

The Texas Natural Resource Conservation Commission (commission) proposes amendments to §106.2, concerning Applicability, §106.224, concerning Aerospace Equipment and Parts Manufacturing, §106.321, concerning Metal Melting and Holding Furnaces, §106.373, concerning Refrigeration Systems, §106.418, concerning Printing Presses, and §106.454, concerning Degreasing Units. The commission also proposes the repeal of §106.222, concerning Woodworking Shops.

#### EXPLANATION OF PROPOSED RULES

The last two sentences in §106.2 would be deleted, as they contain references to §116.211, a section that has been repealed.

Section 106.224(1) would be amended to remove an incorrect reference to a standard exemption number that was valid prior to November 1996 and is still used as a cross-reference.

The amendment to §106.321 would expand the mechanism for authorizing construction or modification of insignificant sources of air emissions from foundries and correct an apparent typographical error in the exemption. The revised exemption will allow for the production of ductile iron, the use of a fluxing agent without chlorine for aluminum foundries, and the limited melting of brass and bronze, and will prohibit the use of “manganese” bronze rather than “magnesium” bronze, which is prohibited in the current exemption, and which does not exist. By adopting the proposed changes into §106.321, an estimated 40 foundries will be exempted from air permitting regulations consistent with advances in chemistry and process technology. The amount of chemicals used in these processes is minimal, as are the emissions from these sources.

The commission directed that the New Source Review Permitting (NSRP) Division evaluate the protectiveness of a significant portion of the exemptions from permitting (previously referred to as standard exemptions). The protectiveness evaluation for §106.373 revealed that in general, it was protective for most compounds. However, additional information was needed to assess protectiveness in all situations. Based on the technical evaluation of the exemption and comments received from affected industry and regional offices, NSRP staff has determined that the exemption needs minor clarifications to ensure its protectiveness through prohibitions of some compounds, and that additional requirements need to be included to address potential disaster situations associated with anhydrous ammonia as a refrigerant. The compounds listed for prohibition from use in this exemption are those that have a higher potential for off-property environmental and health effects and those compounds with disaster potential. The commission does not believe that these compounds are commonly used as refrigerants, and there will be minimal economic effect as a result of their prohibition.

Ammonia is considered a compound possessing disaster potential in the event of catastrophic failure of its containment system. However, it is a very common refrigerant used in systems that are well designed, constructed, and have an abundance of operating history. Claimants will be required to demonstrate that the system will be designed and operated in a manner that will reduce the potential for upsets, and that they have emergency procedures to manage releases and protect the public.

Distance limits and limits on the amount of refrigerant allowed on-site are not being recommended.

Given that refrigeration systems are by design “tighter” than other types of units (i.e., less potential for leaking components) due to the high design pressures and the fact that in general, companies do not

want frequent, expensive recharges, nor do they want to lose cooling power, any system leaks are likely fewer, of smaller volume, and repaired quickly. The incorporation of the effects screening level (ESL) limit on refrigerants serves to prevent highly toxic materials from being used in exempted systems, which serves to ensure protectiveness. The requirement for an audio, visual, and olfactory inspection program for ammonia systems further reduces the risk of leaks and potential for off-site effects or nuisances.

The proposed amendment to §106.373 would modify the existing standard exemption by prohibiting the use of compounds in refrigeration systems with an ESL less than  $150 \mu\text{g}/\text{m}^3$ . The commission has determined that the use of substances with an ESL below that figure could result in a ground level concentration that may not be protective of human health in all situations. The health effects would vary on the type of substance involved and length of exposure, but systems using substances with an ESL below  $150 \mu\text{g}/\text{m}^3$  would require a more extensive engineering and toxicological review to assure their protectiveness and would not be suitable to qualify for a standard exemption.

The amendment also requires protective measures for systems using ammonia as a refrigerant. There are no additional or retroactive requirements being placed on existing systems.

Section 106.418 would be amended to correct a reference in the rule to 30 TAC Chapter 115, Subchapter D. The correct reference is Subchapter E.

Section 106.454 would be amended to correct a reference to the section designation of §115.415.

#### FISCAL NOTE

Stephen Minick, Strategic Planning and Appropriations, has determined that for the first five-year period the sections are in effect, there will be no significant fiscal implications for state or local government as a result of administration or enforcement of the sections.

#### PUBLIC BENEFIT

Mr. Minick also has determined that for each year of the first five years the sections are in effect, the anticipated public benefit will be a decrease in regulatory burden for foundries with insignificant emissions, an increase in the public health protectiveness of the exemption concerning refrigeration units, and the removal of incorrect or obsolete language from existing exemptions. Through research by the staff, the commission believes that most businesses using ammonia as a refrigerant already protect their storage tanks. This amendment would require new businesses with systems using ammonia to erect a barrier around the ammonia tank. The commission estimates the cost of construction to be less than \$1,000. The amendment is not retroactive.

#### REGULATORY IMPACT ANALYSIS

The commission has reviewed the proposed rulemaking in light of the regulatory analysis requirements of Texas Government Code, §2001.0225, and has determined that the rulemaking is not subject to §2001.0225 because it does not meet the definition of a “major environmental rule.” The upper limit of costs to facilities affected by the amendments is \$1,000. The amendments thus will not adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, or the public health and safety of the state or a sector of the state.

#### TAKINGS IMPACT ASSESSMENT

The commission has prepared a Takings Impact Assessment for these rules under Texas Government Code, §2007.043. The following is a summary of that assessment. The specific purpose of this rulemaking is to expand the scope of the exemption from permitting concerning metal foundries, to improve the ability of the exemption concerning refrigeration units to protect public health, and to make nonsubstantive administrative corrections to other existing exemptions. This proposal does not constitute a taking of private, real property.

#### COASTAL MANAGEMENT PLAN

The commission has determined that this rulemaking action relates to an action or actions subject to the Texas Coastal Management Program (CMP) in accordance with the Coastal Coordination Act of 1991, as amended (Texas Natural Resources Code, §§33.201 et. seq.), and the commission's rules in 30 TAC Chapter 281, Subchapter B, concerning Consistency with the Texas Coastal Management Program. As required by 31 TAC §505.11(b)(2) and 30 TAC §281.45(a)(3), relating to actions and rules subject to the CMP, commission rules governing air pollutant emissions must be consistent with the applicable goals and policies of the CMP. The commission has reviewed this rulemaking action for consistency with the CMP goals and policies in accordance with the rules of the Coastal Coordination Council, and has determined that this rulemaking action is consistent with the applicable CMP goals and policies. Any increase in emissions that results from these amendments will not be significant. The specific amendments to §106.373 will reduce the potential for a catastrophic release of anhydrous ammonia.

#### PUBLIC HEARING

A public hearing on this proposal will be held January 26, 1998, at 10:00 a.m. in Room 2210 of Texas Natural Resource Conservation Commission (TNRCC) Building F, located at 12100 Park 35 Circle, Austin. The hearing is structured for the receipt of oral or written comments by interested persons. Individuals may present oral statements when called upon in order of registration. Open discussion within the audience will not occur during the hearing; however, an agency staff member will be available to discuss the proposal 30 minutes prior to each hearing and will answer questions before and after the hearing.

#### SUBMITTAL OF COMMENTS

Written comments may be mailed to Lisa Martin, TNRCC Office of Policy and Regulatory Development, MC 205, P.O. Box 13087, Austin, Texas 78711-3087 or faxed to (512) 239-4808. All comments should reference Rule Log Number 97179-106-AI. Comments must be received by 5:00 p.m., February 2, 1998. For further information, please contact Kerry Drake, New Source Review Division, (512) 239-1112 or Beecher Cameron, Office of Policy and Regulatory Development, (512) 239-1495.

Persons with disabilities who have special communication or other accommodation needs who are planning to attend the hearings should contact the agency at (512) 239-4900. Requests should be made as far in advance as possible.

#### STATUTORY AUTHORITY

The amendment is proposed under the Texas Health and Safety Code, the Texas Clean Air Act (TCAA), §§382.011, 382.012, 382.017, and 382.057. Section 382.017 authorizes the commission to adopt rules consistent with the policy and purposes of the TCAA, while §382.057 authorizes the commission by rule to exempt certain facilities or changes to facilities from the requirements of §382.0518 if such facilities or changes will not make a significant contribution of air contaminants to the atmosphere.

The proposed amendment implements Texas Health and Safety Code, §382.017.

## **SUBCHAPTER A : GENERAL REQUIREMENTS**

### **§106.2**

#### **§106.2. Applicability.**

This chapter applies to facilities or types of facilities listed in this chapter where construction is commenced on or after the effective date of the relevant exemption. [Facilities or types of facilities contained in this chapter must qualify for an exemption under this chapter and may not be qualified for an exemption listed in §116.211 of this title (relating to Standard Exemption List). Facilities or types of facilities not contained in this chapter may qualify for an exemption under §116.211 of this title.]

This agency hereby certifies that the proposal has been reviewed by legal counsel and found to be within the agency's authority to adopt.

Issued in Austin, Texas, on December 17, 1997.

## **SUBCHAPTER I : MANUFACTURING**

### **§106.224**

The amendment is proposed under the Texas Health and Safety Code, the Texas Clean Air Act (TCAA), §§382.011, 382.012, 382.017, and 382.057. Section 382.017 authorizes the commission to adopt rules consistent with the policy and purposes of the TCAA, while §382.057 authorizes the commission by rule to exempt certain facilities or changes to facilities from the requirements of §382.0518 if such facilities or changes will not make a significant contribution of air contaminants to the atmosphere.

The proposed amendment implements Texas Health and Safety Code, §382.017.

#### **§106.224. Aerospace Equipment and Parts Manufacturing (Previously SE 123).**

Any new aerospace equipment and parts manufacturing plant, or physical and operational change to an existing aerospace equipment and parts manufacturing plant are exempt, 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 exemption 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 exemptions. For example, a boiler would not be considered a part of the aerospace manufacturing plant, but could be authorized under §106.181 of this title (relating to Boilers, Heaters, and Other Combustion Devices [(Previously SE 7)]), if all pertinent requirements were met.

(2) - (8) (No change.)

This agency hereby certifies that the proposal has been reviewed by legal counsel and found to be within the agency's authority to adopt.

Issued in Austin, Texas, on December 17, 1997.

**SUBCHAPTER M : METALLURGY**

**§106.321**

The amendment is proposed under the Texas Health and Safety Code, the Texas Clean Air Act (TCAA), §§382.011, 382.012, 382.017, and 382.057. Section 382.017 authorizes the commission to adopt rules consistent with the policy and purposes of the TCAA, while §382.057 authorizes the commission by rule to exempt certain facilities or changes to facilities from the requirements of §382.0518 if such facilities or changes will not make a significant contribution of air contaminants to the atmosphere.

The proposed amendment implements Texas Health and Safety Code, §382.017.

**§106.321. Metal Melting and Holding Furnaces [Furnace] (Previously SE 58).**

Metal melting and holding furnaces as specified in this section are exempt.

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

(A) (No change.)

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

(i) ductile iron is [not] 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) (No change.)

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

(i) - (iv) (No change.)

(v) copper, brass, or bronze; or

(vi) (No change.)

(D) no lead, leaded brass, leaded bronze, or manganese [magnesium] 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.

This agency hereby certifies that the proposal has been reviewed by legal counsel and found to be within the agency's authority to adopt.

Issued in Austin, Texas, on December 17, 1997.

## SUBCHAPTER P : PLANT OPERATIONS

### §106.373

The amendment is proposed under the Texas Health and Safety Code, the Texas Clean Air Act (TCAA), §§382.011, 382.012, 382.017, and 382.057. Section 382.017 authorizes the commission to adopt rules consistent with the policy and purposes of the TCAA, while §382.057 authorizes the commission by rule to exempt certain facilities or changes to facilities from the requirements of §382.0518 if such facilities or changes will not make a significant contribution of air contaminants to the atmosphere.

The proposed amendment implements Texas Health and Safety Code, §382.017.

#### **§106.373. Refrigeration Systems (Previously SE 103).**

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

(1) simple asphyxiants, freon, propane, or liquefied natural gas; or

(2) any other chemical, excluding anhydrous ammonia, with an Effects Screening

Level greater than 150ug/m3;

(3) anhydrous ammonia (ammonia) under the following conditions.

(A) Registration using Form PI-7 must be provided before construction begins under this section.

(B) Concrete and steel post barriers or concrete retaining walls shall be erected around each ammonia storage unit located within ten feet of any traffic area to prevent accidental ruptures by vehicles.

(C) All ammonia facilities shall be equipped with warning signs clearly indicating that ammonia is in use, for example "Danger: Ammonia. Unauthorized entry prohibited."

(D) Audio, visual, and olfactory checks for any ammonia leaks shall be made every month. Records of the date and time of inspections, inspector identification, number of leaks detected, identification of the leaking component, and the date and time of leak repair shall be maintained for the most recent 24-month period.

(E) On-site personnel shall temporarily repair the leak within one day after detection of a leak.

(F) All leaks shall be repaired within 15 days of detection.

(G) An emergency response plan including notification of the appropriate civil authorities shall be maintained on-site which describes the course of action to be taken by personnel in the event of an upset or a leak which cannot be contained.

(H) Accidental releases of refrigerant must be recorded and reported in accordance with §101.6 of this title (relating to Upset Reporting and Recordkeeping Requirements).

This agency hereby certifies that the proposal has been reviewed by legal counsel and found to be within the agency's authority to adopt.

Issued in Austin, Texas, on December 17, 1997.

## SUBCHAPTER R : SERVICE INDUSTRIES

### §106.418

The amendment is proposed under the Texas Health and Safety Code, the Texas Clean Air Act (TCAA), §§382.011, 382.012, 382.017, and 382.057. Section 382.017 authorizes the commission to adopt rules consistent with the policy and purposes of the TCAA, while §382.057 authorizes the commission by rule to exempt certain facilities or changes to facilities from the requirements of §382.0518 if such facilities or changes will not make a significant contribution of air contaminants to the atmosphere.

The proposed amendment implements Texas Health and Safety Code, §382.017.

#### **§106.418. Printing Presses (Previously SE 13).**

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 exempt, provided that all the following conditions of this section are satisfied.

(1) - (6) (No change.)

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

This agency hereby certifies that the proposal has been reviewed by legal counsel and found to be within the agency's authority to adopt.

Issued in Austin, Texas, on December 17, 1997.

## SUBCHAPTER T : SURFACE PREPARATION

### §106.454

The amendment is proposed under the Texas Health and Safety Code, the Texas Clean Air Act (TCAA), §§382.011, 382.012, 382.017, and 382.057. Section 382.017 authorizes the commission to adopt rules consistent with the policy and purposes of the TCAA, while §382.057 authorizes the commission by rule to exempt certain facilities or changes to facilities from the requirements of §382.0518 if such facilities or changes will not make a significant contribution of air contaminants to the atmosphere.

The proposed amendment implements Texas Health and Safety Code, §382.017.

#### **§106.454. Degreasing Units (Previously SE 107).**

Any degreasing unit that satisfies the following conditions of this section is exempt.

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

(A) - (E) (No change.)

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

(2) - (5) (No change.)

This agency hereby certifies that the proposal has been reviewed by legal counsel and found to be within the agency's authority to adopt.

Issued in Austin, Texas, on December 17, 1997.

## **SUBCHAPTER I : MANUFACTURING**

### **§106.222**

The repeal is proposed under the Texas Health and Safety Code, the Texas Clean Air Act (TCAA), §382.057, which provides the Texas Natural Resource Conservation Commission with the authority to adopt rules consistent with the policy and purposes of the TCAA.

The proposed repeal implements Health and Safety Code, §382.017.

#### **§106.222. Woodworking Shops (Previously SE 105).**

This agency hereby certifies that the proposal has been reviewed by legal counsel and found to be within the agency's authority to adopt.

Issued in Austin, Texas, on December 17, 1997.