. It is recommended that those who suffer from excessive perspiration not be employed as process men.
- (o) *Bodily cleanliness*. Since bodily cleanliness is essential to good health, it is recommended that those employes who do not take frequent baths not be employed as process men.

# § 13.179. Repairs.

- (a) All repairs and changes on the machinery, apparatus, and pipes for nitro and amido compounds shall be made only after they have been thoroughly cleaned.
- (b) If it is necessary for an employe to enter any vats, tanks, or other containers in which there have been used, stored or manufactured, gases, fumes or vapors of an asphyxiating or poisonous nature, or materials which give off gases, fumes, or vapors of an asphyxiating or poisonous nature, the following procedure shall be pursued:
  - (1) The containers shall be emptied. All connections shall be disconnected and blanked-off.
  - (2) The containers shall be cleaned thoroughly by repeated washings with water, soda water, steam, compressed air or other suitable means.
  - (3) If the person in charge then considers conditions satisfactory, employes may enter such containers. They shall use an approved type of helmet and have attached to their bodies a life line or rope if the person in charge considers it necessary.
  - (4) The life line or rope shall be under the control of one or more fellow workmen who shall remain outside of the container in order to render any necessary assistance.
  - (5) After the work is finished the men shall take, at once, a bath and change their clothing, including shoes, if the foreman or other person in charge shall deem it necessary. Facilities for taking such baths shall be provided.
- (c) The superintendent of the plant shall be held responsible for enforcing the requirements of this section.

#### Cross References

This section cited in 34 Pa. Code § 13.180 (relating to safety methods and devices).

#### § 13.180. Safety methods and devices.

- (a) For every 50 or less process men employed and exposed to the work risks of § 13.179 (relating to repairs) there shall be present at all times at least two persons who are trained or competent to apply means of resuscitation by the prone pressure or Schaeffer method or by mechanical devices.
- (b) A sufficient number of helmets of an approved type shall be kept at each plant, so that they may be available for use by every employe who may enter places where there may be asphyxiating or poisonous gases, fumes, or vapors.
- (c) All employes who are required by the employer to wear helmets in making repairs or in maintenance work shall be thoroughly instructed in the use of such apparatus, and be physically examined by a licensed physician at least once every 90 days, or after absence from work due to either sickness or accident. The physician shall certify to the proper physical condition of the men so employed and no employe shall be permitted to do such repair work unless so examined and certified.
- (d) Oxygen inhalation apparatus shall be kept on hand, and the foreman and authorized employes shall be instructed in its use. In all cases in which the apparatus has been used, a physician shall at once be called, or the sick employe removed to a hospital. A supply of oxygen or the means for its production shall be kept on hand.
- (e) If oxygen tanks are used, at least two shall be kept on hand at all times, one of which shall be full.

#### § 13.181. Physical examination.

- (a) All applicants for employment as process men shall be physically examined by a licensed physician either before commencing work or before the expiration of 24 hours after their employment.
- (b) All process men shall be physically reexamined by a licensed physician at least once every 30 days and before resuming work after an absence due to sickness, accident, or any other cause.
- (c) Such examinations shall consist of determining and recording in a book or upon a card all of the following facts:
  - (1) Name, age, and address.
  - (2) The process.
  - (3) The weight and height.
  - (4) The pulse.
  - (5) The blood pressure.
  - (6) The haemoglobin.
  - (7) The examination of urine-reaction.
  - (8) The specific gravity.
  - (9) The albumin.
  - (10) The sugar.

- (11) The casts.
- (d) The records of these examinations shall at all times be open for inspection by the Department or its authorized representative.
- (e) The examining physician shall request the factory manager or superintendent to suspend from work any process man who, he believes, is suffering from poisoning and report such case to the Department.
- (f) The employer shall provide, without expense to the employe a hospital room or dispensary, separate and apart from the workroom or rooms, and shall be equipped with all of the following:
  - (1) A couch, bed or surgical table.
  - (2) Two pairs of woolen blankets.
  - (3) Two hot water bottles.
  - (4) Two tanks of oxygen, one of which shall be completely full, and the necessary apparatus for administering them.
    - (5) An oxygen helmet for rescue work.
    - (6) All necessary devices for artificial respiration.
    - (7) A shower bath with hot and cold water.
    - (8) At least one stretcher.
  - (9) A toilet which complies with the requirements of Chapter 41 (relating to sanitation).
- (g) Employers shall keep in a book or on a card, a record of all employes, showing their exact employment and all changes to other work. This record shall at all times be open for inspection by the Department or its authorized representative.

#### TRINITROTOLUOL

# § 13.191. Buildings.

- (a) Trinitrotoluol shall be manufactured in a special plant which is at an approved distance from other factories or portions of factories.
- (b) Buildings in which twice or more nitrated compounds of benzol or twice or more nitrated compounds of toluol are manufactured shall be of fire-resistive material or separated from other buildings.
- (c) Trinitrotoluol factories which are not on the land of an explosives factory shall be surrounded by a fence which prevents the entering of outsiders. At the gates proper signs shall be posted prohibiting the entrance of unauthorized outsiders. Smoking upon the premises is prohibited.

#### § 13.192. Nitration.

Nitration shall be performed in high airy rooms, allowing easy escape of vapors, and in which no nitrated product is stored or handled in a dry condition. There shall be an approved number of easily accessible exits.

#### § 13.193. Storage of acids.

It is recommended that the storage of spent acids be done in tanks, standing in the open air and only roofed over.

# § 13.194. Washing and centrifuging.

All washing and centrifuging operations shall be performed in a building in which no nitrated product is stored. There shall be ample ventilation.

#### § 13.195. Recrystallization.

The recrystallizing of the crude trinitrotoluol with easily inflammable solvents such as alcohol, benzol or toluol shall take place in a building standing alone. All solution tubs, crystallizing vessels, centrifuges and conveying apparatus shall be closed in such manner that vapors in dangerous quantities do not escape into the workroom. Proper ventilation of the workroom shall be provided. All platforms in this building shall have an exit into the open air.

# § 13.196. Drying.

The drying of the trinitrotoluol shall be carried on in a building standing alone. The separation of the pure trinitrotoluol from the solvent may be done in the building for the recrystallizing if the apparatus used avoids accumulation.

#### § 13.197. Packing.

All packing shall be done in separate packing houses.

## § 13.198. Storage.

Trinitrotoluol shall be stored in separate stock rooms and protected by an approved type of barricade. The location of the stock rooms from the nearest manufacturing building shall be at an approved distance.

#### **Cross References**

This section cited in 34 Pa. Code § 13.200 (relating to ammunition).

# § 13.199. Inflammable solvents.

- (a) The storage tanks of inflammable solvents or toluol shall be constructed in such manner that the contents of the tanks, in case of leakage cannot run over the surroundings. It is recommended that storage vessels be below ground. If such solvents are stored above ground, they shall be stored in an approved manner. Storage in open air in iron drums in a suitable place is permissible.
- (b) Earth embankments of sufficient height to hold the contents of tanks in case of leakage shall be placed around all tanks of inflammable materials when such tanks are located above ground.

#### § 13.200. Ammunition.

The manufacture of ammunition from trinitrotoluol shall be conducted in a separate building or plant. Ammunition shall be stored according to the requirements of § 13.198 (relating to storage).

#### § 13.201. Doors.

All doors which lead into the open air shall open outward.

# § 13.202. Nitrating apparatus.

All nitrating vessels shall have reliable appliances for stirring and for the regulation of the temperature, as well as ventilating apparatus for the removal of the vapor.

# § 13.203. Drying apparatus.

- (a) If the drying is done on small drying hand trays the heating elements shall be so arranged that the material to be dried or the dust cannot come in direct contact with them. The temperature in the drying chambers shall not exceed 60 C. All drying apparatus shall be so constructed that the gases escape easily without dangerous pressure if the trinitrotoluol should ignite.
- (b) If the drying is done in large drying pans, hot water or low pressure steam at not over 20 pounds pressure per square inch shall be employed for heating. The contents shall be kept in constant motion and the apparatus constructed to prevent the escape of vapors into the workroom.

#### § 13.204. Dust.

The drying and sifting apparatus shall be so constructed as to prevent as far as practicable the escape of dust. All walls, floors, radiators, electric bulbs and other similar equipment shall be kept free from the accumulation of trinitrotoluol dust. All employes shall be provided without cost with respirators, for their protection against dust.

# § 13.205. Fire prevention.

- (a) In rooms which have easily inflammable solvents or dried TNT (trinitrotoluol), the following shall not be employed:
  - (1) Electric motors.
  - (2) Electric bells.
  - (3) Any other sparking apparatus.
- (b) Centrifuges shall not have a brake nor shall it be allowed to brake them in any manner. Oily waste shall be kept outside the workroom in safety cans which shall be cleaned frequently. In all drying, breaking and sifting operations the friction of iron against iron is not permissible.

#### § 13.206. Refuse.

Impure trinitrotoluol shall be refined and purified before it is used. All refuse from the nitration or recrystallizing rooms which is still useful shall be removed from such rooms and kept in a special room until it is refined. It is not permissible to bury any refuse which contains trinitrotoluol. Such refuse shall be placed in containers and destroyed from time to time under the supervision of an experienced foreman.

#### § 13.207. Repairs.

Repairs on apparatus and other tools which have been in contact with trinitrotoluol are permissible only after they have been thoroughly cleaned. The remelting of old vessels, lead pipe, and other equipment is permissible only after they have been burned off in an open fire. All other vessels, lead pipe and other equipment which have become useless shall be treated in the same manner or destroyed by explosion.

# § 13.208. Nitric acid.

Because of the danger to the employe from inhalation of nitrous fumes in case of fire or of the breakage of carboys, carboys containing nitric acid shall be stored in detached sheds with sandstone, brick or other suitable flooring, and in quantities not to exceed 100 carboys placed in not more than four rows. Nitric acid in carboys may be stored in the open in unlimited quantities.

# § 13.209. Notice.

(a) The Department, on application, shall supply the following notice which shall be posted at all places in plants where there is danger of poisoning by acid fumes:

# **ACID FUMES**

#### WARNING

The Inhalation of Dense Acid Fumes May Cause Death.

Employes are strictly prohibited from entering buildings where dense acid fumes exist, or tanks, or confined spaces which are not entirely clear of acid fumes, unless they wear helmets.

Employes working in such places shall, in addition to the helmets, wear life lines which are at all times in the hands of assistants stationed outside of the tank.

Employes who have been exposed to acid fumes and who feel weak, sick, short of breath, or who are attacked with cramps or coughing, shall report this condition to the foreman, or to the works dispensary

or hospital at once so that proper treatment may be given. They should not wait to get home. Delay may be fatal.

Responsibility for complying with these rules shall rest with the foreman or other person designated for that purpose by the management of the plant.

Failure to comply with these rules may subject the offender to a penalty of a fine or imprisonment.

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- (b) Water shall be always available for use in case of evolution of nitrous fumes caused by breakage or other accident to carboys, and all employes handling such acid shall be warned against sprinkling sand, sawdust, earth, or anything other than water or alkalies upon any spilled nitric acid.
- (c) There shall be a shower bath at all places, where there is danger that an employe may be burned by contact with acid.

#### § 13.210. Accumulations.

No more trinitrotoluol may be kept in the workroom than is necessary for concurrent use.

#### **CHEMICALS**

## § 13.221. Scope.

The handling and storage of acids and other chemicals necessary for the operation of plants not covered by the provisions of this subchapter shall be in accordance with safe methods and practices.

# § 13.222. Heating.

The workroom when desirable shall be heated by a system of steam, indirect hot air radiation or hot water. The temperature of the steam may not exceed 120°C. The radiators shall be at least 1 inch distant from all wood walls or other inflammable material and shall be attached in such manner as to be easily cleaned and inspected.

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