

CHAPTER 18B
HIGH LEVEL ALARMS

Authority

N.J.S.A. 52:27D-198, 201 and 219.

Source and Effective Date

R.1995 d.58, effective January 3, 1995.
See: 26 N.J.R. 4258(a), 27 N.J.R. 878(b).

Executive Order 66(1978) Expiration Date

Chapter 18B, High Level Alarms, expires on January 3, 2000.

Chapter Historical Note

Chapter 18B, High Level Alarms, was adopted as R.1985 d.66, effective February 19, 1985. See: 16 N.J.R. 3339(b), 17 N.J.R. 394(a). Pursuant to Executive Order No. 66(1978), Chapter 18B was readopted as R.1990 d.72, effective January 4, 1990. See: 21 N.J.R. 3344(a), 22 N.J.R. 337(b).

Pursuant to Executive Order No. 66(1978), Chapter 18B was readopted as R.1995 d.58. See: Source and Effective Date.

Cross References

Child care center physical facility requirements, see N.J.A.C. 10:122-5.1 et seq.

Children's group home physical facility requirements, see N.J.A.C. 10:128-4.1 et seq.

Children's shelter physical facility requirements, see N.J.A.C. 10:124-5.1 et seq.

Residential child care physical facility requirements, see N.J.A.C. 10:127-4.1.

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SUBCHAPTER 1. GENERAL PROVISIONS

5:18B-1.1 Authority

The regulations contained in this chapter are promulgated by the Commissioner of the Department of Community Affairs pursuant to the authority given in the "High Level Alarm Act," P.L. 1984, c.31 (N.J.S.A. 52:27D-214, et seq.).

5:18B-1.2 Intent and purpose

(a) It is the intent and purpose of these regulations:

1. To prevent the serious hazards presented by overfilling of flammable liquid storage tanks filled by pipeline;
2. To formulate such requirements to the extent practicable, in terms of performance objectives, so as to make adequate performance for the use intended as the test of acceptability;
3. To permit to the fullest extent feasible the use of modern technical methods, devices and improvements, consistent with the health, safety and welfare of terminal personnel, firefighters and the general public;
4. To insure adequate training of personnel involved in the transfer of flammable liquids by pipeline throughout the State;
5. To insure adequate reinspection and verification that the required safety equipment is in operable condition.

5:18B-1.3 Definitions

The following words and terms, when used in this subchapter, shall have the following meaning unless the context clearly indicates otherwise.

"Attended terminal" means a terminal where an individual knowledgeable in the above-ground liquid storage tank filling operation is physically in attendance and control during the entire delivery of a flammable liquid and has as his responsibility supervision of the storage tank filling operation.

"Commissioner" means the Commissioner of the Department of Community Affairs.

"Department" means the Department of Community Affairs.

"Fire official" means the responsible person in accordance with N.J.A.C. 5:18.

"Flammable liquid" means a liquid having a flash point below 100 degrees Fahrenheit and having a vapor pressure not exceeding 40 psia at 100 degrees Fahrenheit.

"Owner" means a person who owns, purports to own, manages, rents, leases or exercises control over a terminal.

"Pipeline" means a pipeline used to convey a flammable liquid from:

1. A crude petroleum wellhead collection site to a refinery or terminal; or
2. A refinery to a terminal; or
3. A marine vessel to a terminal.

"Pipeline" does not mean gathering lines from the wellhead to a crude petroleum collection tank.

"Terminal" means a facility at which one or more above-ground liquid storage tanks for the containment of flammable liquids are located.

"Unattended terminal" means a terminal where an individual knowledgeable in the above-ground liquid storage tank filling operation is in attendance only during a portion of the time when a flammable liquid is being delivered, or has as his responsibility a function other than supervision of the storage tank filling operation. Any terminal other than an attended terminal shall be considered an unattended terminal.

5:18B-1.4 Effective date

(a) The provisions of these regulations shall take effect 90 days after promulgation.

5:18B-1.5 Severability

If any provisions of these regulations or the application thereof to a person or circumstances is held invalid, the invalidity shall not affect other provisions or applications of the regulations which can be given effect, and to this end the provisions of the regulations are severable.

5:18B-1.6 Applicability

(a) These regulations shall apply to all new and existing terminals supplied by a pipeline.

(b) The provisions of these regulations shall apply uniformly throughout the State. A local governing body may not enact an ordinance more restrictive than these regulations.

SUBCHAPTER 2. ADMINISTRATION AND ENFORCEMENT

5:18B-2.1 Matters covered

(a) The provisions of these regulations shall cover the following areas:

1. The installation of a high level alarm system;
2. Maintenance and testing of high level alarm systems;
3. Acceptability of high level alarm systems;
4. Fire and emergency plans for all terminals covered by these regulations;
5. Formal written procedures to be followed by responsible personnel to prevent overfilling of tanks;
6. Enforcement procedures;
7. Testing procedures;
8. Record keeping procedures.

5:18B-2.2 Variations and exceptions

(a) No variations or exceptions from the requirements of these regulations may be made, except upon the following findings:

1. That strict compliance with any specific provision, if required, would result in practical difficulty to such owner;
2. That the exception, if granted, will provide for comparable alternative protection; and
3. That the exception, if granted, will not jeopardize the health, safety and welfare of plant personnel, firefighters, and the general population.

5:18B-2.3 Applications for variations

(a) An application for a variation pursuant to this Chapter shall be filed in writing with the Department and shall provide specifically:

1. A statement of the requirements of the regulations from which a variation is sought;
2. A statement of the manner by which strict compliance with said provisions would result in practical difficulties;
3. A statement of the nature and extent of such practical difficulties; and

4. A statement of the feasible alternatives to the requirements of the regulations which would adequately protect the health, safety and welfare of plant personnel, firefighters, and the general public.

5:18B-2.4 Review of variation applications

Within 20 business days next succeeding the receipt by the Department of the application, it shall be denied or granted by written order stating the reasons therefor. The application shall be deemed denied for purposes of appeal if no decision is forthcoming within such 20-day period. Records of all applications for variations, and actions taken thereon, shall be available for public inspection at the Department during normal business hours.

5:18B-2.5 Violations, notices and orders

(a) If upon inspection of a terminal the Department discovers a violation of these regulations that constitutes an imminent hazard to the health, safety and welfare of plant personnel, firefighters or the general public, the Department may issue and cause to be served on the owner of the terminal a written order directing that the terminal be vacated, closed or restrained from receiving pipeline shipments of flammable liquids to the site or affected tanks and/or that the violation be corrected within the period specified in the order. The order shall state the nature of the violation and the date and hour by which the terminal or affected tanks shall be vacated, closed, or restrained from receiving pipeline shipments of flammable liquids, and/or the violation corrected.

(b) The Department shall reinspect the terminal within 48 hours of receiving written notice from the owner of a terminal stating that a violation issued under N.J.A.C. 5:18B-2.5(a) has been terminated.

(c) If upon reinspection the Department determines that the violation has been terminated, it shall receive the order issued under (a) above and occupancy and/or operation may be resumed immediately.

(d) If the owner of a terminal denies that a violation justifying an order pursuant to (a) above exists, the owner may apply to the Department for a reconsideration hearing. The hearing shall be conducted, and a final decision issued, within 48 hours of the receipt of the request. Failure to issue a decision shall constitute denial of the owner's appeal.

5:18B-2.6 Compliance

(a) A person who violates or causes to be violated a provision of (d) below shall be liable to a penalty of not more than \$5,000 for each violation.

(b) If a violation of (d) below is of a continuing nature, each day during which the violation remains unabated after the date fixed in an order or notice for the correction or termination of the continuing violation shall constitute an

additional and separate violation, except while an appeal from the order is pending.

(c) If an owner has been given notice of the existence of a violation of the Act and fails to abate the violation, he shall be liable to an additional penalty in the amount of the actual cost to the municipality or fire district of suppressing any fire directly or indirectly resulting from the violation.

(d) No person shall:

1. Obstruct, hinder, delay or interfere by force or otherwise with the Department in the exercise of any power or the discharge of any function or duty under the provisions of these regulations;

2. Prepare, utter or render any false statement, report, document, plans or specification permitted or required under the provisions of these regulations;

3. Render ineffective or inoperative, or fail to properly maintain, any protective equipment or system installed, or intended to be installed, in or on a terminal or tank;

4. Refuse or fail to comply with a lawful ruling, action, order or notice of the Department; or

5. Violate, or cause to be violated, any of the provisions of these regulations.

(e) The following penalties may be assessed:

1. The Department may levy and collect penalties in the amounts set forth in this section.

2. If the administration penalty order has not been satisfied by the thirtieth day after its issuance, the penalty may be sued for, and recovered by and in the name of the Department in a civil action by a summary proceeding under the Penalty Enforcement Law (N.J.S.A. 2A:58-1 et seq.) in the Superior Court.

3. A person who fails to pay immediately a money judgement rendered against him pursuant to this subsection may be sentenced to imprisonment by the court for a period not exceeding six months, unless the judgement is sooner paid.

(f) A person shall be deemed to have violated or caused to have violated a provision of (d) above if an officer, agent or employee under his control and with his knowledge has violated or caused to be violated any provisions of (d) above.

(g) Upon request of the owner or bona fide purchaser of a terminal, the Department shall issue a certificate either:

1. Enumerating the violations indicated by its records to be unabated and the penalties indicated to be unpaid; or

2. Stating that its records indicate that no violations remain unabated and no penalties remain unpaid.

(h) A person who purchases a property without having obtained a certificate stating that there are no unabated violations of record and no unpaid penalties shall be liable for the payment of all unpaid penalties.

(i) Any existing terminal required by these regulations to be equipped with a high level alarm system shall submit plans and specifications in accordance with N.J.A.C. 5:18B-2.9 no later than three months following the effective date of these regulations.

(j) Any new terminal or tank constructed, or planned to be constructed in the State, shall comply with these regulations before the terminal or tank is occupied or put into operation.

5:18B-2.7 Service of notice

Service of notices and orders pursuant to these regulations shall be upon the owner or any person in control of the terminal. Service may be made by personal delivery or by leaving a copy at the dwelling, house or usual place of abode of such persons, with a competent member of his household of the age 14 years or older and residing therein, or by any other method or upon any other person approved pursuant to Rules 4:4-4 and 4:4-5 of the New Jersey Court Rules.

5:18B-2.8 Applicants' right of appeal; procedure

(a) Whenever the Department shall deny an application for an installation, fail to act upon an application for an installation, refuse to grant a variation, or make any other decision pursuant or related to this chapter, including the assessment of any monetary penalties, an owner may file an appeal for an administrative hearing. The case shall be adjudicated before the Office of Administrative Law and the final decision shall be issued by the Commissioner. Such hearings shall be governed by the provisions of the Administrative Procedure Act, N.J.S.A. 52:14B-1 et seq., as implemented by N.J.A.C. 1:1.

(b) The application for appeal shall be taken within 20 business days of the receipt of written notice of the denial or other decision of the Department.

(c) The application for appeal shall be in writing, filed with the Hearing Coordinator, Department of Community Affairs, CN 802, Trenton, NJ 08625 and shall briefly set forth the appellant's position. Such application shall state the name and address of the appellant and the address of the terminal in question, and shall reference specific sections of the regulations and the extent and nature of the appellant's reliance on them. The appellant may append to the written application any relevant data or information.

Amended by R.1993 d.628, effective December 6, 1993.
See: 25 N.J.R. 4363(a), 25 N.J.R. 5466(a).

5:18B-2.9 Plans and specifications

(a) All owners of terminals required by PL 1984, c.31, (N.J.S.A. 52:27D-214 et seq.) to be equipped with a high level alarm system shall submit four copies of the plans and specifications for the proposed systems to the Department. The plans and specifications shall be accompanied by an application containing but not limited to the following information:

1. The name and address of the owner. Where the owner is not a resident of the State the owner shall designate a resident as agent for the purpose of service of any notices for orders which may be necessary. Such address shall not be limited to a post office box, but shall specify a physical location where such owner or agent may be found during normal business hours. Where the owner is a corporation or partnership, the application shall indicate the name and address of a person upon whom service may be made;
2. The street address of the terminal where the high level alarm system is to be installed;
3. A description of how the proposed installation will meet the requirements of N.J.A.C. 5:18B-3.2;
4. Formal written procedures that shall be followed by responsible personnel to prevent overfilling of tanks at attended terminals as required by N.J.A.C. 5:18B-3.4.

(b) In addition, the following information shall be required on any application when such information is available, but no later than the commencement of work:

1. Certification that a copy of the terminal's fire and emergency plan as required in N.J.A.C. 5:18B-3.4 has been filed with the local fire official.

(c) In addition, the owner shall file an application for a construction permit with the Department in accordance with N.J.A.C. 5:23-2.15 of the State Uniform Construction Code.

1. Under the provisions of the State Uniform Construction Code and PL 1984, c.31 (N.J.S.A. 52:27D-214 et seq.) all plan review, construction permits and inspection responsibilities shall be reserved by the Department.

SUBCHAPTER 3. TECHNICAL REQUIREMENTS

5:18B-3.1 Matters covered

(a) This subchapter shall control matters relating to:

1. High level alarm systems at attended terminals and unattended terminals;
2. Prevention of overfilling;
3. Fire and emergency plan;
4. Existing system;

5. Testing requirements.

5:18B-3.2 High level alarm systems

(a) Each terminal at which a tank filled by pipeline is located shall comply with the following requirements:

1. It shall be equipped with a high level alarm system;
2. The high level alarm system shall be set to activate at a predetermined level in each tank filled, directly or indirectly, by pipeline at the terminal to allow sufficient time for the flow of the flammable liquid to be shut down before the tank overfills. The level shall be determined by the maximum filling rate and the time required for terminal personnel to take appropriate action to stop the flow of the flammable liquid;
3. The high level alarm systems shall be maintained in accordance with the manufacturer's recommendation;
4. The high level alarm system shall be tested every three months by the owner of the terminal and a permanent record of the test shall be maintained. The test procedure and record shall include, but not be limited to, the following:
 - i. Control panel function;
 - ii. Back-up power supply;
 - iii. Sensor function;
 - iv. All audible and visual signals; and
 - v. Wiring.

5. Prior to the installation of a new system, the assembled components of the high level alarm system shall have met test requirements for their intended use established by a nationally recognized testing laboratory.

(b) In addition to the requirements specified in (a) above, each attended terminal at which a tank filled by pipeline is located shall comply with the following requirements:

1. The high level alarm system at the terminal shall provide a visual signal and an audible sound alarm device. The audible sound shall be of sufficient decibels above ambient noise levels to alert personnel responsible for taking corrective action. The audible signal shall be a distinctive signal readily distinguishable from all other signals at the terminal. The visual signal shall be of an approved type which is of a distinctive color and candle-power to affect personnel action.
2. The high level alarm system at the terminal shall be equipped with an audible trouble alarm which has a distinctive sound not used for any other purpose and of sufficient decibels so that it is audible to all terminal personnel required to respond to its sounding. The audible trouble alarm shall sound upon the occurrence of any of the following:

- i. A loss of the main electrical operating power in the terminal;
- ii. An electrical break or ground fault in the alarm initiating circuit or the signalling device circuit;
- iii. The derangement of the high level alarm system control equipment;
- iv. The removal of initiating devices from the high level alarm system; or
- v. The electrical derangement of the signalling devices of the high level alarm system; or
- vi. Any other non-performance of the system.

(c) In addition to the requirements specified in (a) above, each unattended terminal at which a tank filled by pipeline is located shall comply with the following requirements:

1. The high level alarm system shall be capable of automatically shutting off or diverting the flow of the flammable liquid at the point of origin within the terminal or at the point of receipt into the aboveground liquid storage tank;
2. The high level alarm system shall be capable of automatically shutting off or diverting the flow of the flammable liquid at the point of origin within the terminal or at the point of receipt into the aboveground liquid storage tank in the event of a power failure in the high level alarm system.

Amended by R.1985 d.611, effective December 2, 1985.
See: 17 N.J.R. 1015(b), 17 N.J.R. 2870(a).
(b)1 substantially amended.

5:18B-3.3 Prevention of overfilling

(a) Formal written procedures shall be followed by responsible personnel to prevent overfilling of tanks. These procedures shall describe the usage of the high level alarm system and the responsibilities, including tank gauging, of personnel who are trained in these procedures and are on duty throughout product receipt to promptly arrange for flow stoppage or diversion. These procedures shall be made available in sufficient copies to be readily accessible to terminal personnel trained in these procedures. In addition, these procedures shall include:

1. Validation of proper line-up and receipt of initial delivery to the tank designated to receive shipment at the expected rate;
2. Provisions for adequate supervision and monitoring of the performance of operating personnel;
3. Schedules for checkout and maintenance of high level instrumentation and related systems;

4. Training and qualification requirements of terminal personnel on duty who are responsible for overfill prevention.

5:18B-3.4 Fire and emergency plan

(a) The owner shall develop a fire and emergency plan for the terminal and file a copy with the fire department having jurisdiction over the terminal. This plan shall include, but not be limited to, the following items;

1. Products stored or processed at the terminal and their locations;
2. In-plant firefighting systems and/or equipment;
3. Method of contacting necessary terminal personnel in the event of a fire or emergency at the plant.

5:18B-3.5 Existing systems

(a) Existing high level alarm systems installed prior to the effective date of these regulations will be deemed to meet the requirements of these regulations if they can be shown to meet the following:

1. N.J.A.C. 5:18B-3.2(a)2, Operation;
2. N.J.A.C. 5:18B-3.2(a)3, Maintenance;
3. N.J.A.C. 5:18B-3.2(a)4, Testing;
4. N.J.A.C. 5:18B-3.3, Prevention of overfilling;
5. N.J.A.C. 5:18B-3.4, Fire and Emergency Plan.

(b) The Department shall be notified of the existence of such a system by its owner, and an inspection shall be made by the Department to determine if the installation is in compliance with the applicable section of these regulations.