

Permit by Rule, Chapter 106 - March 29, 2001

30 TAC Chapter 106 - Exemptions from Permitting

**SUBCHAPTER A: GENERAL REQUIREMENTS**

**Section 106.1, 106.2, 106.4, 106.5, 106.6, 106.13**

**Effective March 29, 2001**

**Section 106.1. Purpose.**

This chapter identifies certain types of facilities or changes within facilities which the commission has determined will not make a significant contribution of air contaminants to the atmosphere pursuant to the Texas Health and Safety Code, the Texas Clean Air Act (TCAA), Section 382.057 and Section 382.05196.

Adopted August 9, 2000 Effective September 4, 2000

**Section 106.2. Applicability.**

This chapter applies to certain types of facilities or changes within facilities listed in this chapter where construction is commenced on or after the effective date of the relevant permit by rule.

Adopted August 9, 2000 Effective September 4, 2000

**Section 106.4. Requirements for Permitting by Rule.**

(a) To qualify for a permit by rule, the following general requirements must be met.

(1) Total actual emissions authorized under permit by rule from the facility shall not exceed 250 tons per year (tpy) of carbon monoxide (CO) or nitrogen oxides (NO<sub>x</sub>); or 25 tpy of volatile organic compounds (VOC) or sulfur dioxide (SO<sub>2</sub>) or inhalable particulate matter (PM<sub>10</sub>); or 25 tpy of any other air contaminant except carbon dioxide, water, nitrogen, methane, ethane, hydrogen, and oxygen.

(2) Any facility or group of facilities, which constitutes a new major stationary source, as defined in Section 116.12 of this title (relating to Nonattainment Review Definitions), or any modification which constitutes a major modification, as defined in Section 116.12 of this title, under the new source review requirements of the Federal Clean Air Act (FCAA), Part D (Nonattainment) as amended by the FCAA

Amendments of 1990, and regulations promulgated thereunder, must meet the permitting requirements of Chapter 116, Subchapter B of this title (relating to New Source Review Permits) and cannot qualify for a permit by rule under this chapter. Persons claiming a permit by rule under this chapter should see the requirements of Section 116.150 of this title (relating to New Major Source or Major Modification in Ozone Nonattainment Areas) to ensure that any applicable netting requirements have been satisfied.

(3) Any facility or group of facilities, which constitutes a new major stationary source, as defined in 40 Code of Federal Regulations (CFR) Section 52.21, or any change which constitutes a major modification, as defined in 40 CFR Section 52.21, under the new source review requirements of the FCAA, Part C (Prevention of Significant Deterioration) as amended by the FCAA Amendments of 1990, and regulations promulgated thereunder, must meet the permitting requirements of Chapter 116, Subchapter B of this title and cannot qualify for a permit by rule under this chapter.

(4) Unless at least one facility at an account has been subject to public notification and comment as required in Chapter 116, Subchapter B or Subchapter D of this title (relating to New Source Review Permits or Permit Renewals), total actual emissions from all facilities permitted by rule at an account shall not exceed 250 tpy of CO or NO<sub>x</sub>; or 25 tpy of VOC or SO<sub>2</sub> or PM<sub>10</sub>; or 25 tpy of any other air contaminant except carbon dioxide, water, nitrogen, methane, ethane, hydrogen, and oxygen.

(5) Construction or modification of a facility commenced on or after the effective date of a revision of this section or the effective date of a revision to a specific permit by rule in this chapter must meet the revised requirements to qualify for a permit by rule.

(6) A facility shall comply with all applicable provisions of the FCAA, Section 111 (Federal New Source Performance Standards) and Section 112 (Hazardous Air Pollutants), and the new source review requirements of the FCAA, Part C and Part D and regulations promulgated thereunder.

(7) There are no permits under the same commission account number that contain a condition or conditions precluding the use of a permit by rule under this chapter.

(8) The proposed facility or group of facilities shall obtain allowances for NO<sub>x</sub> if they are subject to Chapter 101, Subchapter H, Division 3 of this title (relating to Mass Emissions Cap and Trade Program).

(b) No person shall circumvent by artificial limitations the requirements of Section 116.110 of this title (relating to Applicability).

(c) The emissions from the facility shall comply with all rules and regulations of the commission and with the intent of the TCAA, including protection of health and property of the public, and all emissions control equipment shall be maintained in good condition and operated properly during operation of the facility.

(d) Facilities permitted by rule under this chapter are not exempted from any permits or registrations required by local air pollution control agencies. Any such requirements must be in accordance with TCAA, Section 382.113 and any other applicable law.  
Adopted March 7, 2001 Effective March 29, 2001

#### **Section 106.5. Public Notice.**

(a) Any registration subject to this chapter that is declared administratively complete on or after September 1, 1999 is subject to the current version of this chapter. Any registration that is declared administratively complete before September 1, 1999 is subject to the December 24, 1998 version of this chapter, and that version of this chapter is continued in effect for this purpose.

(b) Facilities constructed under this chapter that consist of permanently or temporarily located concrete plants that accomplish wet batching, dry batching, or central mixing, or specialty wet batch, concrete, mortar, grout mixing, or pre-cast concrete products, shall conduct public notice of the proposed construction unless exempted from public notice requirements by TCAA, Section 382.058(b). In all cases, public notice shall comply with the requirements under Chapter 39 of this title (relating to Public Notice) and public participation shall be subject to Chapter 55 of this title (relating to Requests for Reconsideration and Contested Case Hearing; Public Comment).  
Adopted September 2, 1999 Effective September 23, 1999

#### **Section 106.6. Registration of Emissions.**

(a) An owner or operator may certify and register the maximum emission rates from facilities exempted under this chapter in order to establish enforceable allowable emission rates which are below the emission limitations in 106.4 of this title (relating to Requirements for Exemption from Permitting).

(b) All representations with regard to construction plans, operating procedures, and maximum emission rates in any certified registration under this section become conditions upon which the exempt facility shall be constructed and operated.

(c) It shall be unlawful for any person to vary from such representation if the change will cause a change in the method of control of emissions, the character of the emissions, or will result in an increase in the discharge of the various emissions, unless the certified registration is first revised.

(d) The certified registration must include documentation of the basis of emission estimates and a written statement by the registrant certifying that the maximum emission rates listed on the registration reflect the reasonably anticipated maximums for operation of the facility.

(e) The certified registration shall be maintained on-site and be provided immediately upon request by representatives of the Texas Natural Resource Conservation Commission or any air pollution control agency having jurisdiction. If the plant site is unmanned, the regional manager may authorize an alternative site to maintain this documentation. Copies of the certified registration shall be included in applications for permits subject to review under the undesignated heads in Chapter 116, 30 TAC 106 - Subchapter B of this title (relating to New Source Review Permits).  
Adopted August 9, 2000 Effective September 4, 2000

#### **Section 106.13. References to Standard Exemptions and Exemptions from Permitting.**

The authorizations formerly known as standard exemptions and exemptions from permitting are referred to as permits by rule in this title. Types of facilities and changes within facilities authorized by those standard exemptions and exemptions from permitting continue to be authorized unless modifications or changes to those facilities has caused them to no longer meet the conditions of the former standard exemption or exemption from permitting and the general requirements of this subchapter.  
Adopted August 9, 2000 Effective September 4, 2000

### **SUBCHAPTER C : DOMESTIC AND COMFORT HEATING AND COOLING**

#### **Section 106.101 - 106.103**

**Effective September 4, 2000**

#### **Section 106.101. Domestic Use Facilities.**

Any facility constructed and operated at a domestic residence for domestic use is permitted by rule.  
Adopted August 9, 2000 Effective September 4, 2000

#### **Section 106.102. Comfort Heating.**

This section permits by rule combustion units designed and used exclusively for comfort heating purposes employing liquid petroleum gas, natural gas, solid wood, or distillate fuel oil. Distillate fuel oil includes diesel fuel, kerosene, and heating oil Grades 4 and lighter.

Distillate fuel oil does not include heavier residual oils such as Grades 5 and 6 fuel oil. Combustion of bark chips, sawdust, wood chips, treated wood, or wood contaminated with chemicals is not included. Used oil that has not been mixed with hazardous waste may be used as fuel in space heaters provided that:

- (1) the space heater or combination of space heaters at the same account have a maximum capacity of 1.0 Million Btu per hour (MMBtu/hr) provided each individual heater is not greater than 0.5 MMBtu/hr;
  - (2) the combustion gases from the heater(s) are vented to the ambient air in accordance with the following requirements:
    - (A) through an unobstructed vertical vent; or
    - (B) for a stack with a cap;
      - (i) for a flat roof, through a minimum of a three-foot stack; or
      - (ii) for a sloped roof, through a stack that is three feet higher than a point extending ten feet horizontally from the roof; and
  - (3) the heater(s) burns only used oil that the owner or operator generates on-site or used oil received from household do-it-yourself used oil generators.
- Adopted August 9, 2000 Effective September 4, 2000

**Section 106.103. Air Conditioning and Ventilation Systems.**

Comfort air conditioning systems or comfort ventilating systems which are not used to remove air contaminants generated by or released from specific units of equipment are permitted by rule.

Adopted August 9, 2000 Effective September 4, 2000

**SUBCHAPTER D : ANALYSIS AND TESTING**

**Section 106.121 - 106.124**

**Effective September 4, 2000**

**Section 106.121. Hydraulic and Hydrostatic Testing Equipment.**

Equipment used for hydraulic or hydrostatic testing is permitted by rule.

Adopted August 9, 2000 Effective September 4, 2000

**Section 106.122. Bench Scale Laboratory Equipment.**

Bench scale laboratory equipment and laboratory equipment used exclusively for chemical and physical analyses are permitted by rule.

Adopted August 9, 2000 Effective September 4, 2000

**Section 106.123. Vacuum-producing Devices for Laboratory Use.**

Vacuum-producing devices used in laboratory operations are permitted by rule.

Adopted August 9, 2000 Effective September 4, 2000

**Section 106.124. Pilot Plants.**

Any new or modified pilot plant is permitted by rule, provided the following conditions of this section are met.

- (1) For purposes of this section, a pilot plant is defined as a facility that is constructed and operated only for one of the following purposes:
  - (A) testing the manufacturing or marketing potential of a proposed product; or
  - (B) defining the design of a larger plant; or
  - (C) studying the behavior of an existing plant through modeling in the pilot plant.
- (2) The sum of product, co-product, and by-product production design capacity from the pilot plant shall not exceed five million pounds per year.
- (3) Operation of the pilot plant for purposes of testing market potential of a product, co-product, or by-product may not occur beyond the end of the fifth calendar year from the year of initial production (year 1) of the specific product, co-product, or by-product, unless a permit is obtained under Section 116.110 of this title (relating to Applicability). This five-year limit on pilot plant activity applies to equipment devoted to development of one specific product or process; therefore, that equipment can be subsequently used for development of other process(es) or product(s), setting a new time limit for its use.

(4) The pilot plant shall be located at least 500 feet from any recreational area or residence or other structure not occupied or used solely by the owner of the facility or the owner of the property upon which the facility is located.

(5) New or increased emissions shall not exceed 6.0 pounds per hour (lb/hr) and ten tons per year in total (including fugitives) and shall not exceed 1.0 lb/hr at any single stack (excluding fugitives). In addition, total new or increased emissions of each specific chemical shall not exceed the most stringent applicable requirement of the following:

(A) the chemical-specific emission limits determined by Section 106.262(3) of this title (relating to Facilities (Emission and Distance Limitations));

(B) the chemical-specific emission limits determined by Section 106.261(4) of this title (relating to Facilities (Emission Limitations)); or

(C) 6.0 lb/hr for any simple asphyxiant as defined by the American Conference of Governmental Industrial Hygienists.  
Adopted August 9, 2000 Effective September 4, 2000

#### **SUBCHAPTER E: AGGREGATE AND PAVEMENT**

##### **Section 106.141 - 106.150**

**Effective September 4, 2000**

##### **Section 106.141. Batch Mixers.**

Batch mixers with rated capacity of five cubic feet or less for mixing cement, sand, aggregate, additives, and/or water or similar materials are permitted by rule.

Adopted August 9, 2000 Effective September 4, 2000

##### **Section 106.142. Rock Crushers.**

Any rock crusher with a maximum rated capacity of 200 tons per hour or less that operates according to the following conditions of this section is permitted by rule:

(1) operating schedule of the plant does not exceed 1,600 hours per year;

(2) all in-plant haul roads and stockpiles are sprinkled with water and/or chemicals as necessary to achieve maximum control of dust emissions;

(3) water sprays are located at all belt transfer points, shaker screens, and inlet and outlet of all crushers and used as necessary to achieve maximum control of dust emissions;

(4) the plant is located at least 1/2 mile from any recreational area or residence or other structure not occupied or used solely by the owner of the facility or the owner of the property upon which the facility is located;

(5) the plant is located at least 1,000 feet from any state or federal highway not currently under maintenance or construction;

(6) before construction of the facility begins, written site approval is received from the executive director and the facility shall be registered with the commission using Form PI-7, including a current Table 17.

Adopted August 9, 2000 Effective September 4, 2000

##### **Section 106.143. Wet Sand and Gravel Production.**

Any wet sand and gravel production facility that obtains its material from subterranean and subaqueous beds where the deposits of sand and gravel are consolidated granular materials resulting from natural disintegration of rock and stone and whose production rate is 500 tons per hour or less is permitted by rule. All permanent in-plant roads shall be paved and cleaned as necessary or watered as necessary to achieve maximum control of dust emissions.

Adopted August 9, 2000 Effective September 4, 2000

##### **Section 106.144. Bulk Mineral Handling.**

All bulk mineral product (except asbestos) handling facilities that operate in compliance with the following conditions of this section are permitted by rule.

(1) All material shall be transported in a closed conveying system and all exhaust air to the atmosphere shall be vented through a fabric filter having a maximum filtering velocity of 4.0 feet per minute (ft/min) with mechanical cleaning or 7.0 ft/min with automatic air cleaning.

(2) All permanent in-plant roads and vehicle work areas shall be watered, treated with dust-suppressant chemicals, oiled, or paved and cleaned as necessary to achieve maximum control of dust emissions.

(3) The facility (including associated stationary equipment and stockpiles) shall be located at least 300 feet from any recreational area, school, residence, or other structure not occupied or used solely by the owner of the property upon which the facility is located.

(4) Before construction begins, written site approval must be received from the executive director and the facility shall be registered with the commission's Office of Permitting, Remediation, and Registration in Austin using Form PI-7.  
Adopted August 9, 2000 Effective September 4, 2000

**Section 106.145. Bulk Sand Handling.**

All oil well servicing bulk sand handling facilities that operate according to the following conditions of this section are permitted by rule.

- (1) All sand shall be prewashed.
- (2) All handling of sand shall be mechanical or, if conveyed pneumatically, the conveying air shall be vented to the atmosphere through a fabric filter(s) having a maximum filtering velocity of 4.0 feet per minute (ft/min) with mechanical cleaning or 7.0 ft/min with air cleaning.
- (3) All permanent in-plant roads and vehicle work areas shall be watered, treated with dust- suppressant chemicals, oiled, or paved and cleaned as necessary to achieve maximum control of dust emissions.
- (4) The facility (including associated stationary equipment and stockpiles) shall be located at least 300 feet from any recreational area, school, residence, or other structure not occupied or used solely by the owner of the property upon which the facility is located.
- (5) Before construction begins, the owner or operator shall file with the commission's Office of Permitting, Remediation, and Registration in Austin a completed Form PI-7 and supporting documentation demonstrating that all of the requirements of the permit by rule will be met.

Adopted August 9, 2000 Effective September 4, 2000

**Section 106.146. Soil Stabilization Plants.**

Any soil stabilization facility that operates according to the following conditions of this section is permitted by rule.

- (1) All bulk storage silos shall be equipped with fabric filter(s) having a maximum filtering velocity of 4.0 feet per minute (ft/min) with mechanical cleaning or 7.0 ft/min with automatic air cleaning.
- (2) All conveyor belts transferring dry material to the pug mill shall be top covered.
- (3) The pug mill used to mix the materials shall be covered.
- (4) All permanent in-plant roads and vehicle work areas shall be watered, oiled, or paved and cleaned as necessary to achieve maximum control of dust emissions.
- (5) An audible and/or visible mechanism shall be installed on the storage silo(s) to notify operators that the silo is full.
- (6) All stockpiles shall be sprinkled with water and/or chemicals as necessary to achieve maximum control of dust emissions.
- (7) When emulsified asphalt is used as the stabilizing admixture, the emulsified asphalt shall be stored in a container used exclusively for emulsified asphalt storage. Transfer of emulsified asphalt from the storage tank to the pug mill shall be accomplished by means of a pump and metering device.
- (8) Before construction of the facility begins, written site approval shall be received from the executive director and the facility shall be registered with the commission's Office of Permitting, Remediating, and Registration in Austin using Form PI-7.
- (9) The facility shall be located at least 300 feet from any recreational area, school, residence, or other structure not occupied or used solely by the owner of the facility or the owner of the property upon which the facility is located. This distance limitation does not apply to structures within the boundaries of the project for which the facility is to process stabilized soil when the facility is located on or contiguous to the project.

Adopted August 9, 2000 Effective September 4, 2000

**Section 106.147. Asphalt Concrete Plants.**

Any asphalt concrete facility that complies with 40 Code of Federal Regulations Part 60, Subparts A and I and operates according to the following conditions of this section is exempt.

- (1) A New Source Performance Standard pretest meeting concerning the required stack sampling shall be held with commission personnel before the required tests are performed. Air contaminants to be tested for will be determined at the pretest meeting. Stack sampling requirements will not be required by the executive director, provided that:

(A) the applicant submits adequate documentation (including copies of previous test results of the model hot mix plant proposed, including a description of the aggregate materials used in previous tests) demonstrating compliance with the 0.04 grain per dry standard cubic feet allowable;

(B) visible emissions from the exhaust stack are documented at 5.0% or less opacity averaged over six consecutive minutes.

(2) Fuel for dryers shall be sweet natural gas as defined in Chapter 101 of this title (relating to General Rules) or liquid petroleum gas, diesel, or fuel oil with a maximum sulfur content of 1.5%.

(3) All aggregate stockpiles shall be sprinkled with water and/or chemicals as necessary to achieve maximum control of dust emissions.

(4) All permanent in-plant roads shall be watered, oiled, or paved and cleaned as necessary to achieve maximum control of dust emissions.

(5) The plant is located at least 1/2 mile from any recreational area or residence or other structure not occupied or used solely by the owner of the facility or the owner of the property upon which the facility is located.

(6) Before construction of the facility begins, written site approval shall be received from the executive director and the facility shall be registered with the commission's Office of Air Quality in Austin using Form PI-7, including a current Table 22.

(7) Emissions of particulate matter, sulfur dioxide, or organic compounds shall not exceed 25 tons per year each. Adopted August 9, 2000 Effective September 4, 2000

#### **Section 106.148. Material Unloading.**

Railcar or truck unloading of wet sand, gravel, aggregate, coal, lignite, and scrap iron or scrap steel (but not including metal ores, metal oxides, battery parts, or fine dry materials) into trucks or other railcars for transportation to other locations is permitted by rule, provided the following conditions of this section are met.

(1) Bulk materials shall not be stored on-site.

(2) Water sprays or the equivalent must be installed and used as necessary at material handling operations to achieve maximum control of dust emissions.

(3) All permanent in-plant roads and vehicle work areas shall be watered, treated with dust-suppressant chemicals, oiled, or paved and cleaned as necessary to achieve maximum control of dust emissions.  
Adopted August 9, 2000 Effective September 4, 2000

#### **Section 106.149. Sand and Gravel Processing.**

Any sand and gravel production facility that obtains its material from deposits of sand and gravel consisting of natural disintegration of rock and stone is permitted by rule, provided that the following conditions of this section are satisfied:

(1) crushing or breaking operations are not used;

(2) no blasting is conducted to obtain the material;

(3) water sprays are installed on the plant at all screens and transfer points and used as necessary to achieve maximum control of dust emissions;

(4) the area where the sand and gravel is obtained shall be sprinkled with water as necessary to achieve maximum control of dust emissions before the material is removed and transported for processing;

(5) all in-plant roads shall be paved and cleaned or sprinkled with water and/or chemicals as necessary to achieve maximum control of dust emissions;

(6) the plant is located at least 1/4 mile from any recreational area or residence or other structure not occupied or used solely by the owner of the facility or the owner of the property upon which the facility is located;

(7) the production rate is 50 tons per hour or less.  
Adopted August 9, 2000 Effective September 4, 2000

#### **Section 106.150. Asphalt Silos.**

Any silo used to store hot mix asphalt or asphalt emulsion concrete mixtures which meets the following conditions of this section is permitted by rule:

- (1) no cutback asphalt mixtures are stored;
  - (2) for silos on location for more than six months, all truck traffic areas are paved and cleaned as necessary to achieve maximum control of dust emissions and for those silos on location for six months or less, the truck traffic areas are sprinkled with water and/or chemicals as necessary to achieve maximum control of dust emissions;
  - (3) fuel used for heating the silo is sweet natural gas as defined in Chapter 101 of this title (relating to General Air Quality Rules) or liquid petroleum gas or first run refinery grade diesel or Number 2 fuel oil that is not a blend containing waste oils or solvents and that contains less than 0.5% by weight sulfur;
  - (4) the silo(s) is located at least 300 feet from any recreational area, school, residence, or other structure not occupied or used solely by the owner of the property upon which the silo(s) is located;
  - (5) before construction begins, written site approval is received from the executive director and the facility is registered with the commission's Office of Permitting, Remediation, and Registration in Austin using Form PI-7.
- Adopted August 9, 2000 Effective September 4, 2000

## **SUBCHAPTER F : ANIMAL CONFINEMENT**

### **Section 106.161 - 106.163**

**Effective September 4, 2000**

#### **Section 106.161. Animal Feeding Operations.**

Animal feeding operations which confine animals in numbers specified in paragraph (1) of this section and any associated on-site feed handling and/or feed milling operations which satisfy the following conditions of this section are permitted by rule.

(1) Operations designed to feed no more than:

- (A) 1,000 cattle;
- (B) 1,000 horses and mules;
- (C) 2,500 swine weighing more than 55 pounds;
- (D) 10,000 sheep and goats; or
- (E) 1,000 animal equivalents.

(2) Where a combination of cattle, swine weighing over 55 pounds, horses and mules, or sheep and goats are present, animal equivalents shall be calculated by adding the following numbers.

$$\begin{aligned} &1.0 \times (\text{number of cattle}) \\ &+ 0.4 \times (\text{number of swine weighing over 55 pounds}) \\ &+ 2.0 \times (\text{number of horses and mules}) \\ &+ 0.1 \times (\text{number of sheep and goats}) \\ \hline \hline \end{aligned}$$

Total = animal equivalents.

(3) In determining the number of animals or animal equivalents, mothers with nursing young shall be counted as a single animal while the young are nursing. Once removed from the mother, the young animals shall be counted when determining the number of animals or animal equivalents. Swine weighing 55 pounds or less shall be allowed, but not counted in determining the number of animals or animal equivalents. Animals on pasture are not considered as part of the animal feeding operation.

(4) Operations designed to feed no more than 55,000 turkeys or other birds, excluding ducks, concentrated on open lots.

(5) Operations designed to feed no more than 5,000 ducks.

(6) All caged poultry operations designed to feed no more than 30,000 birds.

(7) All housed poultry operations when wood shavings or similar material is used as litter.

(8) All caged poultry operations designed to feed more than 30,000 birds when a dry manure storage and handling system is used and when located at least 1/4 mile from any recreational area or residence or other structure not occupied or used solely by the owner of the egg laying or caged pullet operation. Before construction of the caged laying and caged pullet operations begins, written site approval shall be received from the executive director and the facility shall be registered with the commission's Office of Permitting, Remediation, and Registration using Form PI-7.

(9) For the associated on-site feed handling and/or feed milling operations to be covered under this section, no products from the feed handling and or feed milling shall be shipped off-site.  
Adopted August 9, 2000 Effective September 4, 2000

**Section 106.162. Livestock Auction Facilities.**

Livestock auction sales facilities are permitted by rule, provided the following conditions of this section are satisfied.

- (1) All holding pens shall be covered by a roof.
- (2) All traffic areas shall be paved and cleaned, oiled, or sprinkled with water and/or chemicals as necessary to achieve maximum control of dust emissions.
- (3) Manure shall be cleaned from pens as necessary to prevent an odor nuisance and disposed of in a manner which will not create a nuisance.
- (4) Dead animals shall be properly disposed of within 24 hours after death.
- (5) The facility shall be located at least 600 feet from any recreational area or residence or other structure not occupied or used solely by the owner or operator of this facility.
- (6) Before construction of the facility begins, written site approval shall be received from the executive director and the facility shall be registered with the commission's Office of Permitting, Remediation, and Registration in Austin using Form PI-7.  
Adopted August 9, 2000 Effective September 4, 2000

**Section 106.163. Race Tracks, Zoos, and Animal Shelters.**

All animal racing facilities, domestic animal shelters, zoos, and their associated confinement areas, stables, feeding areas, and waste collection and treatment facilities are permitted by rule. Incineration units are not authorized under this section.  
Adopted August 9, 2000 Effective September 4, 2000

**SUBCHAPTER G: COMBUSTION**

**Section 106.181 - 106.183  
Effective September 4, 2000**

**Section 106.181. Used-Oil Combustion Units.**

Small boilers and heaters burning used oil that has not been mixed with hazardous waste are permitted by rule provided that all of the following conditions are met:

- (1) the combustion unit or combination of combustion units at the same account have a maximum capacity of 1.0 million Btu per hour (MMBtu/hr) and each individual combustion unit is not greater than 0.5 MMBtu/hr;
- (2) the combustion gases from the combustion unit(s) are vented to the ambient air in accordance with the following requirements:
  - (A) through an unobstructed vent; or
  - (B) through a vertical vent with a cap; and
    - (i) a flat roof, through a minimum of a three-foot stack; or
    - (ii) a sloped roof, through a stack that is at least three feet higher than the highest point on the roof or three feet higher than a point extending ten feet horizontally from the roof; and
- (3) the combustion unit(s) burns only used oil the owner or operator generates on-site or used oil received from household do-it-yourself used oil generators.  
Adopted August 9, 2000 Effective September 4, 2000

**Section 106.182. Ceramic Kilns.**

Kilns used for firing ceramic ware, heated exclusively by natural gas, liquid petroleum gas, electricity, or any combination thereof are permitted by rule where the conditions of this section are met:

- (1) the total heat input is ten million British thermal units per hour or less; and
- (2) there are no emissions of lead, beryllium, or fluorides, and emissions of sulfur dioxide and particulate matter from both the material being fired and fuel burned do not exceed 25 tons per year of either air contaminant.  
Adopted August 9, 2000 Effective September 4, 2000



**Section 106.183. Boilers, Heaters, and Other Combustion Devices.**

Boilers, heaters, drying or curing ovens, furnaces, or other combustion units, but not including stationary internal combustion engines or turbines are permitted by rule, provided that the following conditions are met.

- (1) The only emissions shall be products of combustion of the fuel.
  - (2) The maximum heat input shall be 40 million British thermal unit (Btu) per hour with the fuel being:
    - (A) sweet natural gas;
    - (B) liquid petroleum gas;
    - (C) fuel gas containing no more than 0.1 grain of total sulfur compounds, calculated as sulfur, per dry standard cubic foot; or
    - (D) combinations of the fuels in subparagraphs (A) - (C) of this paragraph.
  - (3) Distillate fuel oil shall be fired as a backup fuel only. Firing shall be limited to 720 hours per year. The fuel oil shall contain less than 0.3% sulfur by weight and shall not be blended with waste oils or solvents.
  - (4) All gas fired heaters and boilers with a heat input greater than ten million Btu per hour (higher heating value) shall be designed such that the emissions of nitrogen oxides shall not exceed 0.1 pounds per million Btu heat input.
  - (5) Records of hours of fuel oil firing and fuel oil purchases shall be maintained on-site on a two-year rolling retention period and made available upon request to the commission or any local air pollution control agency having jurisdiction.
- Adopted August 9, 2000 Effective September 4, 2000

**SUBCHAPTER H : CONCRETE BATCH PLANTS**

**Section 106.201 - 106.203**

**Effective September 4, 2000**

**Section 106.201 Permanent and Temporary Concrete Batch Plants**

Any permanently or temporarily located concrete plant that accomplishes wet batching, dry batching, or central mixing, and operates in compliance with the following conditions of this section is exempt. For purposes of this section, a temporarily located concrete facility is one that occupies a designated site for not more than 180 consecutive days or supplies concrete for a single public works project or for the same contractor for related project segments, but not other unrelated projects.

- (1) All stockpiles shall be sprinkled with water and/or dust-suppressant chemicals as necessary to achieve maximum control of dust emissions. The stockpile sprinkler system shall be operable at all times.
- (2) A mechanism shall be installed on each bulk storage silo to warn operators when the silo is full.
- (3) All permanent in-plant roads (batch truck and material delivery truck roads) shall be paved with a cohesive hard surface that can be repeatedly swept, washed, and maintained intact and cleaned as necessary to achieve maximum control of dust emissions. All batch trucks and material delivery trucks shall remain on a paved surface when entering, conducting primary functions, and leaving the property. Other areas on the property subject to vehicle traffic shall be watered, treated with dust-suppressant chemicals, oiled, or paved and cleaned as necessary to achieve maximum control of dust emissions.
- (4) The cement weigh hopper shall be vented to its own fabric filter or the central collection system specified in paragraph (6) of this section.
- (5) All bulk storage silos shall be equipped with fabric filter(s) having a maximum filtering velocity of 4.0 feet per minute (ft/min) with mechanical cleaning or 7.0 ft/min with automatic air cleaning or shall be vented to the central collection system specified in paragraph (6) of this section.
- (6) The dust emissions at the batch drop point (drum feed for central mix plants) shall be controlled by a shroud or other pickup device delivering a minimum of 4,000 actual cubic feet per minute of air to a fabric filter with automatic air cleaning and a 7.0 ft/min maximum filtering velocity, or automatic sequenced mechanical cleaning (not manually activated) and a 5.25 ft/min maximum filtering velocity.
- (7) Unless the facility is to be located temporarily in or contiguous to the right-of-way of a public works project, public notice and opportunity for public hearing, as specified in Section 106.5 of this title (relating to Public Notice), must be published and documentation provided to the commission. A temporarily located plant exempt from public notice may provide concrete for the same

contractor for project segments with the same governmental entity, but may not produce concrete for other unrelated projects or other governmental entities.

(8) Spillage of cement and fly ash used in the batch shall be cleaned up immediately and contained or dampened so that dust emissions from wind erosion and/or vehicle traffic are minimized.

(9) All open-bodied vehicles transporting material from a dry batch plant to the paving mixer(s) shall be loaded with a final layer of wet sand and/or the truck shall be covered with a tarp to reduce the emissions of dust to the minimum level possible under existing conditions.

(10) Before construction of the facility begins, written site approval shall be received from the executive director and the facility shall be registered with the commission's Office of Air Quality in Austin using Form PI-7, including a current Table 20.  
Adopted August 9, 2000 Effective September 4, 2000

#### **Section 106.202 Temporary Concrete Batch Plants**

Any temporarily located concrete facility that accomplishes wet batching, dry batching, or central mixing and operates according to the following conditions of this section is exempt. For purposes of this section, a temporarily located concrete facility is one that occupies a designated site for not more than 180 consecutive days or supplies concrete for a single public works project or for the same contractor for related project segments, but not other unrelated projects.

(1) All bulk storage silos, including auxiliary bulk storage trailers (pigs), shall be equipped with fabric filter(s) having a maximum filtering velocity of 4.0 feet per minute (ft/min) with mechanical cleaning or 7.0 ft/min with automatic air cleaning or are vented to the central collection system specified in paragraph (6) of this section.

(2) The cement weigh hopper shall be vented to a control device which eliminates visible emissions or vented inside the charging hopper of the transit mix truck if controlled by a suction shroud.

(3) A visible and/or audible warning mechanism shall be installed on each silo or auxiliary bulk storage trailer to warn operators that the silo or trailer (pig) is full.

(4) All in-plant roads (batch truck and material delivery truck roads) and areas between stockpiles and conveyor hoppers shall be watered, treated with dust-suppressant chemicals, oiled, or paved with a cohesive hard surface that can be repeatedly swept, washed, and maintained intact and cleaned as necessary to achieve maximum control of dust emissions.

(5) All stockpiles shall be sprinkled with water and/or dust-suppressant chemicals as necessary to achieve maximum control of dust emissions. An operable stockpile watering system shall be on-site at all times.

(6) Loading of rotary mix trucks at wet batch plants shall be through a discharge spout equipped with a water fog ring having low-velocity fog nozzles spaced to create a continuous fog curtain that controls dust emissions, or through a suction shroud which is vented to a central collection system with a minimum of 4,000 actual cubic feet per minute (acfm) of air to a fabric filter with air cleaning and a 7.0 ft/min maximum filtering velocity or automatic sequenced mechanical cleaning and a 5.25 ft/min maximum filtering velocity.

(7) Dust emissions from the loading of open-bodied trucks at the batch drop point of dry batch plants, or dust emissions from the drum feed for central mix plants shall be controlled by a suction shroud which is vented to a central collection system with a minimum of 4,000 acfm of air to a fabric filter with air cleaning and a 7.0 ft/min maximum filtering velocity or automatic sequenced mechanical cleaning (not manually activated) and a 5.25 ft/min maximum filtering velocity. Suction shrouds at dry batch plants shall be used for closure over the receiving vehicle compartment or bed.

(8) Spillage of cement and fly ash used in the batch shall be cleaned up immediately and contained or dampened so that dust emissions from wind erosion and/or vehicle traffic are minimized.

(9) The facility (including associated stationary equipment and stockpiles) shall be located at least 300 feet from any recreational area, school, residence, or other structure not occupied or used solely by the owner of the property upon which the facility is located. This distance limitation does not apply to structures within the boundaries of the project for which the facility is to pour concrete when the facility is located on or contiguous to the project.

(10) Unless the facility is to be located temporarily in or contiguous to the right-of-way of a public works project, public notice and opportunity for public hearing, as specified in Section 106.5 of this title (relating to Public Notice), must be published and documentation provided to the commission. The temporarily located plant exempt from public notice may provide concrete for the same contractor for project segments with the same governmental entity, but may not produce concrete for other unrelated projects or other governmental entities.

(11) All open-bodied vehicles transporting material from a dry batch plant to the paving mixer(s) shall be loaded with a final layer of wet sand and/or the truck shall be covered with a tarp to reduce the emissions of dust to the minimum level possible under existing conditions.

(12) Before construction of the facility begins, written site approval shall be received from the executive director and the facility shall be registered with the commission's Office of Air Quality in Austin using Form PI-7, including a current Table 20. The current Table 20 shall be on file at each plant site.

(13) The appropriate regional office and local air pollution agency shall be notified when the plant changes location and prior to starting operations at each plant site.

Adopted August 9, 2000 Effective September 4, 2000

#### **Section 106.203 Specialty Batch Plants**

Any specialty wet batch, concrete, mortar, grout mixing, or pre-cast concrete products plant that operates according to the following conditions of this section is exempt.

(1) Plant capacity shall not exceed 30 cubic yards per hour with mixer size not to exceed 2.5 cubic yards.

(2) All stockpiles are sprinkled with water and/or chemicals as necessary to achieve maximum control of dust emissions.

(3) Dust emissions at the batch mixer feed shall be controlled by a water spray device which eliminates visible emissions, or a pickup device delivering air to a fabric filter with automatic air cleaning and a 7.0 feet per minute (ft/min) maximum filtering velocity, or automatic sequenced mechanical cleaning and a 5.25 ft/min maximum filtering velocity, or the entire mixing operation is conducted inside the enclosed process building such that no visible emissions from the building occur during mixing activities, or the batch mixer feed is enclosed such that no visible emissions occur.

(4) Fabric filter(s) with a maximum filtering velocity of 4.0 ft/min with an acceptable method of cleaning shall be installed on each storage silo or the silo shall be vented to the control collection system.

(5) A visible and/or audible warning mechanism shall be installed on each silo for warning operators that the silo is full, so that it will not be overloaded at any time.

(6) All permanent in-plant roads (batch truck and material delivery truck roads) are oiled or paved and cleaned as necessary to achieve maximum control of dust emissions. Other areas on the property subject to vehicle traffic shall be oiled or sprinkled with water as necessary to achieve maximum control of dust emissions.

(7) The transfer of cement from the storage silo(s) shall be handled through closed conveying systems with no visible fugitive emissions.

(8) The cement weigh hopper shall be vented to a control device which eliminates visible emissions, or shall be vented inside the batch mixer.

(9) Good housekeeping measures shall be maintained at all times.

(10) Before construction of the facility begins, written site approval is received from the executive director and the facility shall be registered with the commission's Office of Air Quality in Austin using Form PI-7, including a current Table 20.

(11) Unless the plant is to be located temporarily in the right-of-way of a public works project, public notice and opportunity for public hearing, as specified in Section 106.5 of this title (relating to Public Notice), has been published and documentation thereof has been provided to the commission.

Adopted August 9, 2000 Effective September 4, 2000

#### **SUBCHAPTER I : MANUFACTURING Section 106.221, 106.223 - 106.229, 106.231 Effective September 4, 2000**

##### **Section 106.221. Extrusion Presses.**

Presses used exclusively for extruding metals, minerals, plastics, rubber, or wood are permitted by rule except where halogenated carbon compounds or hydrocarbon solvents are used as foaming agents. Presses used for extruding scrap materials or reclaiming scrap materials are not permitted by rule.

Adopted August 9, 2000 Effective September 4, 2000

**Section 106.223. Saw Mills.**

Sawmills processing no more than 25 million board feet, green lumber tally of wood per year, in which no mechanical drying of lumber is performed and which meet all of the following provisions of this section are permitted by rule.

- (1) The mill shall be located at least 500 feet from any recreational area, school, residence, or other structure not occupied or used solely by the owner of the facility or the owner of the property upon which the facility is located.
  - (2) All in-plant roads and vehicle work areas shall be watered, oiled, or paved and cleaned as necessary to achieve maximum control of dust emissions.
  - (3) All sawmill residues (sawdust, shavings, chips, bark) from debarking, planing, saw areas, etc., shall be removed or contained to minimize fugitive particulate emissions. Spillage of wood residues shall be cleaned up as soon as possible and contained such that dust emissions from wind erosion and/or vehicle traffic are minimized.
  - (4) All sawmill residues shall be mechanically conveyed by belts and/or drag chains to a collection area for disposal or if a pneumatic collection system is utilized, the air must exhaust to a fabric or cartridge filter with air cleaning and a filtering velocity no greater than 7.0 ft/min (air-to-cloth ratio = 7.0), or automatic sequenced mechanical cleaning and a filtering velocity no greater than 5.0 ft/min (air-to-cloth ratio = 5.0), or a system found to be equivalent by the appropriate regional office.
  - (5) Disposal of collected sawmill residues must be accomplished in a manner which will prevent the material from becoming airborne. Disposal by means of burning is prohibited unless it is conducted in an approved incinerator.
  - (6) All open-bodied vehicles transporting sawmill residues (sawdust, shavings, chips, bark) shall be covered with a tarp to achieve maximum control of particulate emissions.
  - (7) There will be no visible emissions at the property line from the facility or equipment.
  - (8) Before construction of the facility begins, written site approval must be received from the director of the commission's Office of Permitting, Remediation, and Registration in Austin and the facility shall be registered with that office using Form PI-7.
- Adopted August 9, 2000 Effective September 4, 2000

**Section 106.224. Aerospace Equipment and Parts Manufacturing.**

Any new aerospace equipment and parts manufacturing plant, or physical and operational change to an existing aerospace equipment and parts manufacturing plant are permitted by rule, provided that the following conditions of this section are satisfied.

- (1) For purposes of this section, aerospace equipment and parts manufacturing plant means the entire operation on the property which engages in the fabrication or assembly of parts, tools, or completed components of any aircraft, helicopter, dirigible, balloon, missile, drone, rocket, or space vehicle. This permit by rule will not include composite aerospace equipment and parts manufacturing plants. Composite plants are defined to be plants whose products are less than 50% metal, by weight, based on annual production figures. This definition excludes those operations specifically authorized by other permits by rule. For example, a boiler would not be considered a part of the aerospace manufacturing plant, but could be authorized under Section 106.181 of this title (relating to Small Boilers, Heaters, and Other Combustion Devices), if all pertinent requirements were met.
- (2) Emission points associated with the aerospace equipment and parts manufacturing plant or changes to that plant shall be located at least 100 feet from any off-plant receptor. Off-plant receptor means any recreational area or residence or other structure not occupied or used solely by the owner or operator of the aerospace equipment and parts manufacturing plant or the owner of the property upon which the aerospace plant is located. Controlled access recreational areas owned by the property owner or the owner or operator of the aerospace plant are not off-plant receptors.
- (3) The total annual emissions, in tons per year, of the following air contaminants authorized under this section, on a cumulative basis, from the entire aerospace manufacturing plant shall not exceed the values specified:
  - (A) inhalable particulate matter - five tons per year (tpy);
  - (B) volatile organic compounds (VOC) - 15 tpy;
  - (C) acid gases or vapors - five tpy;
  - (D) non-VOC carbon compound emissions - ten tpy;
  - (E) total of air contaminants in subparagraphs (A) - (D) of this paragraph - 25 tpy.
- (4) Hourly emissions of total new or increased emissions, including fugitives, of particulate matter or chemicals listed or referenced in Table 262 of Section 106.262 of this title (relating to Facilities (Emission Distance Limitations)), shall not exceed the hourly emission rate, E, as determined using the equation,  $E = L/K$  lb/hr and Table 224A, where:

E = maximum allowable hourly emission, lb/hr,

L = limit value (see Table 262), milligrams per cubic meter,  
 K = value from Table 224A (interpolate intermediate values), and  
 D = distance to the nearest off-plant receptor from the closest affected emission point.

**TABLE 224A**

<b><u>D.Feet</u></b>	<b><u>K</u></b>
100	326
200	200
300	139
400	104
500	81
600	65
700	54
800	46
900	39
1,000	34
2,000	14
3,000 or more	8

(5) Before construction or change in operation begins, registration shall be submitted to the commission's Office of Permitting, Remediation, and Registration in Austin using a completed Form PI-7. The emission data provided in the PI-7 shall include all process emission sources at the plant, both existing and proposed, and shall be the maximum allowed emissions for permitted units, the actual emissions for existing grandfathered units or units permitted by rule, and the projected maximum allowable emissions for proposed units. Emissions shall be speciated by chemical compound and the stack parameters, as appropriate, for each emission source shall be provided. Registration shall include a description of the project, calculations, and data identifying specific chemical names, "L" values, "D" values, and a description of pollution control equipment, if any.

(6) An emissions inventory shall be compiled and/or updated on an annual basis for all process emission sources on the property, maintained on a two-year rolling retention cycle, and made available upon request by the executive director. The inventory records should include the basis for all emissions estimates, sample calculations, and material usage records. Material and solvent usage records shall be maintained in sufficient detail to document compliance with this section.

(7) There shall be no visible emissions from each existing and proposed stack, hood, vent, or opening to the atmosphere.

(8) Any facility in which any chemical listed in subparagraph (D) of this paragraph will be handled or stored as a liquid or a compressed gas in a compound mixture of a concentration greater than 10% by weight or an aqueous solution of any chemical listed in subparagraph (D) of this paragraph greater than 50% by weight shall comply with subparagraphs (A) - (C) of this paragraph.

(A) The facility shall be located at least 300 feet from the nearest property line and 600 feet from any off-plant receptor.

(B) The cumulative amount of any one of the chemicals listed in subparagraph (D) of this paragraph, resulting from one or more authorizations under this section, shall not exceed 500 pounds on the plant property.

(C) Any chemical listed in subparagraph (D) of this paragraph shall be handled only in containers operated in compliance with United States Department of Transportation regulations (49 Code of Federal Regulations, Parts 171-178).

(D) Listed chemicals are: acrolein, ammonia, bromine, carbon disulfide, chlorine, ethyl mercaptan, hydrogen chloride, hydrogen bromide, hydrogen cyanide, hydrogen fluoride, hydrogen sulfide, phosphine, sulfur dioxide, methyl bromide, methyl isocyanate, methyl mercaptan, nickel carbonyl, phosgene.

Adopted August 9, 2000 Effective September 4, 2000

**Section 106.225. Semiconductor Manufacturing.**

Modifications, additions, or relocations of equipment (excluding add-on controls) used for semiconductor manufacturing operations that result in the addition, increase, or substitution of an air contaminant are permitted by rule provided the following conditions of this section are satisfied.

(1) The following is a list of definitions for this section.

(A) **Permitted air contaminants** - The individual chemical compounds represented in the latest permit or permit amendment application approved by the executive director.

(B) **Ground Level Contaminant (GLC1)(max) new** - The maximum hourly off-property GLC resulting from the new emission rate of air contaminant 1.

(C) **GLC1(receptor) new** - The maximum hourly off-property GLC at the sensitive receptor with the highest possible impacts resulting from the new emission rate of air contaminant 1.

(D) **GLC2(max)** - The maximum hourly off-property GLC resulting from the emission rate of air contaminant 2.

(E) **GLC2(receptor)** - The maximum hourly off-property GLC at the sensitive receptor with the highest possible impacts resulting from the emission rate of air contaminant 2.

(F) **ESL1** - The 30-minute Effects Screening Level (ESL) published in the commission's ESL list dated April 10, 1995, for air contaminant 1.

(G) **ESL2** - The 30-minute ESL published in the commission's ESL list dated April 10, 1995, for air contaminant 2.

(2) New emissions or an emission increase of any air contaminant less than 0.04 pounds per hour (sitewide) are exempt from all conditions of this section except paragraphs (3), (11), and (12) of this section.

(3) A permit has been issued by the commission for at least one emission source owned by the person using this section on the same property for which this section is being claimed.

(4) The facility's baseline GLCs of the permitted air contaminants have been determined using air dispersion modeling or other methods.

(5) New emission points are not authorized by this section.

(6) There will be no change in method of control for any air contaminants as represented in the latest permit or permit amendment application approved by the executive director.

(7) Increases of a permitted air contaminant shall meet all of the following criteria:

(A)  $GLC1(max)_{new} \leq 2ESL1$ ;

(B)  $GLC1(receptor)_{new} \leq ESL1$ .

(8) Additions of a non-permitted air contaminant, substitutions of a non-permitted air contaminant for a permitted air contaminant, and substitutions of one permitted air contaminant for another permitted air contaminant shall meet all of the following criteria:

(A)  $GLC2(max)_{new} \leq 2ESL2$ ;

(B)  $GLC2(receptor)_{new} \leq ESL2$ .

(9) If the commission ESL list dated April 10, 1995, does not include the air contaminant to be added or substituted, the permittee must use an ESL derived by the commission's Toxicology and Risk Assessment Division. The ESL shall be obtained in writing prior to the use of the new substance.

(10) The cumulative net annual emission increases of the following categories of air contaminants from multiple uses of this section shall not exceed the following values:

(A) particulate matter - five tons per year (tpy);

(B) volatile organic compounds (VOCs) - 15 tpy;

(C) non-VOCs - five tpy;

(D) acids/bases - ten tpy;

(E) any other air contaminant - five tpy;

(F) total of all emission increases - 25 tpy.

(11) The applicable ground-level concentration limits in Chapters 111, 112, and 113 of this title (relating to Control of Air Pollution from Visible Emissions and Particulate Matter; Sulfur Compounds; and Toxic Materials) shall not be exceeded.

(12) Within 30 days of use of this section, the permittee shall maintain documentation that demonstrates all applicable conditions of this section were satisfied. The documentation shall be made available to the commission upon request.

Adopted August 9, 2000 Effective September 4, 2000

**Section 106.226. Paints, Varnishes, Ink, and Other Coating Manufacturing.**

Coating manufacturing operations including raw material storage, weighing, mixing, milling, grinding, thinning, and packaging are permitted by rule, provided the conditions of this section are met.

Coating manufacturing is defined as combining ingredients that are manufactured off-site to make paints, varnishes, sealants, stains, adhesives, inks, pigments, maskants, and paint strippers, etc.

Resin manufacturing is not permitted by rule under this section.

(1) Materials usage shall not exceed the following rates:

(A) 345,000 gallons per year of solvent for all operations at a coating manufacturing site; and

(B) 200,000 pounds of dry powder per year for all operations at a coating manufacturing site.

(2) Operations involving powders which contain more than 0.1% by weight of chromium, cadmium, asbestos, lead, arsenic, cobalt, or strontium are not authorized by this section.

(3) The following conditions must be met to prevent and control emissions.

(A) There shall be no visible emissions from any emission point.

(B) Bags or sacks of dry powders shall be opened within an enclosed bag slitter or within an enclosed area.

(C) Material transfer, storage operations, or other similar operations shall be conducted in enclosed or covered containers which are opened only as necessary for transfer of ingredients.

(D) Mixing, milling, packaging, and filling operations shall be conducted under a hood or within an enclosure designed to capture emissions, which shall then be vented externally or through a carbon adsorption system.

(E) Operations which involve dry powders or pigments shall be vented through a filter.

(F) Any spills of dry powders or solvents shall be cleaned up promptly in a manner designed to control emissions.

(G) Waste materials shall be stored in covered containers and disposed of properly.

(4) Emissions from any operation which are vented externally shall be exhausted using forced air through a stack with an unobstructed vertical discharge. The stack must be, at a minimum, four feet above the peak of the roofline.

(5) The owner or operator of the facility shall keep records of all liquid and solid material usage rates on a monthly basis to demonstrate compliance with paragraph (1) of this section. The usage data shall be maintained for the most recent 24-month period.

Adopted August 9, 2000 Effective September 4, 2000

**Section 106.227. Soldering, Brazing, Welding.**

Brazing, soldering, or welding equipment, except those which emit 0.6 ton per year or more of lead, are permitted by rule.

Adopted August 9, 2000 Effective September 4, 2000

**Section 106.228. Platen Presses for Laminating.**

Platen presses used for laminating are permitted by rule.

Adopted August 9, 2000 Effective September 4, 2000

**Section 106.229. Textile Dyeing and Stripping Equipment.**

Equipment used exclusively for the dyeing or stripping of textiles is permitted by rule.

Adopted August 9, 2000 Effective September 4, 2000

**Section 106.231. Manufacturing, Refinishing, and Restoring Wood Products.**

Facilities, including drying or curing ovens, and hand-held or manually operated equipment, used for manufacturing, refinishing, and/or restoring wood products that meet the following requirements are permitted by rule.

- (1) If a pneumatic sawdust collection system is used, it must be followed by a filter with no visible emissions.
- (2) Waste materials shall be stored and disposed of properly. There shall be no visible emissions leaving the property.
- (3) If the total coatings, solvents, and stripping agents used exceeds six gallons per day (gpd) or one gpd of methylene chloride, the following requirements must be met:
  - (A) the application area must be exhausted using forced air through a stack with an unobstructed vertical discharge above the peak of the roof line; and
  - (B) in addition to the requirements of subparagraph (A) of this paragraph, if application is made by spraying, the application area must also be vented through a filter system with a minimum particulate removal efficiency of 95%.
- (4) Purchase receipts for total coatings, solvents, and stripping agents for the most recent 24 months must be kept on site and be made immediately available upon request of personnel from the agency or any other air pollution control agency having jurisdiction. If the total materials purchased exceeds 550 gallons in any one month, records of the amount of materials used per month must be kept on-site to demonstrate that total emissions do not exceed 25 tons per year in any consecutive 12 months.  
Adopted August 9, 2000 Effective September 4, 2000

## **SUBCHAPTER J : FOOD PREPARATION AND PROCESSING**

### **Section 106.241 - 106.245**

**Effective September 4, 2000**

#### **Section 106.241. Slaughterhouses.**

Any facility where animals or poultry are slaughtered and prepared for human consumption provided that waste products such as blood, offal, and feathers are stored in such a manner as to prevent the creation of a nuisance condition and these waste products are removed from the premises daily or stored under refrigeration until removed are permitted by rule. In addition, areas used to hold animals or poultry for slaughter shall be kept dry and clean to control odors.  
Adopted August 9, 2000 Effective September 4, 2000

#### **Section 106.242. Food Preparation.**

Equipment used in eating establishments for the purpose of preparing food for human consumption is permitted by rule.  
Adopted August 9, 2000 Effective September 4, 2000

#### **Section 106.243. Smokehouses.**

Smokehouses in which the maximum horizontal inside cross-sectional area does not exceed 100 square feet are permitted by rule.  
Adopted August 9, 2000 Effective September 4, 2000

#### **Section 106.244. Ovens, Barbecue Pits, and Cookers.**

Ovens, mixers, blenders, barbecue pits, and cookers if the products are edible and intended for human consumption are permitted by rule.  
Adopted August 9, 2000 Effective September 4, 2000

#### **Section 106.245. Ethyl Alcohol Facilities.**

Ethyl alcohol (ethanol) production facilities having a capacity of less than 200 gallons of ethanol per day when natural gas, liquid petroleum gas, or Number 2 fuel oil is used to supply heat for cooking and distillation are permitted by rule. Drying of spent (distillers) grain and water stillage is not authorized under this section.  
Adopted August 9, 2000 Effective September 4, 2000

## **SUBCHAPTER K: GENERAL**

### **Section 106.261 - 106.266**

**Effective November 1, 2001**

#### **Section 106.261. Facilities (Emission Limitations).**

Facilities, or physical or operational changes to a facility, are permitted by rule provided that all of the following conditions of this section are satisfied.

- (1) This section shall not be used to authorize construction of or any change to a facility authorized in another section of this chapter (see Section 106.262(1) of this title (relating to Facilities (Emission and Distance Limitations))).
- (2) The facilities or changes shall be located at least 100 feet from any recreational area or residence or other structure not occupied or used solely by the owner or operator of the facilities or the owner of the property upon which the facilities are located.
- (3) Total new or increased emissions, including fugitives, shall not exceed 6.0 pounds per hour (lb/hr) and ten tons per year of the



following materials: acetylene, argon, butane, crude oil, refinery petroleum fractions (except for pyrolysis naphthas and pyrolysis gasoline) containing less than ten volume percent benzene, carbon monoxide, cyclohexane, cyclohexene, cyclopentane, ethyl acetate, ethanol, ethyl ether, ethylene, fluorocarbons Numbers 11, 12, 13, 14, 21, 22, 23, 113, 114, 115, and 116, helium, isohexane, isopropyl alcohol, methyl acetylene, methyl chloroform, methyl cyclohexane, neon, nonane, oxides of nitrogen, propane, propyl alcohol, propylene, propyl ether, sulfur dioxide, alumina, calcium carbonate, calcium silicate, cellulose fiber, cement dust, emery dust, glycerin mist, gypsum, iron oxide dust, kaolin, limestone, magnesite, marble, pentaerythritol, plaster of paris, silicon, silicon carbide, starch, sucrose, zinc stearate, or zinc oxide.

(4) Total new or increased emissions, including fugitives, shall not exceed 1.0 lb/hr of any chemical having a limit value (L) greater than 200 milligrams per cubic meter (mg/m<sup>3</sup>) as listed and referenced in Table 262 of Section 106.262 of this title or of any other chemical not listed or referenced in Table 262. Emissions of a chemical with a limit value of less than 200 mg/m<sup>3</sup> are not allowed under this section.

(5) For physical changes or modifications to existing facilities, there shall be no changes to or additions of any air pollution abatement equipment.

(6) Visible emissions, except uncombined water, to the atmosphere from any point or fugitive source shall not exceed 5.0% opacity in any five-minute period.

(7) For emission increases of five tons per year or greater, notification must be provided using Form PI-7-261 within ten days following the installation or modification of the facilities. The notification shall include a description of the project, calculations, data identifying specific chemical names, limit values, and a description of pollution control equipment, if any.

(8) For emission increases of less than five tons per year, notification must be provided using either:

(A) Form PI-7-261 within ten days following the installation or modification of the facilities. The notification shall include a description of the project, calculations, data identifying specific chemical names, limit values, and a description of pollution control equipment, if any; or

(B) Form PI-7-261(a) by March 31 of the following year summarizing all uses of this permit by rule in the previous calendar year. This annual notification shall include a description of the project, calculations, data identifying specific chemical names, limit values, and a description of pollution control equipment, if any.  
Adopted August 9, 2000 Effective September 4, 2000

**Section 106.262. Facilities (Emission and Distance Limitations).**

Facilities, or physical or operational changes to a facility, are exempt provided that all of the following conditions of this section are satisfied.

(1) This section shall not be used to authorize construction or any change to a facility specifically authorized in another section of this chapter, but not meeting the requirements of that section. However, once the requirements of a section of this chapter are met, paragraphs (3) and (4) of this section may be used to qualify the use of other chemicals at the facility.

(2) Emission points associated with the facilities or changes shall be located at least 100 feet from any off-plant receptor. Off-plant receptor means any recreational area or residence or other structure not occupied or used solely by the owner or operator of the facilities or the owner of the property upon which the facilities are located.

(3) New or increased emissions, including fugitives, of chemicals shall not be emitted in a quantity greater than five tons per year nor in a quantity greater than E as determined using the equation  $E = L/K$  and the following table. Figure: 30 TAC **Section 106.262(3)**

<u>D.Feet</u>	<u>K</u>	
100	326	
200	200	E = maximum allowable hourly emission, and never to exceed 6 pounds per hour.
300	139	
400	104	
500	81	
600	65	L = value as listed or referenced in Table 262
700	54	

800	46	
900	39	K = value from the table on this page. (interpolate intermediate values)
1,000	34	
2,000	14	
3,000 or more	8	D = distance to the nearest off-plant receptor.

TABLE 262  
LIMIT VALUES (L) FOR USE WITH EXEMPTIONS FROM PERMITTING Section 106.262

The values are not to be interpreted as acceptable health effects values relative to the issuance of any permits under Chapter 116 of this title (relating to Control of Air Pollution by Permits for New Construction or Modification).

COMPOUND	LIMIT (L) MILLIGRAMS PER CUBIC METER
Acetone	590.
Acetaldehyde	9.
Acetone Cyanohydrin	4.
Acetonitrile	34.
Acetylene	2662.
N-Amyl Acetate	2.7
Sec-Amyl Acetate	1.1
Benzene	3.
Beryllium and Compounds	0.0005
Boron Trifluoride, as HF	0.5
Butyl Alcohol, –	76.
Butyl Acrylate	19.
Butyl Chromate	0.01
Butyl Glycidyl Ether	30.
Butyl Mercaptan	0.3
Butyraldehyde	1.4
Butyric Acid	1.8
Butyronitrile	22.
Carbon Tetrachloride	12.
Chloroform	10.
Chlorophenol	0.2
Chloroprene	3.6
Chromic Acid	0.01

<b>COMPOUND</b>	<b>LIMIT (L) MILLIGRAMS PER CUBIC METER</b>
Chromium Metal, Chromium II and III Compounds	0.1
Chromium VI Compounds	0.01
Coal Tar Pitch Volatiles	0.1
Creosote	0.1
Cresol	0.5
Cumene	50.
Dicyclopentadiene	3.1
Diethylaminoethanol	5.5
Diisobutyl Ketone	63.9
Dimethyl Aniline	6.4
Dioxane	3.6
Dipropylamine	8.4
Ethyl Acrylate	0.5
Ethylene Dibromide	0.38
Ethylene Glycol	26.
Ethylene Glycol Dinitrate	0.1
Ethylidene-2-norbornene, 5-	7.
Ethyl Mercaptan	0.08
Ethyl Sulfide	1.6
Glycolonitrile	5.
Halothane	16
Heptane	350.
Hexanediamine, 1,6-	0.32
Hydrogen Chloride	1.
Hydrogen Fluoride	0.5
Hydrogen Sulfide	1.1
Isoamyl Acetate	133.
Isoamyl Alcohol	15.
Isobutyronitrile	22.
Kepone	0.001
Kerosene	100.
Malononitrile	8.
Mesityl Oxide	40.
Methyl Acrylate	5.8

<b>COMPOUND</b>	<b>LIMIT (L) MILLIGRAMS PER CUBIC METER</b>
Methyl Amyl Ketone	9.4
Methyl-t-butyl ether	45.
Methyl Butyl Ketone	4.
Methyl Disulfide	2.2
Methylenebis (2-chloroaniline) (MOCA)	0.003
Methylene Chloride	26.
Methyl Isoamyl Ketone	5.6
Methyl Mercaptan	0.2
Methyl Methacrylate	34.
Methyl Propyl Ketone	530.
Methyl Sulfide	0.3
Mineral Spirits	350.
Naphtha	350.
Nickel, Inorganic Compounds	0.015
Nitroglycerine	0.1
Nitropropane	5.
Octane	350.
Parathion	0.05
Pentane	350.
Perchloroethylene	33.5
Petroleum Ether	350
Phenyl Mercaptan	0.4
Propionitrile	14.0
Propyl Acetate	62.6
Propylene Oxide	20.
Propyl Mercaptan	0.23
Silica-amorphous- precipitated, silica gel	4.
Silicon Carbide	4.
Stoddard Solvent	350.
Styrene	21.
Succinonitrile	20.
Tolidine	0.02
Trichloroethylene	135.
Trimethylamine	0.1

COMPOUND	LIMIT (L) MILLIGRAMS PER CUBIC METER
Valeric Acid	0.34
Vinyl Acetate	15.
Vinyl Chloride	2.

NOTE: The time weighted average (TWA) Threshold Limit Value (TLV) published by the American Conference of Governmental Industrial Hygienists (ACGIH), in its TLVs and BEIs guide (1997 Edition) shall be used for compounds not included in the table. The Short Term Exposure Level (STEL) or Ceiling Limit (annotated with a "C") published by the ACGIH shall be used for compounds that do not have a published TWA TLV. This section cannot be used if the compound is not listed in the table or does not have a published TWA TLV, STEL, or Ceiling Limit in the ACGIH TLVs and BEIs guide.

(4) Notification must be provided using Form PI-7 within ten days following the installation or modification of the facilities. The notification shall include a description of the project, calculations, and data identifying specific chemical names, L values, D values, and a description of pollution control equipment, if any.

(5) The facilities in which the following chemicals will be handled shall be located at least 300 feet from the nearest property line and 600 feet from any off-plant receptor and the cumulative amount of any of the following chemicals resulting from one or more authorizations under this section (but not including permit authorizations) shall not exceed 500 pounds on the plant property and all listed chemicals shall be handled only in unheated containers operated in compliance with the United States Department of Transportation regulations (49 Code of Federal Regulations, Parts 171- 178): acrolein, allyl chloride, ammonia (anhydrous), arsine, boron trifluoride, bromine, carbon disulfide, chlorine, chlorine dioxide, chlorine trifluoride, chloroacetaldehyde, chloropicrin, chloroprene, diazomethane, diborane, diglycidyl ether, dimethylhydrazine, ethyleneimine, ethyl mercaptan, fluorine, formaldehyde (anhydrous), hydrogen bromide, hydrogen chloride, hydrogen cyanide, hydrogen fluoride, hydrogen selenide, hydrogen sulfide, ketene, methylamine, methyl bromide, methyl hydrazine, methyl isocyanate, methyl mercaptan, nickel carbonyl, nitric acid, nitric oxide, nitrogen dioxide, oxygen difluoride, ozone, pentaborane, perchloromethyl mercaptan, perchloryl fluoride, phosgene, phosphine, phosphorus trichloride, selenium hexafluoride, stibine, liquified sulfur dioxide, sulfur pentafluoride, and tellurium hexafluoride. Containers of these chemicals may not be vented or opened directly to the atmosphere at any time.

(6) For physical changes or modifications to existing facilities, there shall be no changes or additions of air pollution abatement equipment.

(7) Visible emissions, except uncombined water, to the atmosphere from any point or fugitive source shall not exceed 5.0% opacity in any five-minute period.

Adopted August 9, 2000 Effective September 4, 2000

#### **Section 106.263. Repairs and Maintenance.**

Repairs or maintenance not involving structural changes where no new or permanent facilities are installed are exempt.

Adopted August 9, 2000 Effective September 4, 2000

#### **Section 106.264. Replacements of Facilities.**

A facility which replaces an existing facility is permitted by rule provided that the following conditions of this section are satisfied:

- (1) the replacement facility functions in the same or similar manner as the facility to be replaced;
- (2) the emissions from the replacement facility are not more than nor have different characteristics than those from the facility to be replaced;
- (3) the emissions from the replacement facility will not exceed 25 tons per year of any air contaminant;
- (4) the physical location of the replacement facility is the same or immediately adjacent to the facility being replaced;
- (5) there will be no increase in capacity, production rate, or throughput as a result of the replacement;
- (6) notwithstanding the provisions of paragraph (3) of this section, the emissions from the replacement facility will not contain any compounds (other than carbon monoxide, nitrogen oxide, or sulfur dioxide) listed or proposed to be listed as hazardous constituents in 40 Code of Federal Regulations 261, Appendix VIII;

(7) notification of the replacement is provided to the executive director within ten days following installation of the replacement facility.

Adopted August 9, 2000 Effective September 4, 2000

**Section 106.265. Hand-held and Manually Operated Machines.**

Hand-held or manually operated equipment used for buffing, polishing, carving, cutting, drilling, machining, routing, sanding, sawing, surface grinding, or turning of ceramic art work, ceramic precision parts, leather, metals, plastics, fiber board, masonry, carbon, glass, graphite, or wood is permitted by rule.

Adopted August 9, 2000 Effective September 4, 2000

**Section 106.266. Vacuum Cleaning Systems.**

Vacuum cleaning systems used exclusively for industrial, commercial, or residential housekeeping purposes are permitted by rule.

Adopted August 9, 2000 Effective September 4, 2000

**SUBCHAPTER L : FEED, FIBER, AND FERTILIZER**

**Effective September 4, 2000**

**DIVISION 1 : FEED**

**Section 106.281 - 106.283**

**Section 106.281. Feed Milling.**

Modifications to feed milling operations which satisfy the following conditions of this section are permitted by rule.

(1) In conjunction with the installation of additional grain or feed storage silos, including bins used for loading out finished feed, all materials shall be transported in a closed conveying system when handled mechanically or pneumatically. Exhaust air to the atmosphere shall be vented through a fabric filter having a maximum filtering velocity of 4.0 feet per minute (ft/min) with mechanical cleaning or 7.0 ft/min with automatic air cleaning.

(2) In conjunction with the installation of a pellet mill/pellet cooler system, the air from the pellet cooler shall be vented through a high efficiency cyclone collector which has a cone length at least twice the diameter of the cyclone.

Adopted August 9, 2000 Effective September 4, 2000

**Section 106.282. Feed Grinding Facilities.**

Any feed grinding operation which is used only for noncommercial purposes is permitted by rule.

Adopted August 9, 2000 Effective September 4, 2000

**Section 106.283. Grain Handling, Storage, and Drying.**

Any grain handling, storage, and drying facility which meets paragraphs (1) - (3) of this section is permitted by rule.

(1) The facility is in noncommercial use only - that is, used only to handle, dry, and/or store grain produced by the owner(s) of the facility if the following conditions are satisfied:

(A) the total storage capacity does not exceed 750,000 bushels;

(B) the grain handling capacity does not exceed 4,000 bushels per hour;

(C) the facility is located at least 500 feet from any recreational area or residence or business not occupied or used solely by the owner of the facility.

(2) The facility is in commercial use and the following conditions are satisfied:

(A) the total storage capacity of the new and any existing facility or facilities does not exceed 1.5 million bushels;

(B) the facility shall be located at least 1/4 mile from any recreational area or residence or other structure not occupied or used solely by the owner or operator of the facility or the owner of the property upon which the facility is located;

(C) before construction of the facility begins, written site approval shall be received from the executive director and the facility shall be registered with the commission using Form PI-7.

(3) The installation of additional grain storage capacity which satisfies the following conditions:

(A) there shall be no increase in hourly grain handling capacity;

(B) existing grain receiving and loadout facilities are utilized;

(C) grain shall be conveyed by closed conveying systems and air suction shall not be pulled on any conveying unit;

(D) written site approval shall be received from the executive director before construction begins for facilities utilizing existing grain receiving facilities when new gravity or auger loadout systems are to be installed.  
Adopted August 9, 2000 Effective September 4, 2000

**DIVISION 2 : FIBER**  
**Section 106.291**

**Section 106.291. Cotton Gin Stands.**

Replacement or addition of cotton gin stands where no other equipment change or additions are involved are permitted by rule.  
Adopted August 9, 2000 Effective September 4, 2000

**DIVISION 3 : FERTILIZER**  
**Section 106.301, Section 106.302**

**Section 106.301. Aqueous Fertilizer Storage.**

All aqueous fertilizer storage tanks are permitted by rule.  
Adopted August 9, 2000 Effective September 4, 2000

**Section 106.302. Portable Pipe Reactor.**

Portable pipe reactor facilities used to process liquid fertilizer that operate according to the following conditions of this section are permitted by rule.

- (1) Before construction begins, the facility shall be registered with the commission's Office of Permitting, Remediation, and Registration in Austin using Form PI-7.
- (2) All valves, piping, flanges, hoses, and disconnects must be free of leaks.
- (3) Opacity from any process vent shall not exceed 20% except for those periods of start-up described in Section 111.111(a)(1)(E) of this title (relating to Requirement for Specified Sources).
- (4) Emissions from the facility shall not cause or contribute to a condition of air pollution as defined in Texas Health and Safety Code, Section 382.003(3).
- (5) The operating schedule must not exceed 72 hours within a four-month period.  
Adopted August 9, 2000 Effective September 4, 2000

**SUBCHAPTER M : METALLURGY**  
**Section 106.311 - 116.322**  
**Effective September 4, 2000**

**Section 106.311. Crucible or Pot Furnace.**

Crucible or pot furnaces with a brim full capacity of less than 450 cubic inches of any molten metal are permitted by rule.  
Adopted August 9, 2000 Effective September 4, 2000

**Section 106.312. Wax Melting and Application.**

Equipment used exclusively for the melting or application of wax is permitted by rule.  
Adopted August 9, 2000 Effective September 4, 2000

**Section 106.313. Tumblers for Cleaning or Debarring Metal.**

All closed tumblers used for the cleaning or debarring of metal products without abrasive blasting, and all open tumblers with a batch capacity of 1,000 pounds or less are permitted by rule.  
Adopted August 9, 2000 Effective September 4, 2000

**Section 106.314. Shell Core and Mold Machines.**

Shell core and shell mold manufacturing machines are permitted by rule.  
Adopted August 9, 2000 Effective September 4, 2000

**Section 106.315. Sand or Investment Molds.**

Sand or investment molds with a capacity of 100 pounds or less used for the casting of metals are permitted by rule.  
Adopted August 9, 2000 Effective September 4, 2000

**Section 106.316. Metal Inspection.**

Equipment used for inspection of metal products is permitted by rule.  
Adopted August 9, 2000 Effective September 4, 2000

**Section 106.317. Miscellaneous Metal Equipment.**

Equipment used exclusively for rolling, forging, pressing, drawing, spinning, or extruding either hot or cold metals by some mechanical means is permitted by rule.  
Adopted August 9, 2000 Effective September 4, 2000

**Section 106.318. Die Casting Machines.**

Die casting machines are permitted by rule.  
Adopted August 9, 2000 Effective September 4, 2000

**Section 106.319. Foundry Sand Mold Forming Equipment.**

Foundry sand mold forming equipment to which no heat is applied is permitted by rule.  
Adopted August 9, 2000 Effective September 4, 2000

**Section 106.320. Miscellaneous Metallic Treatment.**

Electrically heated or sweet natural gas or liquid petroleum gas fueled equipment used exclusively for heat treating, soaking, case hardening, or surface conditioning of metal objects, such as carbonizing, cyaniding, nitriding, carbon nitriding, siliconizing, or diffusion treating is permitted by rule.  
Adopted August 9, 2000 Effective September 4, 2000

**Section 106.321. Metal Melting and Holding Furnaces.**

Metal melting and holding furnaces as specified in this section are permitted by rule.

(1) crucible furnaces, pot furnaces, or induction furnaces with a holding capacity of 1,000 pounds or less, with the following limitations:

(A) no smelting, reduction, sweating, metal separation, or distilling is conducted;

(B) in ferrous melting furnaces where gray iron or steel is melted:

(i) ductile iron is produced only when emissions are captured by a vent hood and filtered or within a crucible with a lid which allows no visible emissions; and

(ii) the furnace charge is free of oil, grease, and paint;

(C) in nonferrous melting furnaces, only the following metals are melted, poured, or held in a molten state:

(i) aluminum or any alloy containing over 50% aluminum;

(ii) magnesium or any alloy containing over 50% magnesium;

(iii) tin or any alloy containing over 50% tin;

(iv) zinc or any alloy containing over 50% zinc;

(v) copper, brass, or bronze; or

(vi) precious metals;

(D) no lead, leaded brass, leaded bronze, or manganese bronze is melted, poured, or held in a molten state;

(2) aluminum melting or holding furnaces with a holding capacity of 2,000 pounds or less that melt only clean aluminum ingots or pigs and in which no refining, smelting, metal separation, sweating, distilling, or fluxing with chlorine bearing gases is performed.  
Adopted August 9, 2000 Effective September 4, 2000

**Section 106.322. Furnaces to Reclaim Aluminum or Copper.**

Dry hearth reverberate type holding chamber aluminum or copper metal reclamation/sweat furnaces in which no fluxing, degassing, or refining is conducted, which operate according to the following conditions and limitations of this section are permitted by rule.

(1) Scrap metal charges shall consist primarily of copper or aluminum metal. Operation of the furnace for reclamation or lead, tin, zinc, or magnesium metals is prohibited.



- (2) The maximum furnace charging rate shall be 2,000 pounds per hour or less.
- (3) The furnace charge door shall remain closed except during charging and furnace cleaning operations.
- (4) The furnace shall be equipped with an afterburner which will provide a minimum retention time of 0.1 second at a minimum temperature of 1,300 degrees Fahrenheit for all furnace exhaust gases.
- (5) The incineration of any insulated wire or cable containing chlorine compounds in the insulation, such as polyvinyl chloride insulation, is expressly prohibited.
- (6) The owner or operator of the furnace shall initiate and maintain a program of furnace operator training in the recognition of chlorine-bearing wire or cable insulation and shall demonstrate, upon request by the executive director, acceptable proficiency in the recognition of chlorine-bearing wire or cable insulation such as polyvinyl chloride insulation.
- (7) Fuel for the furnace shall be sweet natural gas as defined in Chapter 101 of this title (relating to General Air Quality Rules) or liquid petroleum gas, diesel, or Number 2 fuel oil.
- (8) Before construction begins, the facility shall be registered with the commission's Office of Permitting, Remediation, and Registration in Austin using Form PI-7.  
Adopted August 9, 2000 Effective September 4, 2000

#### **SUBCHAPTER N : MIXERS, BLENDEERS, AND PACKAGING**

##### **Section 106.331 - 106.333**

**Effective September 4, 2000**

##### **Section 106.331. Cosmetics Packaging and Pharmaceutical Packaging and Coating.**

Equipment used exclusively to package pharmaceuticals and cosmetics or to coat pharmaceutical tablets is permitted by rule.  
Adopted August 9, 2000 Effective September 4, 2000

##### **Section 106.332. Chlorine Repackaging.**

Facilities that repackage chlorine are permitted by rule, provided all the following conditions of this section are satisfied:

- (1) the repackaging shall be in United States Department of Transportation approved chlorine cylinders not exceeding one ton in capacity;
- (2) there shall be no more than two tons of chlorine on the property at any time;
- (3) all handling of chlorine shall be in accordance with applicable Chlorine Institute Guidelines;
- (4) the facilities shall be located no closer than 300 feet from any recreational area or residence or other structure not occupied or used solely by the owner or operator of the facilities or the owner of the property upon which the facilities are located;
- (5) the repackaging system shall be operated under vacuum at all times and all venting of lines and cylinders shall be routed to a caustic scrubbing system that prevents release of chlorine to the atmosphere during all operating and maintenance activities. When the scrubbing system is not operating properly, no chlorine shall be repackaged;
- (6) chlorine gas shall not be vented directly to the atmosphere under any circumstances.

Adopted August 9, 2000 Effective September 4, 2000

##### **Section 106.333. Water-based Adhesive Mixers.**

Equipment used exclusively for the mixing and blending of materials at ambient temperature to make water-based adhesives is permitted by rule.

Adopted August 9, 2000 Effective September 4, 2000

#### **SUBCHAPTER O: OIL AND GAS**

##### **Section 106.351 - 106.355**

**Effective June 13, 2001**

##### **Section 106.351. Salt Water Disposal (Petroleum).**

Salt water disposal facilities used to handle aqueous liquid wastes from petroleum production operations and water injection facilities are permitted by rule, provided that the following conditions of this section are met.

- (1) Any facility processing salt water which emits a sour gas shall be located at least 1/4 mile from any recreational area or residence or other structure not occupied or used solely by the owner or operator of the facility or the owner of the property upon which the facility is located.

(2) Any open storage of salt water shall be operated in such a manner as to prevent the occurrence of a nuisance condition off-property.

(3) All plant roads and truck loading and unloading areas must be operated and/or maintained as necessary to prevent dust emissions from the property which would cause or contribute to a nuisance condition. Appropriate operating activities may include reduction of speed of vehicles, use of alternate routes, and covering of dust-producing loads being hauled. Appropriate maintenance activities may include watering, treatment with dust suppressant chemicals, oiling, paving, and cleaning dust-producing surfaces.

(4) Before construction of the facility begins under this section, registration of the permit by rule shall be submitted to the commission's Office of Permitting, Remediation, and Registration in Austin using Form PI-7, unless one of the following exceptions applies:

(A) all delivery of salt water to the site takes place through enclosed hoses or lines, and all storage and handling of salt water takes place in enclosed conduits, vessels, and storage, so that the salt water is not exposed to the atmosphere; or

(B) delivery of salt water from outside a site to all facilities at a site in any calendar day does not exceed 540,000 gallons.  
Adopted August 9, 2000 Effective September 4, 2000

**Section 106.352. Oil and Gas Production Facilities.**

Any oil or gas production facility, carbon dioxide separation facility, or oil or gas pipeline facility consisting of one or more tanks, separators, dehydration units, free water knockouts, gun barrels, heater theaters, natural gas liquids recovery units, or gas sweetening and other gas conditioning facilities, including sulfur recovery units at facilities conditioning produced gas containing less than two long tons per day of sulfur compounds as sulfur are permitted by rule, provided that the following conditions of this section are met. This section applies only to those facilities named which handle gases and liquids associated with the production, conditioning, processing, and pipeline transfer of fluids found in geologic formations beneath the earth's surface.

(1) Compressors and flares shall meet the requirements of Section 106.512 and Section 106.492 of this title (relating to Stationary Engines and Turbines, and Flares).

(2) Total emissions, including process fugitives, combustion unit stacks, separator, or other process vents, tank vents, and loading emissions from all such facilities constructed at a site under this section shall not exceed 25 tons per year (tpy) each of sulfur dioxide (SO<sub>2</sub>), all other sulfur compounds combined, or all volatile organic compounds (VOC) combined; and 250 tpy each of nitrogen oxide and carbon monoxide. Emissions of VOC and sulfur compounds other than SO<sub>2</sub> must include gas lost by equilibrium flash as well as gas lost by conventional evaporation.

(3) Any facility handling sour gas shall be located at least 1/4 mile from any recreational area or residence or other structure not occupied or used solely by the owner or operator of the facility or the owner of the property upon which the facility is located.

(4) Total emissions of sulfur compounds, excluding sulfur oxides, from all vents shall not exceed 4.0 pounds per hour (lb/hr) and the height of each vent emitting sulfur compounds shall meet the following requirements, except in no case shall the height be less than 20 feet:

Total as Hydrogen Sulfide, lb/hr	Minimum vent height, feet
0.27	20
0.60	30
1.94	50
3.00	60
4.00	68

NOTE: Other values may be interpolated.

(5) Before operation begins, facilities handling sour gas shall be registered with the commission's Office of Permitting, Remediation, and Registration in Austin using Form PI-7 along with supporting documentation that all requirements of this section will be met. For facilities constructed under Section 106.353 of this title (relating to Temporary Oil and Gas Facilities), the registration is required before operation under this section can begin. If the facilities cannot meet this section, a permit under Chapter 116 of this title (relating to Control of Air Pollution by Permits for New Construction or Modification) is required prior to continuing operation of the facilities.  
Adopted August 9, 2000 Effective September 4, 2000

**Section 106.353. Temporary Oil and Gas Facilities.**

Temporary separators, tanks, meters, and fluid-handling equipment used for a period not to exceed 90 operating days are permitted by rule, provided that all the following conditions of this section are satisfied.

(1) The purpose of the 90-day period is to test the content of a subsurface stratum believed to contain oil or gas and/or to establish the proper design of a permanent fluid-handling facility.

(2) Any sour gas produced during this test period shall be burned in a smokeless flare which meets the requirements of conditions of Section 106.492(1)(C) and (2)(A) and (C) of this title (relating to Flares).

(3) Total emissions of reduced sulfur compounds, excluding sulfur oxides, but including hydrogen sulfide, shall not exceed 4.0 pounds per hour and the emission point height of any vent of reduced sulfur compounds shall meet the requirements of Section 106.352(4) of this title (relating to Oil and Gas Production Facilities).

(4) Operation of a facility authorized by this section beyond the 90-day period shall not be allowed unless such operation is authorized under exemption from permitting or is permitted under Chapter 116 of this title (relating to Control of Air Pollution by Permits for New Construction or Modification).

Adopted August 9, 2000 Effective September 4, 2000

#### **Section 106.354. Iron Sponge Gas Treating Unit.**

Iron sponge gas treating units processing streams containing less than 60 pounds per hour of hydrogen sulfide are permitted by rule provided that the following conditions of this section are satisfied:

(1) the plant is located at least 1/4 mile from any recreational area or residence or other structure not occupied or used solely by the owner of the facility or the owner of the property upon which the facility is located;

(2) during replacement of the iron oxide impregnated chips, the unit is:

(A) isolated from the main system and the pressure is reduced to 0.5 psia or less through a gas-fired flare; or

(B) sulfur compound emissions to the atmosphere do not exceed one ton per replacement;

(3) the spent iron oxide chips being replaced are properly handled to avoid spontaneous ignition and avoid an odor nuisance.

Adopted August 9, 2000 Effective September 4, 2000

#### **Section 106.355. Metering, Purging, and Maintenance of Pipelines.**

Metering, purging, and maintenance operations for gaseous and liquid petroleum pipelines (including ethylene, propylene, butylene, and butadiene pipelines) are exempt provided that operations are conducted according to the following conditions of this section:

(1) emissions of volatile organic compounds, except fugitive emissions, are burned in a smokeless flare; or

(2) total emissions of any air contaminant will not exceed one ton during any metering, purging, or maintenance operation;

(3) venting of sweet, commercial grade natural gas from pipelines is exempt from paragraphs (1) and (2) of this section. Care must be taken not to vent the gas in an area where an ignition source may exist or where accidental ignition of the venting gas may increase risk of fire at nearby tanks or other facilities.

Adopted August 9, 2000 Effective September 4, 2000

### **SUBCHAPTER P : PLANT OPERATIONS**

#### **Section 106.371 - 106.376**

**Effective September 4, 2000**

#### **Section 106.371. Cooling Water Units.**

Water cooling towers, water treating systems for process cooling water or boiler feedwater, and water tanks, reservoirs, or other water containers designed to cool, store, or otherwise handle water (including rainwater) that have not been used in direct contact with gaseous or liquid process streams containing carbon compounds, sulfur compounds, halogens or halogen compounds, cyanide compounds, inorganic acids, or acid gases are permitted by rule.

Adopted August 9, 2000 Effective September 4, 2000

#### **Section 106.372. Industrial Gases.**

Any air separation, or other industrial gas production, storage, or packaging facility is permitted by rule. Industrial gases, for purposes of this section, include only oxygen, nitrogen, helium, neon, argon, krypton, and xenon.

Adopted August 9, 2000 Effective September 4, 2000

#### **Section 106.373. Refrigeration Systems.**

Refrigeration systems, including storage tanks used in refrigeration systems, that use one of the following categories of refrigerant are permitted by rule:

(1) simple asphyxiants limited to argon, carbon dioxide, ethane, helium, hydrogen, methane, neon, nitrogen, propane, propylene, or liquefied natural gas; or

(2) any other chemical, excluding anhydrous ammonia, with a short-term effects screening level (ESL) published in the commission's ESL list greater than 150Fg/m<sup>3</sup>;

(3) anhydrous ammonia (ammonia) provided:

(A) the facility is registered with the commission's Office of Permitting, Remediation, and Registration in Austin using Form PI-7; and

(B) the system is maintained in good working order and such that ammonia leaks are not detectable beyond the operator's property line.

Adopted August 9, 2000 Effective September 4, 2000

#### **Section 106.374. Lime Slaking Facilities.**

Any lime slaking facility used to mix quicklime with water is permitted by rule, provided the following conditions of this section are met:

(1) the mixing vessel shall be horizontal;

(2) the mixing vessel shall use interior mechanical agitation parallel to the bottom and agitate the water over the full length of the vessel;

(3) quicklime shall be injected into the mixing vessel as follows:

(A) where injection is from a pneumatic transfer system, the quicklime shall be injected at a point at least 12 inches under the surface of the agitated water; or

(B) where injection is from a non-pneumatic conveying system unloading at the top of the vessel, emissions from any vent on the vessel shall be controlled by an appropriately sized wet scrubber;

(4) there shall be no visible emissions (other than uncombined water).

Adopted August 9, 2000 Effective September 4, 2000

#### **Section 106.375. Aqueous Solutions for Electrolytic and Electroless Processes.**

Equipment using aqueous solutions is permitted by rule, providing the conditions of this section are met.

(1) This section authorizes the following operations:

(A) anodizing, chromate conversion coating processes, electroplating, electrodeposition, electroless plating, electrolytic polishing, and electrolytic stripping, as follows.

(i) For plating onto or stripping from any basis substrate, only brass, bronze, cadmium, copper, iron, lead, nickel, tin, zinc, and precious metals may be used.

(ii) Chromic acid shall not be used in any step of a process which involves electrical current, air agitation, or any other factor which causes the chromic acid to bubble or mist.

(B) cleaning, electroless stripping, etching, or other surface preparation and finishing, not including chemical milling or electrolytic metal recovery and reclaiming systems.

(2) Operating conditions.

(A) Hydrochloric acid tank operating conditions shall not exceed:

(i) a temperature of 100 degrees Fahrenheit and a hydrochloric acid concentration of 19.0% by solution weight; or

(ii) a partial pressure of 0.5 millimeters of mercury.

(B) Hydrochloric acid in any state, and any aqueous solution which bubbles or mists due to electrical current, air agitation, or any other factor shall be used in an enclosed building. If the doors and windows of the building are open for any reason other than temporarily for access, emissions shall either be:

(i) captured and exhausted using forced air through a stack with an unobstructed minimum vertical discharge of four feet above the peak of the roofline; or

(ii) controlled with a fume suppressant.

(3) If a facility cannot comply with the hydrochloric acid temperature and concentration limits in paragraph (2)(A)(i) of this section, then to demonstrate compliance with paragraph (2)(A)(ii) of this section, the maximum hydrochloric acid temperature and concentration for each tank shall be recorded daily. At least once per month, the recorded data shall be converted to partial pressure. All data shall be maintained for the most recent 24-month period.  
Adopted August 9, 2000 Effective September 4, 2000

**Section 106.376. Decorative Chrome Plating.**

Decorative chromium electroplating operations that have a maximum combined rated capacity for all decorative chrome plating rectifiers of not more than 5,000 amperes and which use a fume suppressant or other equivalent control as sufficient to meet Section 113.190 of this title (relating to Chromium Emissions from Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks (40 CFR 63, Subpart N)) are permitted by rule. This permit by rule may not be used at any site where other chrome plating or chromic acid anodizing operations are conducted.  
Adopted August 9, 2000 Effective September 4, 2000

**SUBCHAPTER Q : PLASTICS AND RUBBER**

**Section 106.391 - 106.396**

**Effective September 4, 2000**

**Section 106.391. Rubber and Plastic Curing Presses.**

Presses used for the curing of rubber products and plastic products are permitted by rule.  
Adopted August 9, 2000 Effective September 4, 2000

**Section 106.392. Thermoset Resin Facilities.**

Facilities using thermoset resins (excluding resins that do not emit air contaminants) to manufacture or repair products are permitted by rule, provided that the following conditions of this section are satisfied for paragraph (1) and either paragraph (2) or (3) of this section.

(1) The following requirements shall apply to all thermoset resin facilities.

(A) Before construction begins, the facility must be registered with the commission using Form PI-7.

(B) Records of resin and acetone usage shall be kept on a monthly and calendar year-to-date basis to show compliance with this section, and shall be maintained for the most recent 24 months.

(C) All resin spraying and cleaning operations shall be conducted between two hours before sunrise and two hours after sunset. The exhaust fan(s) must be operating during and for at least 30 minutes after any usage of resin and/or cleaning solvents.

(D) All solid trim grinding operations shall be vented through a dry filter system or a water wash system which has a particulate removal efficiency of at least 95%. Particulates trapped in the dry filter system or water wash sludge shall be handled and stored in a way to minimize the escape of fugitive dust emissions.

(E) No more than five tons of acetone shall be used per year (gross usage minus waste disposal).

(2) The following requirements shall apply to facilities that have spraying operations (the facilities may include non-spraying operations).

(A) No more than 75 tons of resin and gelcoat combined shall be used per year (gross usage minus waste disposal).

(B) All resin spraying operations shall be conducted in a booth or an enclosed work area and the emissions shall be exhausted through elevated stack(s). All stacks shall discharge vertically to the atmosphere with no restrictions or obstructions to flow. Each stack shall meet one of the following minimum requirements:

(i) a flow rate of 20,000 actual cubic feet per minute (acfm) and the greater of six feet above the peak of the manufacturing building or 25 feet above ground level; or

(ii) a flow rate of 15,000 acfm and the greater of six feet above the peak of the manufacturing building or 30 feet above ground level.

(C) No more than 1,000 pounds per year of resin shall be used outdoors.

(D) If annual resin usage is less than 1,000 pounds, a facility is exempt from all requirements of this section except recordkeeping (paragraph (1)(B) of this section).

(3) The following requirements shall apply only to non-spraying operations.

(A) No more than 150 tons of resin and gelcoat combined shall be used per year (gross usage minus waste disposal).

(B) All resin operations shall be conducted in a booth or an enclosed work area or the manufacturing building and the emissions shall be exhausted through elevated stack(s). All stacks shall discharge vertically to the atmosphere with no restrictions or obstructions to flow. Each stack shall meet one of the following minimum requirements:

(i) a flow rate of 20,000 acfm and the greater of six feet above the peak of the manufacturing building or 25 feet above ground level; or

(ii) a flow rate of 15,000 acfm and the greater of six feet above the peak of the manufacturing building or 30 feet above ground level.

(C) No more than 3,000 pounds per year of resin shall be used outdoors.

(D) If annual resin usage is less than 3,000 pounds, a facility is exempt from all requirements of this section except recordkeeping (paragraph (1)(B) of this section).

Adopted August 9, 2000 Effective September 4, 2000

**Section 106.393. Conveyance and Storage of Plastic and Rubber Material.**

Equipment used exclusively for conveying and storing plastic and/or rubber solid materials is permitted by rule, provided that no visible emissions occur and all the conditions of this section are met:

(1) equipment used for conveying of powders or resins to storage silos must be equipped with fabric filter(s) having a maximum filtering velocity of 4.0 feet per minute (ft/min) with mechanical shaking or 7.0 ft/min with air cleaning; and

(2) transfer of powders or resins is accomplished in an enclosed system.

Adopted August 9, 2000 Effective September 4, 2000

**Section 106.394. Plastic Compression and Injection Molding.**

Equipment used for compression molding and injection molding of plastics is permitted by rule.

Adopted August 9, 2000 Effective September 4, 2000

**Section 106.395. Equipment for Mixing Plastic and Rubber (No Solvent).**

Mixers, blenders, roll mills, or calenders for rubber or plastics are permitted by rule, provided the following conditions of this section are satisfied. Mixers, blenders, roll mills, or calenders handling or adding asbestos shall not be eligible to be permitted by rule under this section.

(1) Organic solvents, diluents, or thinners shall not be used.

(2) Material in powder form shall not be added unless the mixer, blender, roll mill, or calender is vented to a fabric filter having a maximum filtering velocity of 4.0 feet per minute (ft/min) with mechanical cleaning, or 7.0 ft/min with automatic air cleaning.

(3) There shall be no visible emissions.

Adopted August 9, 2000 Effective September 4, 2000

**Section 106.396. Equipment for Mixing Plastic and Rubber (With Solvent).**

Roll mills or calenders for rubber or plastics in which organic solvents, diluents, or thinners are used are permitted by rule, provided that before construction begins, the facility is registered with Form PI-7 and information regarding process rate and type of material emitted is submitted.

Adopted August 9, 2000 Effective September 4, 2000

**SUBCHAPTER R : SERVICE INDUSTRIES**

**Section 106.411 - 116.419**

**Effective September 4, 2000**

**Section 106.411. Steam or Dry Cleaning Equipment.**

Equipment used exclusively for steam or dry cleaning of fabrics, plastics, rubber, wood, or vehicle engines or drive trains is permitted by rule.

Adopted August 9, 2000 Effective September 4, 2000

**Section 106.412. Fuel Dispensing.**

Equipment used exclusively to store and dispense motor fuels into heavy and light-duty motor vehicles and marine vessels or other watercraft, aircraft, and railroad locomotive engines is permitted by rule.

Adopted August 9, 2000 Effective September 4, 2000

**Section 106.413. Bond Lining to Brake Shoes.**

Equipment used exclusively for bonding lining to brake shoes is permitted by rule.  
Adopted August 9, 2000 Effective September 4, 2000

**Section 106.414. Packaging Lubes and Greases.**

Equipment used exclusively for the packaging of lubricants or greases is permitted by rule.  
Adopted August 9, 2000 Effective September 4, 2000

**Section 106.415. Laundry Dryers.**

Laundry dryers, extractors, or tumblers used for fabrics cleaned with water solutions of bleach or detergents are permitted by rule.  
Adopted August 9, 2000 Effective September 4, 2000

**Section 106.416. Uranium Recovery Facilities.**

A uranium in-situ solution recovery facility producing yellowcake is permitted by rule, provided that the facility operates according to the following conditions of this section.

(1) The facility is located at least 1/4 mile from any recreational area or residence or other structure not occupied or used solely by the owner of the facility or the owner of the property upon which the facility is located.

(2) The facility shall have no emissions other than:

(A) ammonia which shall not exceed an emission rate of 2.0 pounds per hour (lb/hr); and

(B) particulate dust from yellowcake drying not to exceed 0.1 lb/hr.

(3) The facility shall have no visible particulate emissions from any part of the process.

(4) Before construction begins, the facility shall be registered with the commission's Office of Permitting, Remediation, and Registration in Austin using Form PI-7.

Adopted August 9, 2000 Effective September 4, 2000

**Section 106.417. Ethylene Oxide Sterilizers.**

Ethylene oxide (EO) sterilizing chambers/operations located on the same or contiguous property and under common ownership that use 1,000 pounds or less of EO per year are permitted by rule provided that the following conditions of this section are satisfied.

(1) Any sterilizer usage that is less than 0.04 pounds of EO (20 milliliters liquid EO) per charge and the annual usage is 4.0 pounds or less of EO for the entire facility, is exempted from all requirements.

(2) All sterilizers must meet the following conditions.

(A) EO shall only be handled by medical professionals or appropriately trained personnel in medical and industrial use areas.

(B) Written records shall be maintained for a minimum of two years and shall be made available to representatives of the commission upon request. Records shall include:

(i) documentation of the date and time of each sterilizer operation cycle;

(ii) the total pounds of EO purchased and used per calendar year listed as monthly totals;

(iii) leak test results.

(C) Leak tests of each sterilizer system shall be performed at least every six months. Results of the tests shall be made available to the commission upon request.

(D) EO shall only be used alone or in combination with carbon dioxide, nitrogen, chlorofluorocarbon, hydrochlorofluorocarbon diluent gases, or other mixtures as approved by the executive director.

(E) The sterilizer vent system exhaust stack shall meet the following conditions.

(i) The stack shall be uncapped and exhaust vertically upward.

(ii) The stack height shall be extended to at least 15 feet above the roof line of the building; and the stack tip shall be located at least 25 feet from any opening to the building interior, such as fresh air intake, unsealed windows, or pedestrian traffic areas. Stacks on multi-level roofs must only extend 15 feet above the roof upon which the stack is located.

(iii) Stack exit velocity shall be at least 50 feet per second.

(3) The following conditions apply only to sterilizers that use more than four pounds, but less than 100 pounds of EO per year.

(A) Sterilizer systems which vent entirely to atmosphere shall not exceed 0.5 pounds of EO used per cycle. Sterilizer systems which use nonrecirculating, water sealed vacuum systems shall not exceed two pounds of EO charged per cycle. For facilities with multiple sterilizers, the usage rate is based on total EO usage at any given time.

(B) Any combination of sterilizers located on the same or contiguous property under common ownership shall not exceed a total EO usage of less than 100 pounds per year.

(4) The following conditions apply only to sterilizers that use between 100 and 1,000 pounds of EO per year.

(A) Before construction begins, the facility shall be registered with the commission using Form PI-7.

(B) The sterilizer chamber exhaust shall vent through an emission control device that will continuously achieve a minimum EO removal efficiency of 99%. Thermal incineration shall not be used to control sterilizer exhaust emissions if chlorofluorocarbons are used as a diluent.

(C) There shall be no discharge of water containing dissolved EO through a sanitary sewer system.

(D) Any combination of sterilizers located on the same or contiguous property under common ownership shall be limited to a total EO usage of 1,000 pounds per year.

Adopted August 9, 2000 Effective September 4, 2000

#### **Section 106.418. Printing Presses.**

Printing operations (including, but not limited to, screen printers, ink-jet printers, presses using electron beam or ultraviolet light curing, and labeling operations) and supporting equipment (including, but not limited to, corona treaters, curing lamps, preparation, and cleaning equipment) which directly supports the printing operation are permitted by rule, provided that all the following conditions of this section are satisfied.

(1) The uncontrolled emission of volatile organic compounds (VOC) and solvents (including, but not limited to, those used for printing, cleanup, or makeup) shall not exceed the following rates:

(A) 15 tons per year (tpy) for any single printing operation proposed to be covered by this section; and

(B) 25 tpy for all printing operations on the property covered by permits by rule.

(2) Facilities which release ten tpy or more of VOC emissions from all printing operations permitted by rule at the site must register with the commission using Form PI-7.

(3) Copying and duplicating equipment employing the xerographic method are exempt from paragraphs (4) - (6) of this section.

(4) Printing presses covered by this section shall not utilize heat set, thermo set, or oven-dried inks. Heated air may be used to shorten drying time, provided the temperature does not exceed 194 degrees Fahrenheit (90 degrees Celsius).

(5) Records of ink and solvent usage shall be kept in sufficient detail to show compliance with paragraph (1) of this section and shall be maintained for a two-year rolling retention period.

(6) Screen printing operations requiring temperatures greater than 194 degrees Fahrenheit (90 degrees Celsius) to set the ink are exempt from paragraph (4) of this section.

(7) Facilities located in ozone nonattainment areas shall meet the requirements of Chapter 115, Subchapters B and E of this title (relating to General Volatile Organic Compound Sources and Solvent-Using Processes).

Adopted August 9, 2000 Effective September 4, 2000

#### **Section 106.419. Photographic Process Equipment.**

Photographic process equipment by which an image is reproduced upon material sensitized to radiant energy is permitted by rule.

Adopted August 9, 2000 Effective September 4, 2000

### **SUBCHAPTER S : SURFACE COATING**

#### **Section 106.431 - 106.436**

**Effective September 4, 2000**

#### **Section 106.431. Milling and Grinding of Coatings and Molding Compounds.**

Equipment used exclusively to mill or grind coatings and molding compounds where all materials charged are in a paste form is permitted by rule.

Adopted August 9, 2000 Effective September 4, 2000



**Section 106.432. Dipping Tanks and Containers.**

Containers, reservoirs, or tanks used exclusively for dipping operations for coating objects with oils, waxes, or greases where no organic solvents, diluents, or thinners are used; or dipping operations for applying coatings of natural or synthetic resins which contain no organic solvents are permitted by rule.

Adopted August 9, 2000 Effective September 4, 2000

**Section 106.433. Surface Coat Facility.**

Surface coating or stripping facilities, excluding vehicle repair and refinishing shops, shall meet the following conditions of this section to be permitted by rule.

(1) This section does not cover metalizing (spraying molten metal onto a surface to form a coating). However, this section does cover the use of coatings which contain metallic pigments.

(2) All facilities covered by this section at a site shall implement good housekeeping procedures to minimize fugitive emissions, including the following.

(A) All spills shall be cleaned up immediately.

(B) The booth or work area exhaust fans shall be operating when cleaning spray guns and other equipment.

(C) All new and used coatings and solvents shall be stored in closed containers. All waste coatings and solvents shall be removed from the site by an authorized disposal service or disposed of at a permitted on-site waste management facility.

(3) Drying or curing ovens shall either be electric or meet the following conditions:

(A) The maximum heat input to any oven must not exceed 40 million British thermal units per hour (Btu/hr).

(B) Heat shall be provided by the combustion of one of the following: sweet natural gas; liquid petroleum gas; fuel gas containing no more than 5.0 grains of total sulfur compounds (calculated as sulfur) per 100 dry standard cubic foot; or Number 2 fuel oil with not more than 0.3% sulfur by weight.

(4) No add-on control equipment shall be used to meet the emissions limits of this section. The total uncontrolled emissions from the coating materials (as applied) and cleanup solvents shall not exceed the following for all operations:

(A) 25 tons per year (tpy) of volatile organic compounds (VOC) and ten tpy of exempt solvents for all surface coating and stripping operations covered by section at a site;

(B) 30 pounds per hour (lb/hr) of VOC and 5.0 lb/hr of exempt solvents for all surface coating and stripping operations covered by this section at a site;

(C) if emissions are less than 0.25 lb/hr of VOC and/or exempt solvents, a facility is exempt from the remaining requirements of this section, including paragraphs (5) - (9) of this section.

(5) Opacity of visible emissions shall not exceed 5.0%. Compliance shall be determined by the United States Environmental Protection Agency Method 9 averaged over a six-minute period.

(6) The following conditions apply to surface coating operations performed indoors, in a booth, or in an enclosed work area:

(A) no more than six lb/hr of VOC emissions, averaged over any five-hour period, and 500 pounds per week per booth or enclosed work area;

(B) minimum face velocity at the intake opening of each booth or work area is 100 feet per minute (ft/min). Emissions shall be exhausted through elevated stacks that extend at least 1.5 times the building height above ground level. All stacks shall discharge vertically; rain protection shall not restrict or obstruct vertical flow;

(C) for spraying operations, emissions of particulate matter must be controlled using either a water wash system or a dry filter system with a 95% removal efficiency as documented by the manufacturer. The face velocity at the filter shall not exceed 250 ft/min or that specified by the filter manufacturer, whichever is less. Filters shall be replaced whenever the pressure drop across the filter no longer meets the manufacturer's recommendation.

(7) For surface coating operations that are performed outdoors or in a non-enclosed work area, or for indoor operations that do not meet the conditions of paragraph (6) of this section, the following conditions apply.

(A) No more than six lb/hr of VOC emissions, averaged over any five-hour period, and 500 pounds per week shall be emitted at any time for all operations authorized by this paragraph.

(B) If coatings applied with spray equipment contain more than 0.1% by weight of chromates, lead, cadmium, selenium, strontium, or cobalt, then total VOC emissions shall be further limited to 240 pounds per week and 2,000 pounds per year. If coatings are applied with non-spray equipment (such as brushes, rollers, dipping or flow coating), the additional restrictions in this paragraph do not apply.

(C) Coating operations shall be conducted at least 50 feet from the property line and at least 250 feet from any recreational area, residence, or other structure not occupied or used solely by the owner or operator of the facility or the owner of the property upon which the facility is located.

(D) Before construction of the facility begins, written site approval shall be received from the appropriate regional office of the commission or any local program having jurisdiction.

(8) The following records shall be maintained at the plant site for the most recent 24 months and be made immediately available to the commission or any pollution control agency with jurisdiction:

(A) material safety data sheets for all coating materials and solvents;

(B) data of daily coatings and solvent use and the actual hours of operation of each coating or stripping operation;

(C) a monthly report that represents actual hours of operation each day, and emissions from each operation in the following categories:

(i) pounds per hour;

(ii) pounds per day;

(iii) pounds per week; and

(iv) tons emitted from the site during the previous 12 months;

(D) examples of the method of data reduction including units, conversion factors, assumptions, and the basis of the assumptions.

(9) Before construction begins, the facility shall be registered with the commission using Form PI-7.  
Adopted August 9, 2000 Effective September 4, 2000

#### **Section 106.434. Powder Coating Facility.**

Surface coating operations utilizing powder coating materials with the powder applied by an electrostatic powder spray gun or an electrostatic fluidized bed are permitted by rule.  
Adopted August 9, 2000 Effective September 4, 2000

#### **Section 106.435. Classic or Antique Automobile Restoration Facility.**

“Classic” or “Antique” vehicle restoration facilities (the terms “classic” and “antique” vehicle as determined by the Texas Department of Public Safety Vehicle Inspection and Registration Section under Texas Transportation Code, Chapter 502, Section 502.274 (concerning Classic Motor Vehicles) or Section 502.275 (concerning Certain Antique Vehicles; Offense)) qualify for this permit by rule if all of the following conditions of this section are met.

(1) All automobile body/chassis abrasive blast cleaning and coating operations shall be performed in a closed building or enclosure that is located at least 50 feet away from any property lines; or the facility shall be located a minimum of 300 feet from any recreational area or residence not occupied or used solely by the owner of the facility or the owner of the property upon which the facility is located, except that structures occupied by security or watch personnel may be located contiguously.

(2) Total abrasive usage shall be less than 100 pounds per hour, 500 pounds per day, and five tons per year.

(3) Combined clean-up material and paint usage, including solvents used for cleaning or thinning purposes, shall be less than five gallons per day and 100 gallons per year.

(4) All waste coatings, solvents, and spent automotive fluids shall be stored in covered containers and disposed of properly.

(5) The owner or operator of the restoration facilities shall maintain daily and annual records in sufficient detail to verify the usage limits in paragraphs (2) and (3) of this section. These records shall be maintained for a minimum of two years and made available at the request of personnel from the commission or any local pollution control program having jurisdiction.

(6) Facilities conducting vehicle repair and refinishing operations under Section 106.436 of this title (relating to Auto Body Refinishing Facility) may also conduct classic or antique vehicle restoration.  
Adopted August 9, 2000 Effective September 4, 2000

#### **Section 106.436. Auto Body Refinishing Facility.**

Body repair and refinishing of motorcycle, passenger car, van, light truck and heavy truck and other vehicle body parts, bodies, and cabs is permitted by rule, provided that all the following conditions of this section are met.

- (1) Before construction begins, the facility shall be registered with the commission's Office of Permitting, Remediation, and Registration in Austin using Form PI-7-124.
- (2) Facilities which satisfy one of the following conditions.
- (A) Spray operations that use less than 1/2 pint of coatings and solvents per hour are exempt from all of the requirements of this section except for paragraphs (3), (4), (16), and (17) of this section.
- (B) Spray operations that use less than two gallons of coatings and solvents per week are exempt from all of the requirements of this section except for paragraphs (3), (4), (8), (11), (12), (14), (16), and (17) of this section unless additional controls are specified in Section 115.421 of this title (relating to Emission Specifications). Additionally, all overspray emissions must be vented through a filter system that meets the requirements of paragraph (7) of this section.
- (3) Good housekeeping is practiced: spills are cleaned up as soon as possible, equipment is maintained according to manufacturers' instructions, and property is kept clean. In addition, all waste coatings, solvents, and spent automotive fluids including, but not limited to, engine oil, gear oil, transmission fluid, brake fluid, anti-freeze, fresh or waste fuels, and spray booth filters or water wash sludge are disposed of properly. Prior to disposal, all liquid waste shall be stored in covered containers.
- (4) There are no visible emissions leaving the property.
- (5) All spray coating operations which coat more than nine square feet (one panel) shall be performed in a totally enclosed filtered spray booth or totally enclosed filtered spray area with an air intake area of less than 100 square feet. All spray areas shall be equipped with a fan that achieves one of the following requirements:
- (A) a flow capacity of at least 10,000 cubic feet per minute;
- (B) a face velocity of at least 100 feet per minute.
- (6) All spray coating operations which coat less than nine square feet (one panel) and are not in a totally enclosed booth shall be performed on or in a dedicated preparation area which meets the following requirements.
- (A) The preparation area ventilation system shall be operating during spraying, and the exhaust air shall either be vented through a stack to the atmosphere or the air shall be recirculated back into the shop through a carbon adsorption system.
- (B) If the preparation area is equipped with a carbon adsorption system, the carbon shall be replaced at the manufacturer's recommended intervals to minimize solvent emissions.
- (C) The preparation area ventilation system shall be equipped with a filter or filter system to control paint overspray.
- (7) All paint booth, spray area, and preparation area overspray (exhaust) filters or filter systems shall have a particulate control efficiency of at least 90%.
- (8) High transfer efficiency coating application equipment shall be used, such as high volume low pressure spray guns. Electrostatic spray guns or other methods, if demonstrated to provide equivalent or better transfer efficiency are acceptable.
- (9) Cleanup emissions shall be minimized by implementing the following procedures:
- (A) spray and other equipment cleanup is totally enclosed during washing, rinsing, and draining. Non-enclosed cleaners may be used if the vapor pressure of the cleaning solvent is less than 100 millimeters of mercury at 68 degrees Fahrenheit and the solvent is directed toward a drain that leads directly to a remote reservoir;
- (B) all wash solvents are kept in an enclosed reservoir that is covered at all times, except when being refilled with fresh solvents;
- (C) all waste solvents and other cleaning materials are kept in closed containers.
- (10) All spray booth spray area, preparation area, and shop heaters that are not electrically heated must use pipeline quality natural gas or liquified petroleum gas only and the heaters are five million British thermal units per hour or smaller. No firing of waste coatings, solvents, oils, or other automotive fluids shall be permitted on-site.
- (11) All spray booth, spray area, and preparation area stack heights shall meet the following requirements.
- (A) If the stack is located within 200 feet of a building that is taller than the body shop building, the stack height shall be at least 1.2 times the height of the tallest building or higher as measured from ground level.
- (B) If the stack is located greater than 200 feet from a building taller than the body shop building, the stack height shall be at least 1.2 times the height of the body shop building as measured from ground level.
- (C) If any ground level elevation within 250 feet of the spray booth stack is greater than the stack height required in subparagraphs (A) and (B) of this paragraph, this section cannot be used.

(12) Spray booth, spray area, and preparation area stacks shall be located at least 50 feet away from any residence, recreation area, church, school, child care facility, or medical or dental facility.

(13) Rain caps, goose neck exhaust, or other stack heads that would restrict or obstruct vertical discharge of air contaminants shall not be allowed.

(14) The volatile organic compound (VOC) content limits specified in Section 115.421 of this title, concerning automobile and light-duty truck coatings, shall apply to the facility regardless of its location.

(15) Definitions of the coating types specified in subparagraphs (A) - (H) of this paragraph are based on Section 115.10 of this title (relating to Definitions), and the VOC content limits shall be those listed in Section 115.421 of this title. Shop use of the coating categories listed in subparagraphs (A) - (H) of this paragraph in gallons per month shall not be exceeded:

(A) cleanup solvents - 50 gallons per month;

(B) wipe solvents - 50;

(C) precoat - 50;

(D) pretreatment - 50;

(E) sealers - 50;

(F) primers/primer surfacer - 175;

(G) top coats - 320;

(H) specialty coatings - 50.

(16) The following records and reports shall be maintained at the shop site for a consecutive 24-month period and be made immediately available upon request of personnel from the commission or any other air pollution control agency with jurisdiction:

(A) material safety data sheet (MSDS) or other coating data sheets on paint and solvent systems used during the previous 24-month period or currently in use at the shop. The MSDS or coating data sheets should clearly indicate the VOC content of the product and the VOC content of multiple component coatings when mixed according to manufacturers instructions;

(B) records of monthly coating and solvent purchases (invoices from suppliers are acceptable);

(C) records of monthly paint and solvent use if purchase volumes are above the levels specified for any category in paragraph (15) of this section;

(D) additional records are kept in sufficient detail, if necessary, to allow an annual emission inventory to be submitted according to the requirements in Section 101.10 of this title (relating to Emissions Inventory Requirements);

(E) records of the United States Environmental Protection Agency and the commission's Office of Permitting, Remediation, and Registration or identification numbers for each waste generator.

(17) Compliance with the requirements of this section does not eliminate the requirement to comply with all rules of the commission, including Section 101.4 of this title (relating to Nuisance). The commission may require a facility to cease operation until the matter is resolved.

(18) After December 31, 1994, the conditions of this permit by rule are effective as to facilities in existence prior to the adoption of this section.

Adopted August 9, 2000 Effective September 4, 2000

#### **SUBCHAPTER T: SURFACE PREPARATION**

##### **Section 106.451 - 106.454**

**Effective September 4, 2000**

##### **Section 106.451. Wet Blast Cleaning.**

Blast cleaning equipment using a suspension of abrasives in water is permitted by rule.

Adopted August 9, 2000 Effective September 4, 2000

##### **Section 106.452. Dry Abrasive Cleaning.**

Any abrasive cleaning operation that will satisfy paragraph (1) or (2) of this section is permitted by rule:

(1) enclosed abrasive cleaning:

(A) the particulate matter emissions are evacuated through a fabric filter with a maximum filtering velocity of 4.0 feet per minute (ft/min) with mechanical cleaning or 7.0 ft/min with air cleaning; and

(B) there are no visible fugitive emissions from the facility.

(2) outside blast cleaning:

(A) abrasive usage rate shall not exceed 150 tons per year, 15 tons per month, and one ton per day; and

(B) the blast cleaning is performed at least 500 feet from any recreational area or residence or other structure not occupied or used solely by the owner of the facility or the owner of the property upon which the facility is located; and

(C) records shall be maintained of operating hours and abrasive material usage; and

(D) before construction begins, the facility is registered with the commission's Office of Permitting, Remediation, and Registration in Austin using Form PI-7; and

(E) before construction of the facility begins, written site approval shall be received from the executive director.

Adopted August 9, 2000 Effective September 4, 2000

**Section 106.453. Washing and Drying of Glass and Metal.**

Equipment used for washing or drying products fabricated from metal or glass is permitted by rule, provided no volatile organic materials are used in the process and no oil or solid fuel is burned.

Adopted August 9, 2000 Effective September 4, 2000

**Section 106.454. Degreasing Units.**

Any degreasing unit that satisfies the following conditions of this section is permitted by rule.

(1) The following general requirements are applicable to all degreasers unless specifically noted by the conditions of this section.

(A) Units subject to paragraphs (3) - (5) of this section shall meet the following:

(i) register with the commission's Office of Permitting, Remediation, and Registration in Austin using Form PI-7 and a Degreasing Unit Checklist;

(ii) on a monthly basis, records shall be kept of total solvent makeup (gross usage minus waste disposal).

(B) Waste solvent from all degreasing operations shall be stored in covered containers, and be removed by a licensed disposal service or until emptying into an authorized on-site waste management facility.

(C) Porous or absorbent materials, such as cloth, leather, wood, or rope shall not be degreased.

(D) Leaks shall be repaired immediately, or the degreaser shall be shut down until repairs are completed.

(E) A permanent and conspicuous label summarizing proper operating procedures to minimize emissions shall be posted on or near the degreaser.

(F) Each unit, regardless of the county in which it is located, shall meet the requirements of Section 115.412 and Section 115.415 of this title (relating to Control Requirements and Testing Requirements).

(2) The following conditions apply only to remote reservoir cleaners.

(A) The cleaner shall be designed to prevent exposure of the solvent reservoir to the atmosphere except for the drain openings. The drain openings shall not exceed 3.0% of the total cleaner open area and shall under no conditions exceed 16 square inches.

(B) All solvent sprays shall be a solid fluid stream (not a fine, atomized, or shower type spray) and at a minimal operating pressure that is necessary to prevent excessive splashing, but not to exceed ten pounds per square inch, gauge (psig).

(C) The true vapor pressure of the solvent shall not exceed 0.6 pounds per square inch, absolute (psia) as measured or calculated at an operating temperature of 100 degrees Fahrenheit.

(D) The solvent shall not be heated.

(3) The following conditions apply only to cold solvent cleaners, not including remote reservoirs.

(A) The cleaner shall have a freeboard that has a minimum four-inch water cover or provides a freeboard ratio (the distance from top of the solvent level to the top edge of the degreasing tank divided by the degreaser width) equal to or greater than 0.7. For water covers, the solvent must be insoluble in and heavier than water.

(B) The unit shall be equipped with a cover which is closed whenever parts are not being handled in the cleaner. Also, the cover must be designed for easy one-handed operation if any of the following conditions are present:

(i) the true vapor pressure of the solvent is greater than 0.3 psia as measured or calculated at 100 degrees Fahrenheit;

(ii) the solvent is agitated;

(iii) the solvent is heated.

(C) If a solvent spray is used, it shall be a solid fluid stream (not a fine, atomized, or shower-type spray) with a minimal operating pressure that is necessary to prevent splashing above the acceptable freeboard. The operating pressure shall not exceed ten psig.

(D) An internal-cleaned parts drainage rack or facility, for enclosed draining under a cover, shall be provided. An external-cleaned parts drainage rack or facility, for enclosed draining under a cover, may be used if the vapor pressure of the solvent is less than 0.6 psia at 100 degrees Fahrenheit. In all cases, parts shall be drained for at least 15 seconds or until dripping ceases.

(E) The Form PI-7 registration is not required if total solvent makeup (gross usage minus waste disposal) is 110 gallons per year (gallon/yr) or less.

(F) Total solvent makeup shall not exceed the following:

(i) chlorinated solvents - 660 gallons/yr;

(ii) all other solvents - 1,500 gallons/yr.

(4) The following conditions apply only to open top solvent vapor degreasers.

(A) The surface area of the solvent shall not exceed 15 square feet.

(B) The unit shall be equipped with a cover that can be opened and closed easily without disturbing the vapor zone. If the degreaser opening exceeds ten square feet, a powered cover shall be required.

(C) The cover shall be closed at all times except when parts are moved into and out of the degreaser.

(D) The unit shall be equipped with a properly sized refrigerated chiller, or the unit shall have a freeboard ratio (the distance from top of the vapor level to the top edge of the degreasing tank divided by the degreaser width) equal to or greater than 0.75.

(E) Exhaust ventilation for the unit shall operate between 50 and 65 cubic feet per minute (cfm) per square foot of degreaser open area unless this conflicts with Occupational Safety and Health Administration (OSHA) requirements. Ventilation fans or other sources of air agitation shall not be operated near the degreaser opening.

(F) The exhaust stacks shall discharge vertically with no restrictions or obstructions to flow. The stack height shall extend at least 1.3 times the building height as measured from ground level.

(G) Total solvent makeup (gross usage minus waste disposal) shall not exceed the following:

(i) chlorinated solvents - 660 gallons/yr;

(ii) all other solvents - 1500 gallons/yr.

(5) The following conditions apply only to conveyORIZED degreasers.

(A) The inlet and outlet openings shall be closed at all times except when processing work through the degreaser.

(B) The unit shall be equipped with a properly sized refrigerated chiller which has a volatile organic compound removal efficiency of at least 85%, or the unit shall have a freeboard ratio (the distance from top of the vapor level to the top edge of the degreasing tank divided by the degreaser width) equal to or greater than 0.75.

(C) A drying tunnel or other means of control shall be used to limit liquid or vapor carry-out.

(D) Entrances and exits to the degreaser shall be designed to silhouette work loads.

(E) Exhaust ventilation for the unit shall operate between 50 and 65 cfm per square foot of degreaser opening unless this conflicts with OSHA requirements. Ventilation fans or other sources of air agitation shall not be operated near the degreaser openings.

(F) The exhaust stacks shall discharge vertically with no restrictions or obstructions to flow. The stack height shall extend at least 1.5 times the building height as measured from ground level.

(G) Total solvent makeup (gross usage minus waste disposal) shall not exceed the following:

(i) chlorinated solvents - 660 gallons/yr;

(ii) all other solvents - 1,500 gallons/yr.

Adopted August 9, 2000 Effective September 4, 2000

#### **SUBCHAPTER U : TANKS, STORAGE, AND LOADING**

##### **Section 106.471 - 106.478**

**Effective September 4, 2000**

##### **Section 106.471. Storage or Holding of Dry Natural Gas.**

Equipment used exclusively to store or hold dry natural gas is permitted by rule.

Adopted August 9, 2000 Effective September 4, 2000

##### **Section 106.472. Organic and Inorganic Liquid Loading and Unloading.**

Liquid loading or unloading equipment for railcars, tank trucks, or drums; storage containers, reservoirs, tanks; and change of service of material loaded, unloaded, or stored is permitted by rule, provided that no visible emissions result and the chemicals loaded, unloaded, or stored are limited to:

(1) the following list: asphalt, resins, soaps, lube oils, fuel oils, waxes, polymers, detergents, lube oil additives, kerosene, wax emulsions, vegetable oils, greases, animal fats, and diesel fuels;

(2) water or wastewater;

(3) aqueous salt solutions;

(4) aqueous caustic solutions, except ammonia solutions;

(5) inorganic acids except oleum, hydrofluoric, and hydrochloric acids;

(6) aqueous ammonia solutions if vented through a water scrubber;

(7) hydrochloric acid if vented through a water scrubber;

(8) acetic acid if vented through a water scrubber;

(9) organic liquids having an initial boiling point of 300 degrees Fahrenheit or greater. Facilities loading, unloading, or storing butyric acid, isobutyric acid, methacrylic acid, mercaptans, croton oil, 2-methyl styrene, or any other compound with an initial boiling point of 300 degrees Fahrenheit or greater listed in 40 Code of Federal Regulations 261, Appendix VIII shall be located at least 500 feet from any recreational area or residence or other structure not occupied or used solely by the owner of the facility or the owner of the property upon which the facility is located.

Adopted August 9, 2000 Effective September 4, 2000

##### **Section 106.473. Organic Liquid Loading and Unloading.**

Organic liquids loading or unloading equipment for railcars, tank trucks, or drums; and storage containers, tanks, or change of service of the material loaded, unloaded, or stored is permitted by rule, provided that all of the following conditions of this section are met.

(1) Uncontrolled emissions calculated using the version of AP-42 in effect at the time are less than 25 tons per year of organic compounds or of any other air contaminant.

(2) The loading rate of the facilities does not exceed 20,000 gallons per day averaged over any consecutive 30-day period.

(3) The capacity of any tank does not exceed 25,000 gallons, except that tanks having a capacity of less than 40,000 gallons may be used to store sweet crude oil, sweet natural gas condensate, gasoline, and petroleum fuels.

(4) The facilities are used exclusively for the loading, unloading, or storage of:

(A) organic liquids normally used as solvents, diluents, thinners, inks, colorants, paints, lacquers, enamels, varnishes, liquid resins, or other surface coatings;

(B) petroleum, petroleum fuels, other motor vehicle fuels, and natural gas liquids, none of which have a true vapor pressure of 11.0 pounds per square inch, absolute, or greater at maximum temperature of use;

(5) The facilities will meet any applicable requirements of Chapter 115 of this title (relating to Control of Air Pollution from Volatile Organic Compounds);

(6) Facilities used for the loading, unloading, or storage of any compound listed in 40 Code of Federal Regulations 261, Appendix VIII are not permitted by rule under this section.

Adopted August 9, 2000 Effective September 4, 2000

**Section 106.474. Hydrochloric Acid Storage.**

Hydrochloric acid storage tanks used exclusively for the storage of hydrochloric acid with an acid strength of 38% by weight or less are permitted by rule. If an acid more concentrated than 20% by weight is stored, the tank vent must be controlled to reduce emissions by at least 99%.

Adopted August 9, 2000 Effective September 4, 2000

**Section 106.475. Pressurized Tanks or Tanks Vented to a Firebox.**

Any vessel storing carbon compounds composed only of carbon, hydrogen, or oxygen is permitted by rule, provided that the vessel vent is directed to an incinerator, boiler, or other firebox having a stationary flue or a waste gas flare system that will operate with no visible emissions except as provided by Chapter 101 of this title (relating to General Air Quality Rules) for periods of maintenance or operational upset. However, vessels not exceeding 100 barrels capacity and storing only liquid petroleum gas may have the safety relief valve vent directly to the atmosphere. Also, any tank having a capacity not to exceed 1,000 gallons and storing only commercial odorants used to odorize petroleum gases may have the safety relief valve vent directly to the atmosphere.

Adopted August 9, 2000 Effective September 4, 2000

**Section 106.476. Pressurized Tanks or Tanks Vented to Control.**

Any tank or other container storing carbon compounds is permitted by rule, provided that the tank or container pressure is sufficient at all times to prevent vapor or gas loss to the atmosphere or the tank or container is equipped with a relief valve which directs all vapors or gases to an incinerator, boiler, or other firebox having a stationary flue or a waste gas smokeless flare system. The vapors or gases and any necessary fuel gas shall be mixed thoroughly upstream of the heater burner(s) or the flare tip such that the mixed gases have a minimum net or lower heating value of 200 British thermal units per cubic foot. The flare also shall meet the other requirements of Section 106.492 of this title (relating to Flares).

Adopted August 9, 2000 Effective September 4, 2000

**Section 106.477. Anhydrous Ammonia Storage.**

Anhydrous ammonia storage tanks and distribution facilities that meet the following conditions are permitted by rule.

(1) All valves, connectors, and hoses, associated with permanent storage tanks and any nurse tanks stored on-site, shall be properly maintained in leak-proof condition at all times.

(2) The capacity of each permanent storage tank is 30,000 gallons or less.

(3) When transferring ammonia, all vapors shall be vented back to the host tank and never to the atmosphere.

(4) When relieving pressure from hoses associated with permanent storage tanks and any nurse tanks, all vapors shall be bled into an adequate volume of water and never to the atmosphere.

(5) Each permanent storage tank and any nurse tanks stored on-site are equipped to prevent unauthorized operation.

(6) Before construction begins, written site approval must be received from the regional director and the owner or operator shall file with the commission's Office of Permitting, Remediation, and Registration in Austin a completed Form PI-7 and supporting documentation demonstrating that all of the requirements of this section will be met.

(7) Each permanent storage tank is located at least 1/4 mile from any recreational area or residence or other structure not occupied or used solely by the owner of the property upon which the facility is located.

Adopted August 9, 2000 Effective September 4, 2000

**Section 106.478. Storage Tank and Change of Service.**

Any fixed or floating roof storage tank, or change of service in any tank, used to store chemicals or mixtures of chemicals shown in Table 478 in paragraph (8) of this section is permitted by rule, provided that all of the following conditions of this section are met:

(1) The tank shall be located at least 500 feet away from any recreational area or residence or other structure not occupied or used solely by the owner of the facility or the owner of the property upon which the facility is located.

(2) The true vapor pressure of the compound to be stored shall be less than 11.0 psia at the maximum storage temperature.



(3) For those compounds that have a true vapor pressure greater than 0.5 psia and less than 11.0 psia at the maximum storage temperature, any storage vessel larger than 40,000 gallons capacity shall be equipped with an internal floating cover or equivalent control.

(A) An open top tank containing an external floating roof using double seal technology shall be an approved control alternative equivalent to an internal floating cover tank, provided the primary seal consists of either a mechanical shoe seal or a liquid-mounted seal. Double seals having a vapor-mounted primary seal are an approved alternative for existing open top floating roof tanks undergoing a change of service.

(B) The floating cover or floating roof design shall incorporate sufficient flotation to conform to the requirements of American Petroleum Institute Code 650, Appendix C or an equivalent degree of flotation.

(4) Compounds with a true vapor pressure of 0.5 psia or less at the maximum storage temperature may be stored in a fixed roof or cone roof tank which includes a submerged fill pipe or utilizes bottom loading.

(5) For fixed or cone roof tanks having no internal floating cover, all uninsulated tank exterior surfaces exposed to the sun shall be painted chalk white except where a dark color is necessary to help the tank absorb or retain heat in order to maintain the material in the tank in a liquid state.

(6) Emissions shall be calculated by methods specified in Section 4.3 of the current edition of the United States Environmental Protection Agency Publication AP-42. This document may be obtained from the Superintendent of Documents, Washington D.C. 20402. It is Stock Number 0550000251-7, Volume I.

(7) Before construction begins, storage tanks of 25,000 gallons or greater capacity and located in a designated nonattainment area for ozone shall be registered with the commission's Office of Permitting, Remediation, and Registration in Austin using Form PI-7. The registration shall include a list of all tanks, calculated emissions for each carbon compound in tons per year for each tank, and a Table 7 of Form PI-2 for each different tank design.

(8) Mixtures of the chemicals listed in Table 478 which contain more than a total of 1.0% by volume of all other chemicals not listed in Table 478 are not covered by this section.

**Table 478**  
**Approved Chemical List for Exemption from Permitting**

A. Compounds of the following classes containing only atoms of carbon and hydrogen, not including aromatic compounds:

Paraffins. Examples: hexane, pentane, octane, isooctane.

Cycloparaffins (except cyclopentane). Examples: cyclohexane, methyl cyclopentane.

Olefins (except butadiene). Examples: octene, isoprene.

Cycloolefins. Examples: cyclopentadiene, cyclohexene.

B. Aromatic hydrocarbons only as follows: Ethyl benzene, styrene, xylenes.

C. Compounds of the following classes containing only atoms of carbon, hydrogen, and oxygen:

Alcohols (except allyl alcohol, isobutyl alcohol, and propargyl alcohol). Examples of approved alcohols: butyl alcohol, ethylene glycol.

Ethers (except vinyl ethers, glycol ethers, epoxides, and other ringed oxide compounds such as ketenes, furans, and pyrans). Examples of approved ethers: butyl ether, isopropyl ether.

Esters (except acrylates, methacrylates, allyl acetate, vinyl acetate, isopropyl formate). Examples of approved esters: ethyl acetate, butyl formate, methyl propionate.

Ketones (except allyl acetone, methyl ethyl ketone, methyl normal butyl ketone, acetophenone, and vinyl ketones). Examples of approved ketones: acetone, hexanone.

D. Additional chemicals:

Crude oil and refinery petroleum fractions (except pyrolysis naphthas and pyrolysis gasolines) containing less than 10% benzene. Examples of approved petroleum fractions: intermediate and finished gasolines, naphthas, alkylates, fluid catalytic cracking unit feed, fuel oils, distillates, other liquid fuels, and condensates. Natural gas and crude oil condensates that do not emit sour gas.

E. Non-approved chemicals:

Other chemicals not specifically included within the classes defined above are not approved. Examples of non-approved chemicals: aromatics (other than those listed or those found in the crude oil and refinery liquids as listed); aldehydes; amines; amides; imines; nitriles; halogenated compounds; sulfonated chemicals; cyanates; organic acids; ethylene oxide (EtO), propylene oxide, and other oxygenated compounds not listed; organometallic compounds; pesticides.

Adopted August 9, 2000 Effective September 4, 2000

## **SUBCHAPTER V: THERMAL CONTROL DEVICES**

**Section 106.491 - 106.496**  
**Effective September 4, 2000**

**Section 106.491. Dual Chamber Incinerators.**

Dual-chambered incinerators which burn only waste generated on-site and which meet the conditions of this section are permitted by rule. Incinerators used in the processing or recovery of materials or to dispose of pathological waste as defined in Section 106.494 of this title (relating to Pathological Waste Incinerators), hospital waste, and/or infectious waste are not authorized by this section.

(1) The incinerator shall meet the following design requirements.

(A) The incinerator shall be equipped with an afterburner automatically controlled to operate with a minimum temperature of 1,400 degrees Fahrenheit and a minimum gas retention time of 0.5 seconds.

(B) The manufacturer's rated capacity (burn rate) shall be 500 pounds per hour or less.

(C) Stacks shall have unobstructed vertical discharge when the incinerator is operated. Properly installed and maintained spark arrestors are not considered obstructions.

(D) Stack height shall be six feet above the peak of the highest building within 150 feet.

(2) The incinerator shall meet the following operational conditions.

(A) Before construction begins, the facility shall be registered with the commission's Office of Permitting, Remediation, and Registration in Austin using Form PI-7.

(B) Fuel for the incinerator shall be limited to sweet natural gas, liquid petroleum gas, Number 2 fuel oil with less than 0.5% sulfur by weight, or electric power.

(C) This facility shall be used solely for the disposal of the following waste materials generated on-site: paper, wood, cardboard cartons, rags, garbage (animal and vegetable wastes as defined in Chapter 101 of this title (relating to General Rules)), and combustible floor sweepings; containing overall not more than 10% treated papers, plastic, or rubber scraps. Neither garbage content nor moisture content shall exceed 50% and noncombustible solids shall not exceed 10%.

(D) The manufacturer's recommended operating instructions shall be posted at the incinerator and the unit shall be operated in accordance with these instructions.

(E) Incinerator owners and operators shall meet the monitoring, testing, reporting, and recordkeeping requirements found in Chapter 111 of this title (relating to Control of Air Pollution from Visible Emissions and Particulate Matter). Adopted August 9, 2000 Effective September 4, 2000

**Section 106.492. Flares.**

Smokeless gas flares which meet the following conditions of this section are permitted by rule:

(1) design requirements.

(A) The flare shall be equipped with a flare tip designed to provide good mixing with air, flame stability, and a tip velocity less than 60 feet per second (ft/sec) for gases having a lower heating value less than 1,000 British thermal units per cubic foot (Btu/ft<sup>3</sup>) or a tip velocity less than 400 ft/sec for gases having a lower heating value greater than 1,000 Btu/ft<sup>3</sup>.

(B) The flare shall be equipped with a continuously burning pilot or other automatic ignition system that assures gas ignition and provides immediate notification of appropriate personnel when the ignition system ceases to function. A gas flare which emits no more than 4.0 pounds per hour (lb/hr) of reduced sulfur compounds, excluding sulfur oxides, is exempted from the immediate notification requirement, provided the emission point height meets the requirements of Section 106.352(4) of this title (relating to Oil and Gas Production Facilities).

(C) A flare which burns gases containing more than 24 parts per million by volume (ppmv) of sulfur, chlorine, or compounds containing either element shall be located at least 1/4 mile from any recreational area or residence or other structure not occupied or used solely by the owner or operator of the flare or the owner of the property upon which the flare is located.

(D) The heat release of a flare which emits sulfur dioxide (SO<sub>2</sub>) or hydrogen chloride (HCl) shall be greater than or equal to the following values:

For HCl  $Q = 2.73 \times 10^5 \times \text{HCl}$

For SO<sub>2</sub>  $Q = 0.53 \times 10^5 \times \text{SO}_2$

Where Q = heat release, British thermal units per hour, based on lower heating value

HCl = HCl emission rate, lb/hr

SO<sub>2</sub> = SO<sub>2</sub> emission rate, lb/hr

(2) operational conditions.

(A) The flare shall burn a combustible mixture of gases containing only carbon, hydrogen, nitrogen, oxygen, sulfur, chlorine, or compounds derived from these elements. When the gas stream to be burned has a net or lower heating value of more than 200 Btu/ft<sup>3</sup> prior to the addition of air, it may be considered combustible.

(B) A flare which burns gases containing more than 24 ppmv of sulfur, chlorine, or compounds containing either element shall be registered with the commission's Office of Permitting, Remediation, and Registration in Austin using Form PI-7 prior to construction of a new flare or prior to the use of an existing flare for the new service.

(C) Under no circumstances shall liquids be burned in the flare.  
Adopted August 9, 2000 Effective September 4, 2000

#### **Section 106.493 Direct Flame Incinerators**

Direct flame incinerators installed for the purpose of reducing or eliminating non-halogenated volatile organic compound vapors and/or aerosols (but not liquids or solids) are exempt, provided the following conditions of this section are satisfied.

- (1) Before construction begins, the facility shall be registered with the commission's Office of Air Quality in Austin using Form PI-7.
- (2) Each direct flame incinerator shall be automatically controlled to maintain a minimum temperature of 1,400 degrees Fahrenheit in the combustion chamber (secondary chamber if dual-chambered) and a gas retention time of 0.5 second or greater.
- (3) Continuous temperature monitors to record the temperature of the combustion chamber (secondary chamber if dual chambered) shall be installed and maintained. Temperature data shall be maintained on a rolling two-year retention basis and shall be made available at the request of personnel from the commission or any local air pollution control program having jurisdiction.
- (4) Manufacturer's recommended operating instructions shall be posted at each incinerator and each unit shall be operated in accordance with these instructions.
- (5) Opacity of emissions from the incinerator shall not exceed 5.0% averaged over a five-minute period.
- (6) There shall be no obstructions to stack flow, such as by rain caps, unless such devices are designed to automatically open when the incinerator is in operation. Properly installed and maintained spark arrestors are not considered obstructions.
- (7) Heat for the incinerator shall be provided by the combustion of sweet natural gas, liquid petroleum gas, or Number 2 fuel oil with no more than 0.5% sulfur by weight or by electric power.
- (8) The gases being incinerated shall contain no halogenated organic compounds.
- (9) This section shall not apply to catalytic incinerators or direct flame incinerators installed to control emissions from new or modified facilities subject to the requirements of Chapter 116 of this title (relating to Control of Air Pollution by Permits for New Construction or Modification).  
Adopted August 9, 2000 Effective September 4, 2000

#### **Section 106.494. Pathological Waste Incinerators.**

(a) Definitions. The following words and terms, when used in this section, shall have the following meanings, unless the context clearly indicates otherwise.

- (1) **Pathological waste (as defined in 25 TAC Section 1.132 (relating to Definitions))-**  
Includes, but is not limited to:

(A) human materials removed during surgery, labor and delivery, autopsy, or biopsy, including:

- (i) body parts;
- (ii) tissues or fetuses;
- (iii) organs; and
- (iv) bulk blood and body fluids;

(B) products of spontaneous or induced human abortions, including body parts, tissues, fetuses, organs, and bulk blood and body fluids, regardless of the period of gestation;

(C) laboratory specimens of blood and tissue after completion of laboratory examination; and

(D) anatomical remains.

(2) **Human remains (as defined in Health and Safety Code (H&SC), Section 711.001)** - The body of decedent.

(3) **Carcasses** - Dead animals, in whole or part.

(4) **Crematory (as defined in the H&SC, Section 711.001)** - A structure containing a furnace used or intended to be used for the cremation of human remains.

(5) **Animal feeding operations** - A lot or facility (other than an aquatic animal feeding facility or veterinary facility) where animals are stabled or confined and fed or maintained for a total of 45 days or more in any 12-month period, and the animal confinement areas do not sustain crops, vegetation, forage growth, or post-harvest residues in the normal growing season.

(6) **Non-commercial incinerator** - An incinerator which does not accept pathological waste or carcasses generated off-site for monetary compensation.

(7) **Stack height** - Elevation of the stack exit above the ground.

(b) Conditions of permit by rule. Crematories and non-commercial incinerators used to dispose of pathological waste and carcasses which meet the following conditions of this section are permitted by rule. Incinerators used in the recovery of materials are not covered by this section.

(1) Design requirements.

(A) The manufacturer's rated capacity (burn rate) shall be 200 pounds per hour (lbs/hr) or less.

(B) The incinerator shall be a dual-chamber design.

(C) Burners shall be located in each chamber, sized to manufacturer's specifications, and operated as necessary to maintain the minimum temperature requirements of subparagraphs (D) or (E) of this paragraph at all times when the unit is burning waste.

(D) Excluding crematories, the secondary chamber must be designed to maintain a temperature of 1,600 degrees Fahrenheit or more with a gas residence time of 1/2 second or more.

(E) In lieu of subparagraph (D) of this paragraph, incinerators at animal feeding operations that:

(i) are used to dispose of carcasses generated on-site; and

(ii) are located a minimum of 700 feet from the nearest property line, shall be designed to maintain a secondary chamber temperature of 1,400 degrees Fahrenheit or more with a gas residence time of 1/4 second or more. Alternatively, incinerators may be located in accordance with Table 494, provided the total manufacturer's rated capacity (burn rate) of all units located less than 700 feet from a property line shall not exceed 200 lb/hr. Setback distances shall be measured from the stack exit.

**Table 494**

<u>Stack Height (feet)</u>	<u>Property Line Distance (feet) For 24-hour Operation</u>	<u>Property Line Distance (feet) For *Daytime-only Operation</u>
8 or less	210	150
>8 and ≤ 12	200	140
>12 and ≤ 16	180	130
>16 and ≤ 20	160	110
> than 20	140	90

\*One hour after sunrise to one hour before sunset

(F) There shall be no obstructions to stack flow, such as by rain caps, unless such devices are designed to automatically open when the incinerator is operated. Properly installed and maintained spark arresters are not considered obstruction.

(2) Operational conditions.

(A) Before construction begins, the facility shall be registered with the commission using Form PI-7.

(B) The manufacturer's recommended operating instructions shall be posted at the unit and the unit shall be operated in accordance with these instructions.

(C) The opacity of emissions from the incinerator shall not exceed 5.0% averaged over a six-minute period.

(D) Heat shall be provided by the combustion of sweet natural gas, liquid petroleum gas, or Number 2 fuel oil with less than 0.3% sulfur by weight, or by electric power.

(E) Incinerators installed and operated in accordance with the conditions of this section shall not be used to dispose of any medical waste, other than pathological waste and/or carcasses.

(F) Incinerators installed and operated in accordance with the conditions of this section shall also meet the requirements of Section 111.121, 111.125, 111.127, and 111.129 of this title (relating to Single-, Dual-, and Multiple-Chamber Incinerators; Testing Requirements; Monitoring and Recordkeeping Requirements; and Operating Requirements).

(G) Crematories shall be used for the sole purpose of cremation of human remains and appropriate containers.  
Adopted August 9, 2000 Effective September 4, 2000

#### **Section 106.495. Heat Cleaning Devices.**

Heat cleaning devices (such as ovens, furnaces, and/or direct flame incinerators) used to thermally remove residual combustible or semi-combustible materials from noncombustible electrical or mechanical parts are permitted by rule, provided the following conditions of this section are satisfied.

(1) Before construction begins, the facility shall be registered with the commission's Office of Permitting, Remediation, and Registration in Austin using Form PI-7.

(2) The combustible material shall not exceed 10% by weight of the total load to the oven, furnace, and/or incinerator.

(3) The combustible material shall contain no halogenated organic compounds.

(4) The oven, furnace, and/or incinerator shall be equipped with an afterburner automatically controlled to operate with a minimum temperature of 1,400 degrees Fahrenheit and a gas retention time of 0.5 second or greater.

(5) Opacity of emissions from the oven, furnace, and/or incinerator shall not exceed 5.0% averaged over a five-minute period.

(6) The manufacturer's recommended operating instructions shall be posted at each oven, furnace, and/or incinerator, and each unit shall be operated in accordance with these instructions.

(7) Heat shall be provided by the combustion of sweet natural gas, liquid petroleum gas, or Number 2 fuel oil with no more than 0.5% sulfur by weight, or by electric power.

(8) The emission of any air contaminant shall not exceed 0.5 pounds per hour and 2.0 tons per year.  
Adopted August 9, 2000 Effective September 4, 2000

#### **Section 106.496 Trench Burners**

Any trench burner that operates according to the following conditions of this section is exempt.

(1) The trench burner shall be operated at least 300 feet from any recreational area, residence, or other structure not occupied or used solely by the owner of the trench burner or the owner of the property upon which the trench burner is located.

(2) The trench shall be opened in undisturbed soil not previously excavated, built up, compacted, or used in any type of landfill operation.

(3) The trench shall be no wider than 12 feet with a minimum depth of ten feet. The maximum length of the burning area as measured along the bottom of the trench shall not exceed by more than five feet the length of the manifold. The walls of the trench must be maintained such that they remain vertical.

(4) Operation of this trench burner is limited to the hours between 8:00 a.m. and 6:00 p.m., and is limited to a total of eight hours per day and 1,000 hours per year. A written record or log of the hours of operation of this trench burner shall be maintained at the site and made available at the request of personnel from the commission or any local air pollution control program having jurisdiction. This record or log shall be organized such that the compliance status of this special condition can be readily determined.

(5) Material shall not be added to the trench such that the material will not be consumed by 6:00 p.m.

(6) The blower shall remain on until all material is consumed so that any remaining material in the trench will not smoke when the blower is turned off.

(7) This trench burner shall not be operated when an air stagnation advisory is in effect for the area in which the trench burner is located.

(8) Opacity of emissions from the trench and from operation of the blower shall not exceed 20% averaged over a five-minute period, except for a start-up period which shall not exceed 20 minutes. Opacity shall be measured as outlined in Chapter 13, "Visible Emissions Evaluation," of the commission's Sampling Procedures Manual, as published in January 1983, and as subsequently revised.

(9) Material to be burned in the trench is limited to not more than 7.0 tons per hour of trees, brush, and untreated lumber. Material not being worked and material being stockpiled to be burned at a later date must be kept at least 75 feet from the trench.

(10) Material shall not be added to the trench in such a manner as to be stacked above the air curtain at any time.

(11) The ash generated by this operation shall be removed from the trench as necessary in order to maintain the minimum trench depth of ten feet. The ash shall be removed in such a manner as to minimize the ash becoming airborne. All material removed from the trench must be completely extinguished before being landfilled or placed in contact with combustible material to prevent combustion outside of the trench or in the landfill.

(12) A copy of this section shall be kept at the burn site and made available at the request of personnel from the commission or any local air pollution control program having jurisdiction.

(13) Operating instructions shall be posted at the burn site and all operators shall read and have knowledge of these instructions. The operating instructions shall be made available at the request of personnel from the commission or any local air pollution control program having jurisdiction.

(14) An operator shall remain with the trench burner at all times when it is operating.

(15) Upon notification by a representative of the commission or any local air pollution control program having jurisdiction that the trench burner is not complying with the conditions of this section, no additional material shall be added to the trench until compliance with such conditions has been effected.

(16) The Texas Natural Resource Conservation Commission (TNRCC) shall be notified by the owner or operator of the trench burner prior to use of the trench burner at a TNRCC permitted landfill.

(17) Upon removal of the trench burner from the burn site, the trench shall be completely filled with uncombustible material.

(18) Before operation of the facility begins at any site, written site approval shall be received from the executive director and any local air pollution control program having jurisdiction in the area and the facility shall be registered with the commission's Office of Air Quality in Austin using Form PI-7.

Adopted August 9, 2000 Effective September 4, 2000

#### **SUBCHAPTER W: TURBINES AND ENGINES**

##### **Section 106.511, Section 106.512**

**Effective September 4, 2000**

##### **Section 106.511. Portable and Emergency Engines and Turbines.**

Internal combustion engine and gas turbine driven compressors, electric generator sets, and water pumps, used only for portable, emergency, and/or standby services are permitted by rule, provided that the maximum annual operating hours shall not exceed 10% of

the normal annual operating schedule of the primary equipment; and all electric motors. For purposes of this section, "standby" means to be used as a "substitute for" and not "in addition to" other equipment.  
Adopted August 9, 2000 Effective September 4, 2000

#### **Section 106.512. Stationary Engines and Turbines.**

Gas or liquid fuel-fired stationary internal combustion reciprocating engines or gas turbines that operate in compliance with the following conditions of this section are exempt.

(1) The facility shall be registered by submitting the commission's Form PI-7, Table 29 for each proposed reciprocating engine, and Table 31 for each proposed gas turbine to the commission's Office of Air Quality in Austin within ten days after construction begins. Engines and turbines rated less than 240 horsepower (hp) need not be registered, but must meet paragraphs (5) and (6) of this section, relating to fuel and protection of air quality. Engine hp rating shall be based on the engine manufacturer's maximum continuous load rating at the lesser of the engine or driven equipment's maximum published continuous speed. A rich-burn engine is a gas-fired spark-ignited engine that is operated with an exhaust oxygen content less than 4.0% by volume. A lean-burn engine is a gas-fired spark-ignited engine that is operated with an exhaust oxygen content of 4.0% by volume, or greater.

(2) For any engine rated 500 hp or greater, subparagraphs (A)-(C) of this paragraph shall apply.

(A) The emissions of nitrogen oxides (NO<sub>x</sub>) shall not exceed the following limits:

(i) 2.0 grams per horsepower-hour (g/hp-hr) under all operating conditions for any gas-fired rich-burn engine;

(ii) 2.0 g/hp-hr at manufacturer's rated full load and speed, and other operating conditions, except 5.0 g/hp-hr under reduced speed, 80-100% of full torque conditions, for any spark-ignited, gas-fired lean-burn engine, or any compression-ignited dual fuel-fired engine manufactured new after June 18, 1992;

(iii) 5.0 g/hp-hr under all operating conditions for any spark-ignited, gas-fired, lean-burn two-cycle or four-cycle engine or any compression-ignited dual fuel-fired engine rated 825 hp or greater and manufactured after September 23, 1982, but prior to June 18, 1992;

(iv) 5.0 g/hp-hr at manufacturer's rated full load and speed and other operating conditions, except 8.0 g/hp-hr under reduced speed, 80-100% of full torque conditions for any spark-ignited, gas-fired, lean-burn four-cycle engine, or any compression-ignited dual fuel-fired engine that:

(I) was manufactured prior to June 18, 1992, and is rated less than 825 hp; or

(II) was manufactured prior to September 23, 1982;

(v) 8.0 g/hp-hr under all operating conditions for any spark-ignited, gas-fired, two-cycle lean-burn engine that:

(I) was manufactured prior to June 18, 1992, and is rated less than 825 hp; or

(II) was manufactured prior to September 23, 1982;

(vi) 11.0 g/hp-hr for any compression-ignited liquid-fired engine.

(B) For such engines which are spark-ignited gas-fired or compression-ignited dual fuel-fired, the engine shall be equipped as necessary with an automatic air-fuel ratio (AFR) controller which maintains AFR in the range required to meet the emission limits of subparagraph (A) of this paragraph. An AFR controller shall be deemed necessary for any engine controlled with a non-selective catalytic reduction (NSCR) converter and for applications where the fuel heating value varies more than plus or minus 50 British thermal unit/standard cubic feet from the design lower heating value of the fuel. If an NSCR converter is used to reduce NO<sub>x</sub>, the automatic controller shall operate on exhaust oxygen control.

(C) Records shall be created and maintained by the owner or operator for a period of at least two years, made available, upon request, to the commission and any local air pollution control agency having jurisdiction, and shall include the following:

(i) documentation for each AFR controller, manufacturer's, or supplier's recommended maintenance that has been performed, including replacement of the oxygen sensor as necessary for oxygen sensor-based controllers. The oxygen sensor shall be replaced at least quarterly in the absence of a specific written recommendation;

(ii) documentation on proper operation of the engine by recorded measurements of NO<sub>x</sub> and carbon monoxide (CO) emissions as soon as practicable, but no later than seven days following each occurrence of engine maintenance which may reasonably be expected to increase emissions, changes of fuel quality in engines without oxygen sensor-based AFR controllers which may reasonably be expected to increase emissions, oxygen sensor replacement, or catalyst cleaning or catalyst replacement. Stain tube indicators specifically designed to measure NO<sub>x</sub> and CO concentrations shall be acceptable for this documentation, provided a hot air probe or equivalent device is used to prevent error due to high stack temperature, and three sets of concentration measurements are made and averaged. Portable NO<sub>x</sub> and CO analyzers shall also be acceptable for this documentation;

(iii) documentation within 60 days following initial engine start-up and biennially thereafter, for emissions of NO<sub>x</sub> and CO, measured in accordance with United States Environmental Protection Agency (EPA) Reference Method 7E or 20 for NO<sub>x</sub> and Method 10 for CO. Exhaust flow rate may be determined from measured fuel flow rate and EPA Method 19. California Air Resources Board Method A-100 (adopted June 29, 1983) is an acceptable alternate to EPA test methods. Modifications to these methods will be subject to the prior approval of the Source and Mobile Monitoring Division of the commission. Emissions shall be measured and recorded in the as-found operating condition; however, compliance determinations shall not be established during start-up, shutdown, or under breakdown conditions. An owner or operator may submit to the appropriate regional office a report of a valid emissions test performed in Texas, on the same engine, conducted no more than 12 months prior to the most recent start of construction date, in lieu of performing an emissions test within 60 days following engine start-up at the new site. Any such engine shall be sampled no less frequently than biennially (or every 15,000 hours of elapsed run time, as recorded by an elapsed run time meter) and upon request of the executive director. Following the initial compliance test, in lieu of performing stack sampling on a biennial calendar basis, an owner or operator may elect to install and operate an elapsed operating time meter and shall test the engine within 15,000 hours of engine operation after the previous emission test. The owner or operator who elects to test on an operating hour schedule shall submit in writing, to the appropriate regional office, biennially after initial sampling, documentation of the actual recorded hours of engine operation since the previous emission test, and an estimate of the date of the next required sampling.

(3) For any gas turbine rated 500 hp or more, subparagraphs (A) and (B) of this paragraph shall apply.

(A) The emissions of NO<sub>x</sub> shall not exceed 3.0 g/hp-hr for gas-firing.

(B) The turbine shall meet all applicable NO<sub>x</sub> and sulfur dioxide (SO<sub>2</sub>) (or fuel sulfur) emissions limitations, monitoring requirements, and reporting requirements of EPA New Source Performance Standards Subpart GG--Standards of Performance for Stationary Gas Turbines. Turbine hp rating shall be based on turbine base load, fuel lower heating value, and International Standards Organization Standard Day Conditions of 59 degrees Fahrenheit, 1.0 atmosphere and 60% relative humidity.

(4) Any engine or turbine rated less than 500 hp or used for temporary replacement purposes shall be exempt from the emission limitations of paragraphs (2) and (3) of this section. Temporary replacement engines or turbines shall be limited to a maximum of 90 days of operation after which they shall be removed or rendered physically inoperable.

(5) Gas fuel shall be limited to: sweet natural gas or liquid petroleum gas, fuel gas containing no more than ten grains total sulfur per 100 dry standard cubic feet, or field gas. If field gas contains more than 1.5 grains hydrogen sulfide or 30 grains total sulfur compounds per 100 standard cubic feet (sour gas), the engine owner or operator shall maintain records, including at least quarterly measurements of fuel hydrogen sulfide and total sulfur content, which demonstrate that the annual SO<sub>2</sub> emissions from the facility do not exceed 25 tons per year (tpy). Liquid fuel shall be petroleum distillate oil that is not a blend containing waste oils or solvents and contains less than 0.3% by weight sulfur.

(6) There will be no violations of any National Ambient Air Quality Standard (NAAQS) in the area of the proposed facility. Compliance with this condition shall be demonstrated by one of the following three methods:

(A) ambient sampling or dispersion modeling accomplished pursuant to guidance obtained from the executive director. Unless otherwise documented by actual test data, the following nitrogen dioxide (NO<sub>2</sub>)/NO<sub>x</sub> ratios shall be used for modeling NO<sub>2</sub> NAAQS;

Device	NO <sub>x</sub> Emission Rate (Q) g/hp-hr	NO <sub>2</sub> /NO <sub>x</sub> Ratio
IC Engine	Less than 2.0	0.4
IC Engine	2.0 thru 10.0	0.15 + (0.5/Q)
IC Engine	Greater than 10.0	0.2
Turbines		0.25
IC Engine with catalytic converter		0.85



B) all existing and proposed engine and turbine exhausts are released to the atmosphere at a height at least twice the height of any surrounding obstructions to wind flow. Buildings, open-sided roofs, tanks, separators, heaters, covers, and any other type of structure are considered as obstructions to wind flow if the distance from the nearest point on the obstruction to the nearest exhaust stack is less than five times the lesser of the height, Hb, and the width, Wb, where:

Hb = maximum height of the obstruction, and  
Wb = projected width of construction

2 square root of  $\{(L \times W)/(3.141)\}$

where:

L = length of obstruction  
W = width of obstruction

(C) the total emissions of NOx (nitrogen oxide plus NO2) from all existing and proposed facilities on the property do not exceed the most restrictive of the following:

(i) 250 tpy;

(ii) the value  $(0.3125 D)$  tpy, where D equals the shortest distance in feet from any existing or proposed stack to the nearest property line.

Adopted August 9, 2000 Effective September 4, 2000

#### **SUBCHAPTER X: WASTE PROCESSES AND REMEDIATION**

##### **Section 106.531 - 106.534**

**Effective September 4, 2000**

##### **Section 106.531. Sewage Treatment Facility.**

Sewage treatment facilities, excluding combustion or incineration equipment, land farms, or grease trap waste handling or treatment facilities are permitted by rule.

Adopted August 9, 2000 Effective September 4, 2000

##### **Section 106.532. Water and Wastewater Treatment.**

Water and wastewater treatment units are permitted by rule, provided the following conditions of this section are met.

(1) The facility performs only the following functions:

(A) disinfection;

(B) softening;

(C) filtration;

(D) flocculation;

(E) stabilization;

(F) taste and odor control;

(G) clarification;

(H) carbonation;

(I) sedimentation;

(J) neutralization;

(K) chlorine removal;

(L) activated sludge treatment, anaerobic treatment, and associated control of gases from these treatments;

(M) aerobic oxidation/biodegradation using oxygen or peroxide in the absence of nitrogen or other gas that would cause stripping of volatile organic compounds (VOC) from the water;

(N) stripping VOC, ammonia, or other air contaminants from the water with air or other gas, provided the stripped gases are controlled with an abatement system that meets the requirements of Section 106.533(5) of this title (relating to Water and Soil Remediation). For ammonia or hydrogen chloride (HCl) or other acid gas emissions, abatement may include a water or caustic scrubbing system as a means of complying with this section. Final emissions of HCl resulting from combustion of chlorine or chlorine-containing compounds shall not exceed 0.1 pounds per hour;

(O) liquid phase separation of VOC and water in which:

(i) the sum of the partial pressures of all species of VOC in any sample is less than 1.5 psia; or

(ii) the separator is enclosed and emissions are vented through an emission abatement system meeting the requirements specified previously for stripped VOC and ammonia;

(2) Chlorine or sulfur dioxide (SO<sub>2</sub>) shall be used only in containers approved by the United States Department of Transportation and emissions of chlorine or SO<sub>2</sub> from treatment of water or decontamination of equipment at any water treatment plant shall not exceed ten tons per year.

(3) The following shall not be permitted by rule under this section:

(A) gas stripping or aeration facilities where VOC or other air contaminants are stripped from water directly to the atmosphere;

(B) disposal facilities using land surface treatment;

(C) surface facilities associated with injection wells;

(D) cooling towers in which VOC or other air contaminants may be stripped to the atmosphere.

Adopted August 9, 2000 Effective September 4, 2000

### **Section 106.533. Water and Soil Remediation.**

Equipment used to reclaim or destroy chemicals removed from contaminated ground water, contaminated water condensate in tank and pipeline systems, or contaminated soil for the purpose of remedial action is permitted by rule, provided all the following conditions of this section are satisfied.

(1) Applicability shall pertain to soil and water remediation at the property where the original contamination of the ground water or soil occurred or at a nearby property secondarily affected by the contamination, but not to any soil or water treatment facility where soils or water are brought in from another property. Such facilities are subject to Section 116.110 of this title (relating to Applicability).

(2) For treating groundwater or soil contaminated with petroleum compounds, the total emissions of petroleum hydrocarbons shall not exceed 1.0 pound per hour (lb/hr), except that benzene emissions also must meet the conditions of Section 106.262(3) and (4) of this title (relating to Facilities (Emission and Distance Limitations)). For purposes of this section, petroleum is considered to include:

(A) liquids or gases produced from natural formations of crude oil, tar sands, shale, coal and natural gas; or

(B) refinery fuel products to include fuel additives.

(3) For treating groundwater or soil contaminated with chemicals other than petroleum, emissions must meet the requirements of Section 106.262(2), (3), and (4) of this title. If the groundwater or soil is contaminated with both petroleum and other chemicals, the petroleum compound emissions must meet paragraph (2) of this section and the other chemical emissions must meet the requirements of Section 106.262(2), (3), and (4) of this title. The emission of any chemical not having a Limit (L) Value in Table 262 of Section 106.262 of this title is limited to 1.0 lb/hr.

(4) The handling and processing (screening, crushing, etc.) of contaminated soil and the handling and conditioning (adding moisture) of remediated soil shall be controlled such that there are no visible emissions with the exception of moisture.

(5) If abatement equipment is used to meet paragraphs (2) and (3) of this section, the equipment must satisfy one of the following conditions.

(A) The vapors shall be burned in a direct-flame combustion device (incinerator, furnace, boiler, heater, or other enclosed direct-flame device) operated in compliance with Section 106.493(2) and (3) of this title (relating to Direct Flame Incinerators (Previously SE 88)).

(B) The vapors shall be burned in a flare which meets the requirements of Section 106.492 of this title (relating to Flares (Previously SE 80)) and the requirements of 40 Code of Federal Regulations 60.18, which shall take precedence over Section 106.492 of this title in any conflicting requirements whether or not New Source Performance Standards apply to the flare.

(C) The vapors shall be burned in a catalytic oxidizer which destroys at least 90% of the vapors. An evaluation of oxidizer effectiveness shall be made at least weekly, using a portable flame or photoionization detector or equivalent instrument to determine the quantity of carbon compounds in the inlet and outlet of the catalytic oxidizer. Records of oxidizer performance shall be maintained in accordance with paragraph (7) of this section.

(D) The vapors shall be routed through a carbon adsorption system (CAS) consisting of at least two activated carbon canisters that are connected in series. The system shall meet the following additional requirements.

(i) The CAS shall be sampled and recorded weekly to determine breakthrough of volatile organic compounds (VOC). Breakthrough is defined as a measured VOC concentration of 50 parts per million by volume (ppmv) in the outlet of the initial canister. The sampling point shall be at the outlet of the initial canister, but before the inlet to the second or final polishing canister. Sampling shall be performed while venting maximum emissions to the CAS (example: during loading of tank trucks, during tank filling, during process venting).

(ii) A flame ionization detector (FID) shall be used for VOC sampling. The FID shall be calibrated prior to sampling with certified gas mixtures (propane in air) of 10 ppmv  $\pm$  2.0% and of 100 ppmv  $\pm$  2.0%.

(iii) When the VOC breakthrough is measured, the waste gas flow shall be switched to the second canister immediately. Within four hours of detection of breakthrough, a fresh canister shall be placed as the new final polishing canister. Sufficient fresh activated carbon canisters shall be maintained at the site to ensure fresh polishing canisters are installed within four hours of detection of breakthrough.

(iv) Records of the CAS monitoring maintained at the plant site shall include, but are not limited to, the following:

(I) sample time and date;

(II) monitoring results (ppmv);

(III) corrective action taken, including the time and date of the action; and

(IV) process operations occurring at the time of sampling.

(v) The registration shall include a demonstration that activated carbon is an appropriate choice for control of the organic compounds to be stripped.

(6) Before construction of the facility begins, the facility shall be registered with the commission's Office of permitting, Remediation, and Registration in Austin using Form PI-7. The registration shall contain specific information concerning the basis (measured or calculated) for the expected emissions from the facility. The registration shall also explain details as to why the emission control system can be expected to perform as represented.

(7) Records required by applicable paragraphs of this section shall be maintained at the site and made available to personnel from the commission or any local agency having jurisdiction. These records shall be made available to representatives of the commission and local programs upon request and shall be retained for at least two years following the date that the data is obtained.

Adopted August 9, 2000 Effective September 4, 2000

**Section 106.534. Municipal Solid Waste Landfills and Transfer Stations.**

Municipal solid waste landfills and waste transfer stations operating in compliance with the Texas Solid Waste Disposal Act are exempt.

Adopted August 9, 2000 Effective September 4, 2000