

SAFETY REGULATION no. 30

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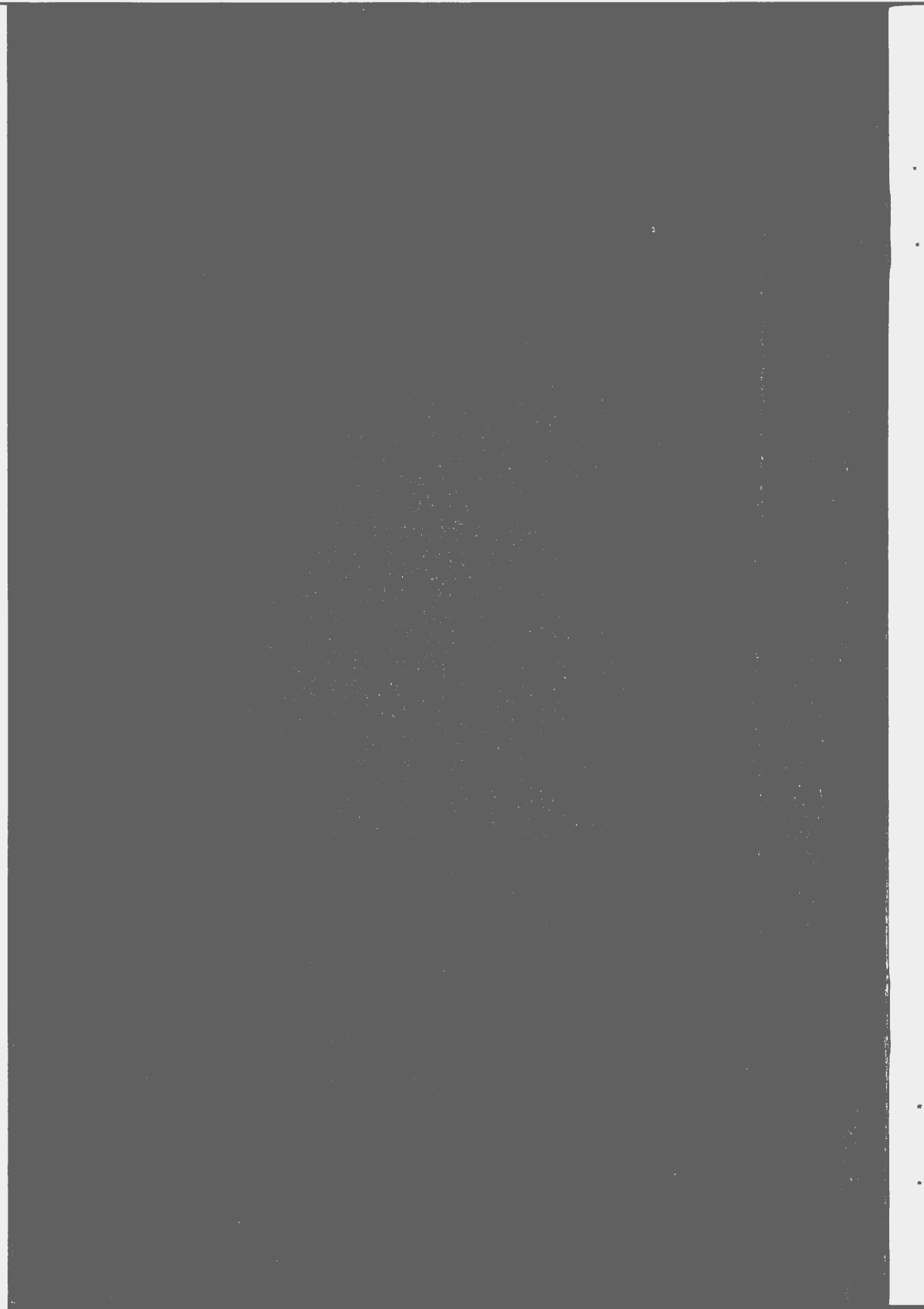


PLAN FILING



Effective July 1, 1969

STATE OF NEW JERSEY
DEPARTMENT OF LABOR & INDUSTRY
BUREAU OF ENGINEERING & SAFETY
Trenton, N.J.



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No. 30,

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STATE OF NEW JERSEY,
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BUREAU OF ENGINEERING & SAFETY,
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FOREWORD

The intent of this regulation is to require the filing of plans, specifications and related data by employers or owners of buildings or structures used as places of employment within the jurisdiction of the Department of Labor and Industry. It is promulgated by the Commissioner of Labor and Industry of the State of New Jersey under the authority of the Worker Health and Safety Act, P. L. 1965, Chapter 154, in accordance with the following sections:

3. Every employer shall furnish a place of employment which shall be reasonably safe and healthful for employees. Every employer shall install, maintain and use such employee protective devices and safeguards including methods of sanitation and hygiene and where a substantial risk of physical injury is inherent in the nature of a specific work operation shall also with respect to such work operation establish and enforce such work methods, as are reasonably necessary to protect the life, health and safety of employees, with due regard for the nature of the work required.
4. The owner of any premises used in whole or in part as a place of employment shall be responsible for its structural adequacy, protection against the origin and spread of fire and for the provision of adequate general ventilation and lighting, emergency egresses, fire warning systems and for safe elevator systems.
10. The Commissioner shall have the power and authority to require by rules and regulations promulgated hereunder that the owner of any building or structure to be erected or adapted as a place of employment submit to the Commissioner such plans and specifications for his approval and other data relative thereto before the building or structure is erected or adapted.

He shall further have the power and authority to require by rules and regulations promulgated hereunder that prior to the installation of sanitation facilities, fire prevention and protection, egresses, exhaust and ventilating systems, elevators and other conveying equipment and employee protective devices and equipment the owner or employer submit plans and specifications for his approval and other data relative thereto.

The same statute provides authority for the Commissioner to grant exceptions from the requirements of rules and regulations in accordance with Section 23 as follows:

23. The Commissioner shall have the power and authority to grant exceptions from the literal requirements of rules and regulations promulgated under this Act. Such exception shall be granted in any particular case only where it is clearly evident that it is necessary to prevent undue hardship or where existing conditions prevent compliance. In no case shall any exception be granted unless in the opinion of the Commissioner reasonable protection of the health and safety of workers and the public will be maintained hereby. An application for an exception shall be filed in writing with the Commissioner, setting forth specifically the requirements of the rules and regulations from which an exception is desired and the reason why enforcement of the applicable provisions of the rules and regulations is unreasonable. The Commissioner shall grant or deny the exception within 30 days from the date of receipt by him of the application. The Commissioner shall maintain a record of all exceptions granted and shall make such record reasonably available for public examination and shall mail a copy of all rulings granting exceptions to the members of the board.

The following sections of the Revised Statutes of the State of New Jersey should be noted by all responsible parties:

34:1-23 FEES FOR APPROVAL OF PLANS, SPECIFICATIONS, OR NEW WORK.

The Commission may charge a fee of not less than two (\$2.00) dollars nor more than three hundred (\$300.00) dollars for issuing a certificate of approval of any plans or specifications, or both, required by law or regulation of the department to be submitted to him for approval.

- 45:8-45 No department, institution, commission, board or body of the State Government, or any political subdivision thereof, being the depository or having the custody of any plan or specification involving professional engineering, shall receive or file any such plan or specification unless there is affixed thereto the seal of a professional engineer licensed pursuant to the provisions of this Chapter, or the seal of a registered architect thereon nor receive or file any plan involving land surveying unless there is affixed thereto the seal of a land surveyor licensed pursuant to this Chapter.

The requirements for the protection of employees set forth in the Worker Health and Safety Act are to be incorporated in the plan filings listed in Section 3 of this regulation. These requirements are delineated in the following existing legal documents of the Bureau:

1. Standard Building Code of New Jersey.

- Buildings and Structures

- Elevators, Escalators, Moving Walks and Dumbwaiters

- Fire Alarm and Smoke Detection Systems

- Sprinkler Systems and Other Fire Extinguishing Agents

- Egress Provisions and Fire Escapes

- Structural Designs and Details

- Flammable or Combustible Liquids

- Heating, Ventilating and Air Conditioning Systems

- Electric Power and Light Systems

- Hazardous Chemicals, Compressed Gases, Liquefied Gases other than Liquefied Petroleum Gases and Cryogenic Fluids

2. Sanitation Facilities—Safety Regulation No. 16

3. Conveyors, Cableways and Related Equipment—Safety Regulation No. 5.

4. Exhaust Air Systems, Spray and Finish Systems and Dust Collecting Systems—Safety Regulation Governing Local Exhaust Systems.

5. Liquefied Petroleum Gas Installations—Liquefied Petroleum Gas Act P. L. 1958.

SECTION 1—PURPOSE AND SCOPE

1.1 PURPOSE.

1.1.1 The purpose of this regulation is:

1. To require that the owner of any building or structure to be erected or adapted as a place of employment, submit to the Commissioner such plans and specifications for his approval and other data relative thereto before the building or structure is erected or adapted.
2. To require that prior to the installation of sanitation facilities, fire prevention and protection, egresses, exhaust and ventilating systems, elevators and other conveying equipment and employees protective devices and equipment, the owner or employer submit plans and specifications to the Commissioner for his approval and other data relative thereto.
3. To establish a procedure for submitting plans, specifications, and other related data for the Commissioner's approval.

1.2 SCOPE

1.2.1 This regulation applies to:

1. Manufacturing establishments with one or more employees as covered by the Act.
2. All activities performed within manufacturing establishments such as warehousing or storage.

1.2.2 This regulation shall not apply to:

1. The exceptions for the various projects listed in Section 3.
2. Places of employment excluded under the Worker Health and Safety Act.

SECTION 2—DEFINITIONS

ADDITION	A physical enlargement of an existing building or structure, service system or safety provision.
ALTERATION	A physical rearrangement of the whole or its parts of an existing building or structure, service system or safety provision.
ARCHITECT	A person licensed to practice architecture in New Jersey by the New Jersey State Board of Architects.
BUILDING	A structure enclosed within exterior walls or fire walls, built, erected and framed of component structural parts, designed for the housing, shelter, enclosure and support of individuals, animals or property of any kind. See STRUCTURE.
BUILDING CODE OF THE BUREAU	Building and structural requirements adopted by the Commissioner of the Department of Labor and Industry under the Worker Health and Safety Act.
BUREAU	The Bureau of Engineering and Safety, Division of Labor, Department of Labor and Industry, State of New Jersey.
COMBUSTIBLE LIQUID	Any liquid having a flash point at or above 140° F.
COMMISSIONER	Commissioner of the Department of Labor and Industry or his authorized representative.
COMPRESSED GAS	Any mixture or material having in the container either an absolute pressure exceeding 40 pounds per square inch at 70° F., or an absolute pressure exceeding 104 pounds per square inch at 130° F., or both; or any liquid flammable material having a Reid vapor pressure exceeding 40 pounds per square inch at 100° F.

CONTRACTOR	A person, firm or corporation, engaged by an owner or employer to perform certain work and services required in a plan approval issued by the Bureau.
CRYOGENIC FLUID	A gas liquefied by ultra low temperatures usually from minus 148° F., to almost absolute zero (—459° F.).
DEPARTMENT	Department of Labor and Industry.
EMPLOYEE	Any person engaged in service to an employer for wages, salary or other compensation.
EMPLOYER	Any person or corporation, partnership, individual proprietorship, joint venture, firm, company or legal entity who engages the services of an employee and who pays his wages, salary, or other compensation; and any person exercising supervision of employees on an employer's behalf.
FLAMMABLE LIQUID	Any liquid having a flash point below 140° F., and having a vapor pressure not exceeding 40 pounds per square inch absolute at 100° F.
HAZARDOUS CHEMICALS	Materials not otherwise defined in this regulation which are flammable, corrosive, toxic, poisonous, radioactive, chemically unstable, explosive, undergo spontaneous or exothermic reactions of explosive violence and include but are not limited to corrosive liquids, flammable solids, highly toxic materials, and unstable chemicals.
HIGH HAZARD OCCUPANCY	Buildings and structures or parts thereof classified in the hazardous use groups by the Building Code of the Bureau.
LIQUEFIED GAS	A gas which, under the charged pressure, is partially liquid at a temperature of 70° F.
MANUFACTURING ESTABLISHMENT	A building, structure or place for fabricating, processing or producing goods and wares by hand or machinery. All accessory operations, such as the storage of raw materials and finished products, as well as other supplemental activities, are part of this establishment.

MERCANTILE ESTABLISHMENT	A building, structure or place used for the selling or buying of goods, wares and merchandise.
OWNER	Person possessing equitable title which is that person, corporation, partnership, individual proprietorship, joint venture, firm, company or other legal entity that has actual control over the premises used in whole or in part as a place of employment.
PLACE OF EMPLOYMENT	Any building or other premises occupied by an employer in or about which an employee customarily is suffered or permitted to work.
PLAN FILING	Delivery in person or by mail of application, project data form, and fee; and when required, drawings and other related data to the offices of the Bureau of Engineering and Safety for approval and deposit in its records.
PROFESSIONAL ENGINEER	A person licensed to practice professional engineering in New Jersey by the New Jersey Board of Professional Engineers and Land Surveyors.
PROFESSIONAL OF RECORD	The Professional Engineer or Architect who accepts the responsibility for the design of a project to assure compliance with the legal requirements of the Department.
SAFETY PROVISION	A combination of parts, equipment, and design to assure the safe use of the space of a building or structure exposed to conditions therein which may be dangerous to the health and safety of the occupants.
SERVICE ESTABLISHMENT	A building, structure, or place used for operations in which employees are engaged to perform services for the benefit of the customers at retail.
SERVICE SYSTEM	A combination of parts and equipment to provide for use of the space of a building or structure for human occupancy.

STRUCTURE

An assembly of materials forming a construction for occupancy or use including among others, buildings, stadiums, gospel and circus tents, reviewing stands, platforms, stagings, observation towers, radio towers, storage tanks, trestles, piers, wharves, open sheds, coal bins, shelters, fences, and display signs.

WAREHOUSE ESTABLISHMENT

A building, structure or place used primarily to store materials, goods or merchandise of any nature or form.

SECTION 3—REQUIRED PLAN FILINGS

3.1 BASIC PROVISIONS.

- 3.1.1 The required plan filings shall be submitted and approval obtained before commencement of construction or installation of proposed projects.
- 3.1.2 Plan filings for projects involving more than one building or structure on a site shall be submitted so that there is a separate filing for each building or structure.
- 3.1.3 Plan filings shall be required for the projects covered in 3.2 through 3.17 except plan filings shall not be required for:
 - 1. Process equipment and systems not requiring special safeguards to protect against exposure to health and fire.
 - 2. Safeguards for mechanical transmission systems, wood-working machines, rolling mills, calendars, presses and similar machines.
 - 3. Replacement of parts and equipment in kind in any previously approved project.
 - 4. Alterations or additions to existing process equipment and systems which do not increase the hazard classification or affect exposure to health and fire.
- 3.1.4 Plan filings covered in 3.1.3 shall be submitted with the original building filing except as provided in 3.1.5 and 3.1.6.
- 3.1.5 Plan filings required under 3.2 shall include the structural and architectural plans and plans for services such as ventilation, air conditioning, heating, electrical and sprinklers. The plans for such services may be submitted individually or in combination under separate plan filing at a later date only if written commitment is made for filing within specified time acceptable to the Bureau.
- 3.1.6 Separate plan filings shall be required for the projects listed in 3.3, 3.5, 3.11 and 3.14.
- 3.1.7 Construction or installation projects not subject to plan filing under this regulation shall conform with the appropriate regulations of the Bureau.

3.2 BUILDINGS AND STRUCTURES

3.2.1 Each new building or structure.

3.2.2 Each addition to an existing approved building or structure.

3.2.3 Each existing building or structure with necessary alterations converted to use under Department jurisdiction, except as follows:

1. A modified building filing may be utilized for certain existing buildings in accordance with Section 6.

3.2.4 Alterations to any one existing approved building or structure except as follows:

1. Alterations to partitions that are without structural involvement, and do not interfere with established means of egress, and are not required to have fire resistance rating.
2. Repairs in kind not involving more than 25 percent of the structure.
3. Enclosures for heating equipment and low pressure steam generating equipment in one-story buildings where the floor area of enclosure does not exceed 400 square feet and the enclosure is non-bearing.

3.3 ELEVATORS, ESCALATORS, MOVING WALKS, DUMBWAITERS AND SPECIAL LIFTS.

3.3.1 Each elevator, escalator, moving walk, dumbwaiter or special lift in any location.

3.3.2 Each workman's elevator used to transport construction workers or other persons in construction or demolition projects.

3.4 HEATING, VENTILATING AND AIR CONDITIONING SYSTEMS.

3.4.1 Each heating system, ventilating system, air conditioning system or combination of these systems in any one building, except as provided in 3.4.2.

3.4.2 Exceptions for existing buildings other than high hazard occupancies:

1. Heating systems not exceeding 250,000 Btu per hour.
2. Ventilating systems consisting of wall, window and roof units not exceeding 5,000 cubic feet per minute capacity.

3. Alterations and additions to existing systems costing less than 40 percent of the value of the installation but not more than \$5,000.00.
4. Window and wall type air conditioning units not exceeding 50,000 Btu per hour individual capacity.

3.5 EXHAUST SYSTEMS, SPRAY AND FINISH SYSTEMS AND DUST COLLECTING SYSTEMS.

3.5.1 Each exhaust system, spray and finish system and dust collecting system or combination of these systems in any one building except as follows:

1. Alterations or additions to existing systems that cost less than 40 percent of the value of the installation but not more than \$1,000.00.

3.6 FIRE ALARM AND SMOKE DETECTION SYSTEMS.

3.6.1 Each fire alarm system, smoke detection system or combination of such systems in any one building except as follows:

1. Emergency evacuation systems.

3.7 FIRE EXTINGUISHING SYSTEMS.

3.7.1 Sprinkler Systems.

1. Each sprinkler system in any one building when such system is required by the Building Code of the Bureau.
2. Each sprinkler system exceeding 50 heads in other than high hazard occupancies.

3.7.2 Standpipe and Hose Systems.

1. Each standpipe and hose system in any one building when such system is required by the Building Code of the Bureau.
2. Each standpipe and hose system installed in unsprinklered buildings.

3.7.3 Carbon Dioxide, Dry Chemical, Foam, and Vaporizing Liquid Extinguishing Systems.

1. Each carbon dioxide, dry chemical, foam and vaporizing liquid extinguishing system or combination of such systems in any one building when such systems are required by the Building Code of the Bureau.

3.8 EGRESS PROVISIONS.

3.8.1 Egress provisions including stairways, fire escapes, stair towers, corridors, passageways, ramps and doors in any one building when not included in other required filings.

3.9 STRUCTURAL PROJECTS.

3.9.1 Structural designs and details in any one building or structure when not included in other required filings.

3.10 SANITATION FACILITIES.

3.10.1 Sanitation facilities in any one building when not included in other required filings except as follows:

1. Dressing rooms and restrooms that accommodate less than 25 people.
2. New toilet and washing facilities that accommodate less than 10 employees when in compliance with regulations for new installations and no structural involvement with non-bearing provisions.
3. Alterations and enlargements to toilet and washing facilities limited to 25 percent of the physical space.

3.11 LIQUEFIED PETROLEUM GAS INSTALLATIONS.

3.11.1 Liquefied petroleum gas installations as required by the regulations of the Bureau.

3.12 FLAMMABLE OR COMBUSTIBLE LIQUIDS.

3.12.1 Storage or handling of flammable liquids in excess of 110 gallons inside any one building or 550 gallons outside a building, or combustible liquids in excess of 550 gallons inside any one building or 1,100 gallons outside of building except as follows:

1. Modification to storage and handling of flammable or combustible liquids inside existing buildings approved for high hazard occupancy provided the modification is made in accordance with the Building Code of the Bureau.
2. Modifications of existing outside container storage that do not affect the quantity distance requirements of the Building Code of the Bureau.

3. Additions to existing outside tank storage that comprise less than 10 percent of the existing quantities, provided they do not exceed 1,500 gallons, and conform to the Building Code of the Bureau.

3.13 HAZARDOUS CHEMICALS.

- 3.13.1 Storage and handling of hazardous chemicals which require separation from exposures, special safety provisions or quantity limitations to protect the life, health and safety of employees.

3.14 COMPRESSED GASES, LIQUEFIED GASES OTHER THAN LIQUEFIED PETROLEUM GASES AND CRYOGENIC FLUIDS.

3.14.1 Compressed Gases.

1. Storage or handling of any flammable, dangerous, noxious, or poisonous compressed gas as required by the Safety Regulation on compressed gases except as follows:
 - 1.1 Gases in approved containers used for laboratory and research purposes.
 - 1.2 Gases in portable containers used for welding and other incidental purposes.
 - 1.3 Gases not classified as dangerous, noxious or poisonous under normal temperatures and pressures used in conjunction with process equipment.

3.14.2 Liquefied Gases other than Liquefied Petroleum Gases.

1. Each liquefied gas installation used for other than research or experimental purposes.

3.14.3 Cryogenic Fluids.

1. Each cryogenic fluid installation.

3.15 CONVEYORS, CABLEWAYS, AND RELATED EQUIPMENT.

- 3.15.1 Conveyors, cableways and related equipment in any one building when such installations have any of the following involvements:
 1. Fully or partially supported by structural members which comprise a part of building structure.

2. Travels over a required passageway with vertical clearance less than 7 feet above the floor.
3. Crosses a required passageway and encroaches upon the normal floor travel conditions.
4. Within 4 feet of any required egress door or opening.
5. Passes through a firewall or fire resistive partition.
6. Serves more than one floor in a multi-story building and pierces a floor of the building.
7. Values of more than \$5,000.00.

3.16 PROJECTS EMBRACED IN MINE SAFETY ACT, EXPLOSIVES ACT, AND FIREWORKS ACT.

- 3.16.1 Projects as required by the Mine Safety Act, the Explosives Act, and the Fireworks Act as administered by the Mine Safety Section of the Bureau.

3.17 ELECTRICAL EQUIPMENT.

- 3.17.1 Polyphase transformer stations inside and outside of buildings or structures.
- 3.17.2 Distribution circuits extending from polyphase transformer stations to and including the central switchboard except as provided in 3.17.4.
- 3.17.3 Distribution circuits exceeding 100 KVA supplying the interior of buildings or structures extending from the utility supply point to the point of use except as provided in 3.17.4.
- 3.17.4 Exception. Distribution circuits from power panels to process equipment and production machinery.

SECTION 4—REQUIRED ELEMENTS OF PLAN FILING SUBMITTALS

4.1 APPLICATION FORM.

- 4.1.1 Application forms furnished by the Bureau shall be filed fully completed in triplicate.
- 4.1.2 Address on Line 2 of application shall include official street number, municipality and county in which facility is located. Additional information to assist in locating the facility in outlying or hidden sites shall be noted.
- 4.1.3 Applications shall not be valid without the name and signature of responsible party authorizing the filing, such as owner or employer, except that signature of the contractor or professional of record may be accepted only when this responsibility is properly delegated with a letter of authorization.
- 4.1.4 Amendments to applications may be filed prior to the issuance of the Certificate of Plan Approval by the Bureau.

4.2 PROJECT DATA FORMS.

- 4.2.1 Project data forms furnished by the Bureau shall be filed fully completed in triplicate. See 5.2.

4.3 PLAN FILING.

- 4.3.1 Plans with essential details shall be filed in triplicate. See 5.2.
- 4.3.2 Additional plan sets may be submitted by applicant without additional fee for Bureau stamp of approval.
- 4.3.3 When projects are of a repetitive nature, such as those involving standard components or previously approved packaged units, standard drawings may be utilized and submitted with future plan filings.
- 4.3.4 Specifications, computations and design data prepared by the designer which is not included on the plans shall be filed in duplicate when required by the Bureau.

4.3.5 When special materials or structural systems require filing under Controlled Material Procedure of the Building Code, the required certification shall be filed in triplicate by the professional of record under proper seal and signature.

4.4 RECORD OF REVISIONS.

4.4.1 All drawings and documents shall include notation of any and all revisions with date of change noted.

4.5 REQUIRED SEAL AND SIGNATURE.

4.5.1 Prints of drawings and documents submitted to the Bureau by architects and professional engineers shall comply with the requirements of the State Board of Architects and the State Board of Professional Engineers and Land Surveyors.

4.5.2 Prints or duplications of drawings and documents shall bear the embossed seal of the professional of record. Original tracings and documents with the printed seal of the professional of record shall not be acceptable on prints and copies of this material even when the seal is clear and legible. A rubber stamp shall not be acceptable under any conditions.

4.5.3 Original tracings and documents may bear the required signature of the professional of record, and copies of these originals with the duplicated signature shall be acceptable for filing. Where the prints of drawings and copies of documents do not include the duplicated signature of the professional of record, each print of drawings and the title page of documents shall bear his signature as well as his embossed seal.

4.6 FILING FEE.

4.6.1 A fee shall be submitted with each filing in accordance with the following schedule. Filing fees shall be payable to the Commissioner of Labor and Industry by check or money order. Cash is not acceptable.

4.6.2 The valuation shall be based on the total cost of labor, material and equipment for the project shown on the plans and specifications.

4.6.3 Fee for valuations up to \$20,000.00 is \$2.00 per thousand, for each building or equipment filing. Valuations in amounts which are fractions of \$1,000.00 shall have the fee determined by the next higher even \$1,000.00 of valuation.

Table for Fees Up to \$20,000.00

APPROVED VALUATION NOT MORE THAN	TOTAL FEE
\$1,000.00	\$2.00
2,000.00	4.00
3,000.00	6.00
4,000.00	8.00
5,000.00	10.00
6,000.00	12.00
7,000.00	14.00
8,000.00	16.00
9,000.00	18.00
10,000.00	20.00
11,000.00	22.00
12,000.00	24.00
13,000.00	26.00
14,000.00	28.00
15,000.00	30.00
16,000.00	32.00
17,000.00	34.00
18,000.00	36.00
19,000.00	38.00
20,000.00	40.00

4.6.4 Fee for valuations from \$20,000.00 to \$540,000.00 is \$40.00 plus 50¢ per thousand above \$20,000.00 for each building or equipment filing.

4.6.5 Fee for valuations above \$540,000.00 is \$300.00 maximum for each building or equipment filing.

4.6.6 TYPICAL EXAMPLE

Estimated Cost—\$65,350.00

For fee determination \$65,350.00 becomes \$66,000.00

For first \$20,000.00 @ \$2.00 per M. Fee is \$40.00

For balance 46,000.00 @ 0.50 per M. Fee is 23.00

Total Value \$66,000.00

Total Fee \$63.00

4.6.7 Fees shall not be refundable after a Certificate of Plan Approval has been issued.

SECTION 5—APPROVAL OF PLANS, ACCEPTANCE OF CONSTRUCTION WORK AND EQUIPMENT INSTALLATIONS

5.1 APPROVAL OF PLANS.

- 5.1.1 Plan filings and other submittals shall be considered approved only when such material is marked with a stamp of approval indicating formal action by the Bureau.

Note: The Bureau does not issue any implied or temporary approvals.

- 5.1.2 Fully executed plan approvals shall include the issuance of a Certificate of Plan Approval by the Bureau subsequent to the granting of the initial plan approval.

Note: In municipalities with a building inspection service, plans for the construction of buildings and structures are also subject to approval by the local authority.

- 5.1.3 Whenever construction conditions, installation requirements, or other events result in construction or installation which is not in substantial conformance with plans approved by the Bureau, revised plans shall be submitted for approval as soon as the extent of the changes is known.

5.2 DISTRIBUTION OF APPROVED PLANS.

- 5.2.1 For filings required in 3.2, one copy of plans and project data forms approved by the Bureau shall be retained for its official record. All other copies shall be returned to the owner or employer.
- 5.2.2 One set of the returned plans and project data forms covered in 5.2.1 shall be kept on the construction site for inspection service by the Bureau representatives during the entire construction period for the buildings or structures.
- 5.2.3 For filings required in 3.3 through 3.17, two copies of plans and project data forms approved by the Bureau shall be retained by the Bureau for its inspection service and official records. All other copies shall be returnable to the owner or employer.

5.3 ACCEPTANCE OF CONSTRUCTION WORK AND EQUIPMENT INSTALLATIONS.

- 5.3.1 Construction work and equipment installations shall be acceptable to the Bureau only after field inspection reports by Bureau representatives indicate that there has been compliance with the approved plans and documents. See 5.1.3.
- 5.3.2 Formal written notice of acceptance of the work or systems shall be issued upon request of the owner or professional of record.

SECTION 6—MODIFIED PROCEDURE FOR EXISTING BUILDING APPROVAL

6.1 CONDITIONS FOR APPROVAL.

6.1.1 Approval may be obtained to adapt existing buildings for places of employment under a modified procedure when the proposal is in accordance with the following:

1. All occupancies are low hazard fire classification.
2. The total floor area of a building used exclusively for a place of employment is not greater than 5,000 square feet.
3. The total floor area of the place of employment in a building of mixed use is not greater than 5,000 square feet and involves less than 35 percent of the total space of the building.
4. The facility complies with all applicable rules and regulations of the Bureau.
5. Approval of facility is recommended by Safety Inspection Section after inspection of premises.

6.2 REQUIRED ELEMENTS FOR APPROVAL.

6.2.1 Application forms shall be submitted in accordance with 4.1.

6.2.2 A fee shall be submitted with each filing in accordance with 4.6.

6.2.3 The following data shall be submitted for each existing building approval:

1. Type of construction of building.
2. Total floor area of building by floors.
3. List of all other occupancies.
4. Designation of the area of building used for manufacturing occupancies specifically identified by floor and section.
5. Statement that the structural members of building are in state of good repair.

APPENDIX A—EXPLANATORY STATEMENTS

This regulation requires the filing of plans in sufficient detail to obtain Bureau approval. This appendix is not intended to be a part of the mandatory requirements of the regulation but a guide line to what constitutes sufficient detail. Listed below are all the details normally required to obtain approval for a large or complex project. For smaller projects or projects with less complication with regard to health and safety of employees, less detail and data is required. Subject matter arrangement corresponds with that of Section 3 of this regulation.

1. BASIC PROVISIONS.

- 1.1 Plans titled, stating name of owner and tenant, location of the work by street number and municipality, classification of project, date of drawing, drawing number and all revisions thereto.
- 1.2 The name, signature and embossed seal of the professional engineer or architect of record on all drawings and required documents.
- 1.3 Plans drawn to scale to produce good legibility.

2. BUILDINGS AND STRUCTURES.

- 2.1 A plot plan showing the proposed work in relation to the property lines and all other structures on the premises which may affect or be affected by the proposed project, and notations of the height, area, and type of construction of each building or structure.
- 2.2 Architectural floor plan showing all spaces, egresses, walls and partitions.
- 2.3 Elevations of all sides as necessary to delineate the project.
- 2.4 Typical sections and construction details.
- 2.5 Wall sections and other details to illustrate unusual conditions.
- 2.6 Foundation plans with description of soil and allowable soil pressure based on investigation by professional of record.

- 2.7 Structural floor plans showing all framing and bracing and the allowable floor loads, including live load, itemized dead loads, equipment and collateral loading.
- 2.8 Roof framing plan showing all openings, allowable roof load, including live load, itemized dead loads, equipment and collateral loading.
- 2.9 Complete designs with sizes, sections and relative locations of the various members. Foundations, floor levels, column centers, and offsets shown in accurate dimensions.
- 2.10 Kinds of materials to be used in beams, girders, trusses, rafters, roof decks, columns, piers, floors and walls indicated.
- 2.11 Data concerning the assumed loads, shears moments and axial forces to be resisted by all members and the connections.
- 2.12 Where joints are to be assembled with high strength bolts and are required to resist shear between the connected parts, drawings are to indicate whether the connections are friction or bearing.
- 2.13 Stress diagram for roof trusses together with truss connections and details.
- 2.14 Computations for structural designs filed in duplicate that may be submitted on separate sheets with the title page signed and sealed by professional of record.
- 2.15 Selections of structural members made from tables in accepted engineering references showing source of data.

3. ELEVATORS, ESCALATORS, MOVING PLATFORMS, DUMBWAITERS AND SPECIAL LIFTS.

- 3.1 Engineering drawings sufficient to identify the machinery and equipment, installation, design data, safeguards and hoistway details or references thereto.
- 3.2 Hoistways, including pits, machine rooms, venting and access provisions. (Usually filed separately under Section 2 of this Appendix)
- 3.3 Location of elevator, type of building, number of stories, landing positions and height of travel.
- 3.4 Design data indicating minimum rated load, speed, rope sizes and strengths, and number of car doors.
- 3.5 Sheave sizes and location, and sheave beam and machine beam reactions.

- 3.6 Interlocks, locks and contacts, and car and counterweight safeties.
- 3.7 Car and counterweight clearances.
- 3.8 Pit and buffer details.
- 3.9 Hoistway venting provisions and ventilation.
- 3.10 Plunger and cylinder details, piping layout, and location and enclosure of machinery for hydraulic elevators.
- 3.11 Workmen's Elevators.
 - 3.11.1 Items covered by 3.1 through 3.10.
 - 3.11.2 One set of appropriate architectural plans.
 - 3.11.3 One set of engineering plans and one set of computations substantiating the adequacy of the hoistway located in a building or structure for which plan approval by the Bureau is not otherwise needed.

4. HEATING, VENTILATING AND AIR CONDITIONING SYSTEMS.

- 4.1 Engineering drawings sufficient to present the location and arrangements of the installation as well as identifying the equipment, piping, ducts and safety devices.
- 4.2 Details covering equipment weight and supports, air intakes and vents, control systems, refrigerant fuel or energy source connections and distribution arrangement.
- 4.3 Design data on heat loss, cooling load as applicable, temperature design conditions, direction of air flow, number of air changes, fresh air quantities supplied per square foot of floor and information to control special environmental contaminants or hazards.
- 4.4 Schedule of equipment including the name of manufacturer, model number, size, capacity, motor and fan data, and other equipment information.
- 4.5 System controls covered by diagram and description.

5. EXHAUST SYSTEMS, SPRAY AND FINISH SYSTEMS, AND DUST COLLECTING SYSTEMS.

- 5.1 Engineering drawings sufficient to present plan views and elevations of the installation.
- 5.2 Plot plan to fix the location of the system in the property or in the area of the building involved.

- 5.3 Buildings and structures adjacent to the systems.
- 5.4 Operations adjacent to systems when systems are within buildings or structures.
- 5.5 Structural details to determine adequacy of supports for equipment and ducts.
- 5.6 Inlet and outlet points of systems showing their proximity to chimneys, adjacent property and other discharge outlets.
- 5.7 Provisions for heating outside fresh air, when necessary.
- 5.8 Duct design including size, material, thickness, arrangement, mains, branches, inlet and discharge velocities, transport and capturing velocities and connections to equipment.
- 5.9 Schedule of equipment listing the name of manufacturer of fan, capacity, model, motor rating and name plate data of other equipment.
- 5.10 Dimensions to indicate overall size and face openings of hoods, booths and rooms.
- 5.11 Materials with thickness for sides (walls), tops (ceilings) and bottoms (floors) of hoods, booths and rooms.
- 5.12 Electrical equipment identification for hoods, booths and rooms.
- 5.13 Overall dimensions with material and thickness noted for collector and filter equipment.
- 5.14 Air inlet and outlet sizes with description of separating provision for collector and filter equipment.
- 5.15 Structural details for collector and filter equipment.
- 5.16 Specific location of collector.
- 5.17 Fire protection measures to be provided.
- 5.18 The methods for protecting the passage of these systems through walls, floors and roofs.
- 5.19 Electrical installations involved in the safety provisions of these systems identified in detail.

6. FIRE ALARM AND SMOKE DETECTION SYSTEMS.

- 6.1 Engineering drawings sufficient to present floor plans, diagrams and wiring systems.

- 6.2 Floor plans showing partitions subdividing the area and required egress locations.
- 6.3 Signal stations and sounding devices with mounting heights above the floor.
- 6.4 Schematic diagrams showing the physical arrangement of the systems with sending stations and sounding devices related to the floor plans and stories of the building.
- 6.5 Wiring drawings with details of the electrical system including the source of power, control panel and separate circuits.
- 6.6 Conductors with rated current and voltage values with protective coverings, such as conduit and armor.
- 6.7 Automatic detection devices for fire alarm systems and smoke detection systems with sufficient data to determine acceptance for the applications incorporated in the designs of the systems.

7. FIRE EXTINGUISHING SYSTEMS.

7.1 Sprinkler Systems.

- 7.1.1 Floor plan of each story or level showing sections divided by partitions and firewalls including blind spaces.
- 7.1.2 Full height building cross section indicating floor, roof and ceiling construction.
- 7.1.3 Plot plan showing building relative to streets and property lines.
- 7.1.4 Size of municipal water mains in street, indicating whether dead end or circulating. If dead end, showing distance to circulating main. Pressure in psi noted.
- 7.1.5 Secondary source of water supply indicated.
- 7.1.6 Type of system, wet or dry, including residual pressure in psi and capacity in gpm.
- 7.1.7 Type of hazard for which system is designed.
- 7.1.8 Number and size of sprinklers per area and design arrangement in square feet per head. Dimensions of all branches and mains in plan and elevation. Size of all piping.
- 7.1.9 Temperature setting of sprinkler heads.

- 7.1.10 Distance of sprinkler deflectors from underside of roof, ceiling or floor.
- 7.1.11 Type of hangers used and distance between hangers with data to indicate adequacy of supporting members.
- 7.1.12 Control gates, checks, drain pipes and test pipes.
- 7.1.13 Hand hose equipment with sizes, lengths and locations.
- 7.1.14 Pit construction and piping details.
- 7.1.15 Underground piping to include weight, size, valves and depth of piping below grade.
- 7.1.16 Additions to existing systems including parts of existing system essential for the proper performance of the additions.

7.2 Standpipe and Hose Systems.

- 7.2.1 The size, location and connections of fixed portion of system.
- 7.2.2 Specifications covering the character of the materials and main features of installation.

7.3 Carbon Dioxide, Dry Chemical, Foam, and Vaporizing Liquid Extinguishing Systems.

- 7.3.1 Sufficient detail to enable the Bureau to evaluate the hazard involved.
- 7.3.2 Details on the materials, location, enclosure, physical limits, and isolation of the hazard.
- 7.3.3 Information and calculations on the amount of extinguishing agent, the location, size and flow rate of nozzles and discharge device so that the adequacy of the quantity, flow rate, and distribution of extinguishing agent can be determined; the location, size, length and arrangement of connected pipe, fittings and hose; and the location and size of the extinguishing agent storage facility.
- 7.3.4 Information pertaining to the location and function of the detection devices, operating devices, auxiliary equipment, and electrical circuitry.
- 7.3.5 Sufficient information to identify properly the apparatus and devices.
- 7.3.6 Explanation of any special features of the system.

8. EGRESS PROVISIONS.

- 8.1 Floor areas and allowed population.
- 8.2 Egress locations with door size, type hardware and swing shown.
- 8.3 Enclosure systems with fire resistive rating of all components for corridors, passageways and stairways.
- 8.4 Stairway design showing incline, platform sizes, handrails, guards, vertical height between landings, and dimensions of step riser, tread and width.
- 8.5 Structural details of stairs, platforms and supports for required capacities.
- 8.6 Pressure and smoke venting provisions in enclosed stairways in detail in accordance with code requirements.
- 8.7 Fire escape designs indicating capacity, locations, general arrangement, materials of construction, structural details, water drainage provisions, dimensions of step riser, tread and width.
- 8.8 Protection of building openings under and adjacent to fire escapes.
- 8.9 All egresses discharging to passageways connecting with public streets or right of way.

9. STRUCTURAL PROJECTS.

- 9.1 Plan to fix location of proposed work with relation to property lines, buildings or structures involved.
- 9.2 Information and data as covered in 2.4 through 2.15 of this Appendix.

10. SANITATION FACILITIES.

- 10.1 Floor layout of room locations with fixtures, compartments and egress doors indicated in scale not less than one-eighth of an inch to a foot.
- 10.2 Cross sections of rooms and compartments to note materials of construction, ceiling heights, physical dimensions, surface finishes and general arrangement.
- 10.3 Ventilation details showing windows in sizes for natural systems or mechanical systems in air supply and exhaust capacities.

11. LIQUEFIED PETROLEUM GAS INSTALLATIONS.

11.1 In accordance with Safety Regulations on liquefied petroleum gas.

12. FLAMMABLE OR COMBUSTIBLE LIQUIDS.

- 12.1 A plot plan to scale to show on site and off site buildings, structures, property lines, occupancies, required site improvements, location of fire extinguishing equipment, elevations, openings and types of construction of buildings or structures, principal egress points, driveways and parking areas, and distances from combustible or flammable materials.
- 12.2 Design and details of foundations or supports for all containers and equipment of the installation. The foundation drawings to include a description of the soil and allowable soil pressure based on investigation of the professional of record. Calculations to accompany drawings.
- 12.3 A schematic, isometric or plan drawing of the entire system to the point of use or safe terminal point. This drawing to include all equipment, parts, piping, pumps, valves, controls, safety devices, material, instrumentation and electrical (power and lighting) systems necessary to evaluate the safe operation of the system.
- 12.4 Details necessary for the safe installation and operation of the system to be noted on the plans or to accompany the plans. Identification to include the items listed in 12.3, size, ratings, capacity, whether approved for material, maximum allowable working pressure, material and manufacturer.
- 12.5 Container outline drawings indicating its dimensions, fittings, connections, capacity, design pressure, code, or accepted engineering standard under which the vessel was made.
- 12.6 Fire protection facilities both in the plant and under the jurisdiction of public fire department.
- 12.7 Electrical equipment, controls and safety devices as required commensurate with the hazard or exposure.
- 12.8 Bonding and grounding of equipment when necessary.
- 12.9 Venting or explosion relief when required by the exposure.
- 12.10 Mechanical ventilation consistent with the maintenance of safe atmospheric conditions.

13. HAZARDOUS CHEMICALS.

- 13.1 Information and data as covered in 12.1 through 12.10 of this Appendix.
- 13.2 Pressure vessel outline drawings to include date of manufacture, New Jersey registry number and the National Board of Pressure Vessels Inspector's number.

14. COMPRESSED GASES, LIQUEFIED GASES OTHER THAN LIQUEFIED PETROLEUM GASES, AND CRYOGENIC FLUIDS.

- 14.1 Information and data as covered in 12.1 through 12.10 of this Appendix.
- 14.2 Container outline drawings to include date of manufacture, New Jersey registry number and the National Board of Pressure Vessels Inspector's number.

15. CONVEYORS, CABLEWAYS, AND RELATED EQUIPMENT.

- 15.1 Plan filings in accordance with Safety Regulation No. 5, Conveyors and Cableways.

16. PROJECTS EMBRACED IN MINE SAFETY ACT, EXPLOSIVES ACT, AND FIREWORKS ACT.

- 16.1 Plan filings in accordance with the regulations of the Mine Safety Act, the Explosives Act and the Fireworks Act.

17. ELECTRICAL EQUIPMENT.

- 17.1 Wiring drawings with details of the electrical system including the source of power, control panels and separate circuits.
- 17.2 Bonding, grounding and lightning protection, when required.
- 17.3 Overcurrent protection.
- 17.4 Electrical equipment in hazardous locations specified by Class and Division.
- 17.5 Emergency electrical system, when required.
- 17.6 Transformer stations.