The Texas Natural Resource Conservation Commission (commission) proposes new §110.10, Definitions; §110.12, Performance Standards; §110.14, Technology Registration; §110.15, Testing Requirements; §110.16, Labeling Requirements; §110.17, Exemptions; and §110.19, Affected Counties and Compliance Schedules. The proposed new sections in new Chapter 110, Reduction of Air Pollution from Ozone, and corresponding revisions to the state implementation plan (SIP) are proposed in order to reduce ground-level ozone in the Houston/Galveston (HGA), Dallas/Fort Worth (DFW), and Beaumont/Port Arthur (BPA) ozone nonattainment areas, as well as in the 95-county central and eastern Texas region, and are one element of the strategy for the proposed HGA Post-1999 Rate-of-Progress (ROP)/Attainment Demonstration SIP. The purpose of these proposed rules is to incorporate a technology in the affected areas that will reduce ozone from ambient air that is drawn across the external heat exchanger units of air-cooled air conditioning units, including heat pumps.

BACKGROUND AND SUMMARY OF THE FACTUAL BASIS FOR THE PROPOSED RULES

The HGA ozone nonattainment area is classified as Severe-17 under the Federal Clean Air Act (FCAA) Amendments of 1990 (42 United States Code (USC), §§7401 et seq.), and therefore is required to attain the one-hour ozone standard of 0.12 parts per million (ppm) by November 15, 2007. The HGA area, defined by Brazoria, Chambers, Fort Bend, Galveston, Harris, Liberty, Montgomery, and Waller Counties, has been working to develop a demonstration of attainment in accordance with 42 USC, §7410. On January 4, 1995, the state submitted the first of its Post-1996 SIP revisions for HGA.

The January 1995 SIP consisted of urban airshed model (UAM) modeling for 1988 and 1990 base case episodes, adopted rules to achieve a 9% ROP reduction in volatile organic compounds (VOC), and a

commitment schedule for the remaining ROP and attainment demonstration elements. At the same time, but in a separate action, the State of Texas filed for the temporary nitrogen oxides (NO_x) waiver allowed by 42 USC, §7511a(f). The January 1995 SIP and the NO_x waiver were based on early base-case episodes which marginally exhibited model performance in accordance with the United States Environmental Protection Agency (EPA) modeling performance standards, but which had a limited data set as inputs to the model. In 1993 and 1994, the commission was engaged in an intensive data-gathering exercise known as the COAST study. The state believed that the enhanced emissions inventory, expanded ambient air quality and meteorological monitoring, and other elements would provide a more robust data set for modeling and other analysis, which would lead to modeling results that the commission could use to better understand the nature of the ozone air quality problem in the HGA area.

Around the same time as the 1995 submittal, the EPA policy regarding SIP elements and timelines went through changes. Two national programs in particular resulted in changing deadlines and requirements. The first of these programs was the Ozone Transport Assessment Group. This group grew out of a March 2, 1995 memo from Mary Nichols, former EPA Assistant Administrator for Air and Radiation, that allowed states to postpone completion of their attainment demonstrations until an assessment of the role of transported ozone and precursors had been completed for the eastern half of the nation, including the eastern portion of Texas. Texas participated in this study, and it has been concluded that Texas does not significantly contribute to ozone exceedances in the Northeastern United States. The other major national initiative that has impacted the SIP planning process is the revisions to the national ambient air quality standard (NAAQS) for ozone. The EPA promulgated a final rule on July 18, 1997

changing the ozone standard to an eight-hour standard of 0.08 ppm. In November 1996, concurrent with the proposal of the standards, the EPA proposed an interim implementation plan (IIP) that it believed would help areas like HGA transition from the old to the new standard. In an attempt to avoid a significant delay in planning activities, Texas began to follow this guidance and readjusted its modeling and SIP development timelines accordingly. When the new standard was published, the EPA decided not to publish the IIP, and instead stated that, for areas currently exceeding the one-hour ozone standard, that standard would continue to apply until it is attained. The FCAA requires that HGA attain the standard by November 15, 2007.

The EPA issued revised draft guidance for areas such as HGA that do not attain the one-hour ozone standard. The commission adopted on May 6, 1998, and submitted to EPA on May 19, 1998, a revision to the HGA SIP which contained the following elements in response to EPA's guidance: UAM modeling based on emissions projected from a 1993 baseline out to the 2007 attainment date; an estimate of the level of VOC and NO_x reductions necessary to achieve the one-hour ozone standard by 2007; a list of control strategies that the state could implement to attain the one-hour ozone standard; a schedule for completing the other required elements of the attainment demonstration; a revision to the Post-1996 9% ROP SIP that remedied a deficiency that the EPA believed made the previous version of that SIP unapprovable; and evidence that all measures and regulations required by Subpart 2, of Title I of the FCAA to control ozone and its precursors have been adopted and implemented, or are on an expeditious schedule to be adopted and implemented.

In November 1998, the SIP revision submitted to the EPA in May 1998 became complete by operation of law. However, the EPA stated that it could not approve the SIP until specific control strategies were modeled in the attainment demonstration. The EPA specified a submittal date of November 15, 1999 for this modeling. In a letter to the EPA dated January 5, 1999, the state committed to model two strategies showing attainment.

As the HGA modeling protocol evolved, the state eventually selected and modeled seven basic modeling scenarios. As part of this process, a group of HGA stakeholders worked closely with commission staff to identify local control strategies for the modeling. Some of the scenarios for which the stakeholders requested evaluation included options such as California-type fuel and vehicle programs as well as an acceleration simulation mode equivalent motor vehicle inspection and maintenance program. Other scenarios incorporated the estimated reductions in emissions that were expected to be achieved throughout the modeling domain as a result of the implementation of several voluntary and mandatory statewide programs adopted or planned independently of the SIP. It should be made clear that the commission did not propose that any of these control strategies be included in the ultimate control strategy submitted to the EPA in 2000. The need for, and effectiveness of, any controls which may be implemented outside the covered area will be evaluated on a county-by-county basis.

The SIP revision was adopted by the commission on October 27, 1999, submitted to the EPA by November 15, 1999, and contained the following elements: photochemical modeling of potential specific control strategies for attainment of the one-hour ozone standard in the HGA area by the attainment date of November 15, 2007; an analysis of seven specific modeling scenarios reflecting

various combinations of federal, state, and local controls in HGA (additional scenarios H1 and H2 build upon Scenario VIf); identification of the level of reductions of VOC and NO_x necessary to attain the one-hour ozone standard by 2007; a 2007 mobile source budget for transportation conformity; identification of specific source categories which, if controlled, could result in sufficient VOC and/or NO_x reductions to attain the standard; a schedule committing to submit by April 2000 an enforceable commitment to conduct a mid-course review; and a schedule committing to submit modeling and adopted rules in support of the attainment demonstration by December 2000.

The April 19, 2000 SIP revision for HGA contained the following enforceable commitments by the state: to quantify the shortfall of NO_x reductions needed for attainment; to list and quantify potential control measures to meet the shortfall of NO_x reductions needed for attainment; to adopt the majority of the necessary rules for the HGA attainment demonstration by December 31, 2000, and to adopt the rest of the shortfall rules as expeditiously as practical, but no later than July 31, 2001; to submit a Post-99 ROP plan by December 31, 2000; to perform a mid-course review by May 1, 2004; and to perform modeling of mobile source emissions using the EPA mobile source emissions model (MOBILE6), to revise the on-road mobile source budget as needed, and to submit the revised budget within 24 months of the model's release. In addition, if a conformity analysis is to be performed between 12 months and 24 months after the MOBILE6 release, the state will revise the motor vehicle emissions budget (MVEB) so that the conformity analysis and the SIP MVEB are calculated on the same basis.

In order for the state to have an approvable attainment demonstration, the EPA has indicated that the state must adopt those strategies modeled in the November submittal and then adopt sufficient controls

to close the remaining gap in NO_x emissions. The modeling included in this proposal indicates a gap of an additional 77.98 tons per day (tpd) of NO_x reductions is necessary for an approvable attainment demonstration. The commission estimates that this measure will achieve a minimum of 13.0 tpd of NO_x equivalent reductions and is therefore a necessary measure to consider for closing the gap and successfully demonstrating attainment.

The emission reduction requirements included as part of this SIP revision represent substantial, intensive efforts on the part of stakeholder coalitions in the HGA area. These coalitions, involving local governmental entities, elected officials, environmental groups, industry, consultants, and the public, as well as the commission and the EPA, have worked diligently to identify and quantify potential control strategy measures for the HGA attainment demonstration. Local officials from the HGA area have formally submitted a resolution to the commission, requesting the inclusion of many specific emission reduction strategies.

The current SIP revision contains rules, enforceable commitments, and photochemical modeling analyses in support of the HGA ozone attainment demonstration. In addition, this SIP contains post-1999 ROP plans for the milestone years 2002 and 2005, and for the attainment year 2007. The SIP also contains enforceable commitments to implement further measures, if needed, in support of the HGA attainment demonstration, as well as a commitment to perform and submit a mid-course review.

The HGA ozone nonattainment area will need to ultimately reduce NO_x more than 750 tpd to reach attainment with the one-hour standard. In addition, a VOC reduction of about 25% will have to be

achieved. Adoption of the residential and commercial air conditioning rules will contribute to attainment and maintenance of the one-hour ozone standard in the HGA, DFW, BPA, and 95-county eastern and central Texas areas.

The commission solicits comment on additional flexibilities relating to rule content and implementation which have not been addressed in this or other concurrent rulemakings. These flexibilities may be available for both mobile and stationary sources. Additional flexibilities may also be achieved through innovative and/or emerging technology which may become available in the future. Additional sources of funds for incentive programs may become available to substitute for some of the measures considered here.

SECTION BY SECTION DISCUSSION

Chapter 110 is proposed as a new chapter which will contain rules to reduce ambient levels of ozone directly rather than through the reduction of ozone precursor chemicals.

Proposed new §110.10 includes new definitions for “covered air conditioning unit,” “inlet ozone concentration,” “ozone reduction technology,” “ozone reduction efficiency,” and “outlet ozone concentration.”

Proposed new §110.12(a) sets performance standards for covered air conditioning units that may be supplied or installed in the HGA, DFW, and BPA ozone nonattainment areas after January 1, 2002. These requirements are for the ozone reduction technology to have an initial ozone reduction efficiency

equal to or greater than 70%, and to retain an ozone reduction efficiency equal to or greater than 50% averaged over any one-hour period, for a period of 15 years. The requirements further mandate labeling of the covered air conditioning units. Proposed new §110.12(b) prohibits persons from tampering with, or knowingly disabling, ozone reduction technology on covered air conditioning units.

Proposed new §110.14(a) requires persons supplying or manufacturing ozone reduction technology to certify in a registration letter that each make and model of covered air conditioning unit will be compliant with the performance standards. Proposed new §110.14(b) clarifies that the ozone reduction technology is not registered until the executive director provides the persons supplying or manufacturing the ozone reduction technology with a written registration confirmation letter and a registration number for each covered air conditioner. Proposed new §110.14(c) provides the executive director the authority to revoke or deny any registration if he determines that the technology does not work.

Proposed new §110.15(a) establishes the testing requirements for determining the ozone reduction efficiency for covered air conditioning units. The requirements include the use of EPA reference methods for ozone concentration determination, sets the range of ambient air inlet conditions under which the technology must be able to show ozone reduction efficiency, and allows for testing in artificially-created atmospheres, as well as ambient air, under properly controlled conditions. Proposed new §110.15(b) allows the executive director to approve alternate air sampling test methods so long as those methods are equivalent to the methods listed in the section. Proposed new §110.15(c) clarifies

that the executive director is authorized to require the ozone reduction technology manufacturer or supplier to conduct testing of any covered air conditioning unit then in use.

Proposed new §110.16(a) requires covered air conditioning units to be permanently labeled to identify that they are compliant with the rules. The label must identify the unit's ozone reduction technology registration number, the year and month of the unit's manufacture, and shall state whether the unit meets the performance standards of §110.12.

Proposed new §110.17(a) allows the executive director to exempt a manufacturer's covered air conditioning unit from specific rules in the chapter if the manufacturer can prove that the technology is not available for, or adaptable to, that unit.

Proposed new §110.19 lists the counties in which the rules apply, and specifies a compliance date for those rules.

FISCAL NOTE: COSTS TO STATE AND LOCAL GOVERNMENTS

Mr. John Davis, Technical Specialist with Strategic Planning and Appropriations determined for the first five-year period the proposed rules are in effect, the commission does not anticipate significant fiscal implications for any unit of state and local government as a result of administration or enforcement of the proposed new sections.

The proposed rulemaking action would require that all air conditioning units sold in the eight-county HGA, four-county DFW, and three-county BPA ozone nonattainment areas and 95 additional central and eastern Texas counties after January 1, 2002 have ozone reduction technology installed. The ozone reduction technology must achieve an initial ozone reduction efficiency equal to or greater than 70%, and an overall ozone reduction efficiency equal to or greater than 50% averaged over any one-hour period, for a period of 15 years. Each new unit will have to be permanently labeled to identify that it is compliant with the new requirements, and the manufacturers and suppliers of ozone reduction technology will have to provide a registration letter to the commission certifying that each make and model of covered air conditioning unit will be compliant with the performance standards.

Any unit of state or local government in the affected counties that purchases air conditioning units after January 1, 2002, will be affected by the proposed rulemaking action. The commission anticipates that it will cost manufacturers more to design and manufacture air conditioning units incorporating the ozone reduction technology. Based on estimates provided by air conditioning manufacturers and a potential ozone reduction technology manufacturer and supplier, affected air conditioning units are projected to cost between $42 and $116 more per ton of air conditioning capacity. Covered air conditioning units range in size from 1.0 ton and less window units; 1.5 to 5.0 ton residential and small commercial units; to 10 to 50 ton large air-cooled commercial units, such as rooftop units. The resulting price increase would be $42 to $116 for typical 1.0 ton window unit, $63 to $580 for a typical residential unit, and $420 to $5,800 for large commercial units. The overall fiscal impact to state and local governments is not anticipated to be significant unless a very large number of the new air conditioning units are purchased.

PUBLIC BENEFIT AND COSTS

Mr. Davis also determined for each of the first five years the proposed rules are in effect, the public benefit anticipated as a result on implementing the new sections will be the reduction of ambient ground-level ozone concentrations. The rules are expected to help the agency achieve the ozone NAAQS in the HGA, DFW, and BPA nonattainment areas, as well as maintain the ozone NAAQS in the central and eastern Texas region.

Under the proposed rulemaking, the commission will require that all air conditioning units supplied or installed in the affected counties after January 1, 2002 have some type of ozone reduction technology, unless otherwise exempted. The ozone reduction technology must achieve an initial ozone reduction efficiency equal to or greater than 70%, and an overall ozone reduction efficiency equal to or greater than 50% averaged over any one-hour period, for a period of 15 years. Each new unit will have to be permanently labeled to identify that it is compliant with the new requirements and the manufacturers and suppliers of ozone reduction technology will have to provide the agency a registration letter certifying that each make and model of covered air conditioning unit will be compliant with the performance standards.

Any individual or business in the affected counties that purchases covered air conditioning units after January 1, 2002, will be affected by the proposed rulemaking. The commission anticipates that it will cost manufacturers more to design and manufacture air conditioning units incorporating the ozone reduction technology. These increased costs will be offset by price increases to consumers. Based on estimates provided by air conditioning manufacturers and a potential ozone reduction technology

manufacturer and supplier, affected air conditioning units are projected to cost between $42 and $116 more per ton of air conditioning capacity. Covered air conditioning units range in size from 1.0 ton and less window units; 1.5 to 5.0 ton residential and small commercial units; to 10 to 50 ton large air-cooled commercial units, such as rooftop units. The resulting price increase would be $42 to $116 for typical 1.0 ton window unit, $63 to $580 for a typical residential unit, and $420 to $5,800 for large commercial units. The overall fiscal impact to individuals and businesses will depend on the number and capacity of new air conditioning units purchased.

SMALL AND MICRO BUSINESS ASSESSMENT

The commission does not anticipate adverse fiscal implications for small or micro-businesses as a result of administration or enforcement of the proposed new sections. The total fiscal impact to small or micro-businesses in the affected counties will depend on how many air conditioning units they buy or produce after January 1, 2002.

Under the proposed rulemaking, the commission will require that all air conditioning units sold in the affected counties after January 1, 2002 have ozone reduction technology installed. Incorporation of the new technology will result in a price increase for air conditioners sold in the affected counties after January 1, 2002. Small and micro-businesses in the affected counties that purchase air conditioning units after January 1, 2002 can expect to pay approximately $42 to $116 more per ton of air conditioning capacity. Covered air conditioning units range in size from 1.0 ton and less window units; 1.5 to 5.0 ton residential and small commercial units; to 10 to 50 ton large air-cooled commercial units,

such as rooftop units. The resulting price increase would be $42 to $116 for typical 1.0 ton window unit, $63 to $580 for a typical residential unit, and $420 to $5,800 for large commercial units.

DRAFT REGULATORY IMPACT ANALYSIS DETERMINATION

The commission reviewed the proposed rulemaking in light of the regulatory analysis requirements of Texas Government Code, §2001.0225, and determined that the rule making action meets the definition of a “major environmental rule” as defined in that statute. "Major environmental rule” means a rule, the specific intent of which is to protect the environment or reduce risks to human health from environmental exposure and that may 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. Proposed new Chapter 110 is intended to protect the environment or reduce risks to human health from environmental exposure to ozone and may affect in an adverse material way, a sector of the economy, or competition.

However, the proposed rules do not meet any of the four criteria which would cause them to be subject to Texas Government Code, §2001.0225(b). Specifically, the ozone reduction technology required by the rules is part of a plan to help meet the ozone NAAQS in the HGA, DFW, and BPA ozone nonattainment areas. The rules are therefore being proposed to meet a federal requirement. States are primarily responsible for ensuring attainment and maintenance of NAAQS once the EPA has established those standards. Under 42 USC, §7410 and related provisions, states must submit, for EPA approval, SIPs that provide for the attainment and maintenance of NAAQS. The proposed rules do not exceed a requirement of a delegation agreement, and were not developed solely under the general powers of the

agency, but were specifically developed to meet the air quality standards established under federal law as NAAQS and under TCAA, §§382.002, 382.011, 382.012, 382.017, and 382.019.

TAKINGS IMPACT ASSESSMENT

The staff prepared a takings impact assessment for these rules in accordance with Texas Government Code, §2007.043. The following is a summary of that assessment. The specific purpose of the rulemaking is to require ozone reduction technology on covered air conditioning units supplied or installed in the HGA, DFW, and BPA ozone nonattainment areas, and the 95-county eastern and central Texas region on or after January 1, 2002. This proposed rulemaking is part of an air pollution strategy to reduce the level of ozone in those areas. Promulgation and enforcement of the proposed rules will not burden private, real property. Although the proposed rules do not directly prevent a nuisance, do not prevent an immediate threat to life or property, and do not prevent a real and substantial threat to public health and safety, they do partially fulfill a federal mandate under 42 USC, §7410 requiring states to develop and submit to the EPA a SIP which details the state's plans for the attainment and maintenance of the NAAQS. Because the purpose of the rule proposal is to require certain ozone reduction technology in order to meet federal air quality standards for ozone it is exempted from the requirements of Texas Government Code, §2007.043 as an action reasonably taken to fulfill an obligation mandated by federal law. Consequently, this rulemaking action does not constitute a takings under the Texas Government Code, Chapter 2007.

CONSISTENCY WITH THE COASTAL MANAGEMENT PROGRAM

The commission determined that the proposed rulemaking 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 commission rules in 30 TAC Chapter 281, Subchapter B, concerning consistency with the CMP. As required by 30 TAC §281.45(a)(3) and 31 TAC §505.11(b)(2), commission rules governing air pollutant emissions must be consistent with the applicable goals and policies of the CMP. The commission has reviewed this action for consistency with the goals and policies of the Coastal Coordination Council, and has determined that they are consistent. The CMP goal applicable to this rule making action is to protect, preserve, and enhance the diversity, quality, quantity, functions, and values of coastal natural resource areas (31 TAC §501.12(1)). No new sources of air contaminants will be authorized and ambient ozone concentrations will be reduced as a result of these rules. The CMP policy applicable to this rulemaking action is that commission rules comply with regulations in 40 Code of Federal Regulations (CFR), to protect and enhance air quality in the coastal area (31 TAC §501.14(q)). This rulemaking action complies with 40 CFR Part 50, National Primary and Secondary Ambient Air Quality Standards, and 40 CFR Part 51, Requirements for Preparation, Adoption, and Submittal Of Implementation Plans. Accordingly, the commission finds this rule making action to be consistent with CMP goals and policies.

Interested persons may submit comments on the consistency of the proposed rules with the CMP during the public comment period.

ANNOUNCEMENT OF HEARINGS

The commission will hold public hearings on this proposal at the following times and locations: September 18, 2000, 10:00 a.m., Lone Star Convention Center, 9055 Airport Road (FM 1484), Conroe; September 18, 2000, 7:00 p.m., Lake Jackson Civic Center, 333 Highway 332 East, Lake Jackson; September 19, 2000, 10:00 a.m. and 7:00 p.m., George Brown Convention Center, 1001 Avenida de Las Americas, Houston; September 20, 2000, 9:00 a.m., VFW Hall, 6202 George Bush Drive, Katy; September 20, 2000, 6:00 p.m., East Harris County Community Center, 7340 Spencer, Pasadena; September 21, 2000, 10:00 a.m., Southeast Texas Regional Airport Media Room, 6000 Airline Drive, Beaumont; September 21, 2000, 2:00 p.m., Amarillo City Commission Chambers, City Hall, 509 East 7th Avenue, Amarillo; September 21, 2000, 6:00 p.m., Charles T. Doyle Convention Center, 21st Street at Phoenix Lane, Texas City; September 22, 2000, 10:00 a.m., Dayton High School, 2nd Floor Lecture Room, 3200 North Cleveland Street, Dayton; September 22, 2000, 11:00 a.m., El Paso City Council Chambers, 2 Civic Center Plaza, 2nd Floor, El Paso; September 22, 2000, 2:00 p.m., North Central Texas Council of Governments, 2nd Floor Board Room, 616 Six Flags Drive, Suite 200, Arlington; and September 25, 2000, 10:00 a.m., Texas Natural Resource Conservation Commission, 12100 North I-35, Building E, Room 201S, Austin. The hearings are being held to receive oral and written comments from interested persons. Registration will begin one hour prior to each hearing, and interested persons may provide oral comments when called upon, in order of registration. A four-minute time limit will be set at each hearing to assure that enough time is allowed for every interested person to speak. Open discussion will not occur during the hearings; however, agency staff members will be available to discuss the proposal one hour before each hearing, and will answer questions before and after each hearing.

Persons with disabilities who have special communication or other accommodation needs, who are planning to attend a hearing, should contact the Office of Environmental Policy, Analysis, and Assessment at (512) 239-4900. Requests should be made as far in advance as possible.

SUBMITTAL OF COMMENTS

Written comments may be submitted to Heather Evans, Office of Environmental Policy, Analysis, and Assessment, MC 206, P.O. Box 13087, Austin, Texas 78711-3087, faxed to (512) 239-4808, or e-mailed to *siprules@tnrcc.state.tx.us*. All comments should reference Rule Log Number 2000-011J-110-AI. Comments must be received by 5:00 p.m., September 25, 2000. For further information, please contact Jeff Greif at (512) 239-1534 or Alan Henderson at (512) 239-1510.

STATUTORY AUTHORITY

The new sections are proposed under Texas Water Code (TWC or Code), §5.103, which authorizes the commission to adopt rules necessary to carry out its powers and duties under the Code, and under the Texas Health and Safety Code, TCAA, §382.017, which provides the commission the authority to adopt rules consistent with the policy and purposes of the TCAA. The new sections are also proposed under TCAA, §382.002, which states as the policy and purpose of the chapter the control or abatement of air pollution in the state; §382.011, which authorizes the commission to control the quality of the state's air; and §382.012, which authorizes the commission to prepare and develop a general, comprehensive plan for the control of the state's air.

The proposed new sections implement TCAA, §382.002, relating to Policy and Purpose; §382.011, relating to General Powers and Duties; and §382.012, relating to State Air Control Plan.

CHAPTER 110: REDUCTION OF AIR POLLUTION FROM OZONE

§§110.10, 110.12, 110.14 - 110.17, 110.19

§110.10. Definitions.

Unless specifically defined in the TCAA or in the rules of the commission, the terms used by the commission have the meanings commonly ascribed to them in the field of air pollution regulation. In addition to the terms which are defined by the TCAA, the following words and terms, when used in this chapter, shall have the following meanings, unless the context clearly indicates otherwise.

(1) Covered air conditioning unit – Any air-cooled air conditioning unit (including split or packaged units) or heat pump unit.

(2) Inlet ozone concentration – The ozone concentration, measured in parts per billion, of the air entering a covered air conditioning unit prior to exposure to any ozone reduction technology.

(3) Outlet ozone concentration – The ozone concentration, measured in parts per billion, of air exiting a covered air conditioning unit.

(4) Ozone reduction efficiency – The difference between inlet ozone concentration and outlet ozone concentration, divided by the inlet ozone concentration, expressed in percent.

(5) Ozone reduction technology – A technology that converts ozone into oxygen or removes ozone from the outdoor forced air flow through a covered air conditioning unit without adding harmful air pollutants to the ambient air.

§110.12. Performance Standards.

(a) No person may supply or install a covered air conditioning unit for use unless it is equipped with a registered ozone reduction technology that has an initial ozone reduction efficiency equal to or greater than 70% averaged over any one-hour period, retains an efficiency equal to or greater than 50% averaged over any one-hour period for 15 years, and is properly labeled in accordance with §110.16 of this title (relating to Labeling Requirements).

(b) No person may tamper with, or knowingly disable, an ozone reduction technology incorporated in a covered air conditioning unit in the counties specified in §110.19 of this title (relating to Affected Counties and Compliance Schedules).

§110.14. Technology Registration.

(a) All persons supplying or manufacturing ozone reduction technology for use in the counties specified in §110.19 of this title (relating to Affected Counties and Compliance Schedules) must certify in writing to the executive director that their ozone reduction technology will meet the ozone reduction requirements of §110.12 of this title (relating to Performance Standards) for each make and model of covered air conditioning unit for which their technology is registered.

(b) Each make and model of covered air conditioning unit is registered when the ozone reduction technology manufacturer or supplier receives a written registration confirmation from the executive director providing a registration number for each covered air conditioning unit make and model.

(c) The executive director may revoke, in writing, any registration or part of a registration, if the executive director determines that the technology does not meet the performance standards of §110.12 of this title.

§110.15. Testing Requirements.

(a) Ozone reduction efficiency for covered air conditioning units shall be determined in accordance with the following test methods and procedures.

(1) Ozone concentrations shall be determined by selecting and using an appropriate EPA Reference Method from 40 Code of Federal Regulations Part 50, Appendix D.

(2) Ozone reduction technology must be demonstrated to meet the ozone reduction efficiency performance standards in §110.12 of this title (relating to Performance Standards), under all of the following conditions;

(A) inlet ozone concentration between 60 - 140 parts per billion;

(B) inlet air temperature between 75 - 110 degrees Fahrenheit;

(C) inlet dew points between 50 - 75 degrees Fahrenheit; and

(D) maximum and minimum air flow rates if applicable (fan on).

(3) Ozone reduction efficiency shall be measured using one or both of the following air sampling test methods:

(A) simultaneous air sampling of the inlet and outlet ozone concentration of a covered air conditioning unit for an hour where conditions in the bulk air stream entering the unit are created by artificial means, provided that:

(i) sampling locations are chosen so that sufficient mixing of the air enables sound ozone reduction measurements to be taken; and

(ii) ozone is introduced and dispersed sufficiently upstream of the covered air conditioning unit sampling location to insure complete mixing in the air prior to the sampling point;

(B) simultaneous air sampling of the inlet and outlet ozone concentration of a covered air conditioning unit where ambient conditions are within the ranges specified in paragraph (2) of this subsection for any one-hour test run, provided that:

(i) the probe locations are chosen in a manner which accurately demonstrates the average ozone reduction efficiency of the ozone reduction technology; and

(ii) the probe locations are sufficiently shrouded to insure the upstream and downstream measurements are taken from the same air mass and that no cross mixing has occurred.

(b) Alternate air sampling test methods may be used if the executive director determines that the proposed methods are equivalent to the methods listed in this section, and he approves the proposed method in writing.

(c) The ozone reduction technology manufacturer or supplier must test, at their expense, any covered air conditioner in use in the nonattainment area, within 90 days of being directed to conduct such testing by the executive director.

§110.16. Labeling Requirements.

Covered air conditioning units intended for use in the counties specified in §110.19 of this title (relating to Affected Counties and Compliance Schedules) shall be labeled with a permanent material that must be welded, riveted, or otherwise permanently attached to the unit. The label shall identify the unit's ozone reduction technology registration number (if applicable), the year and month of the unit's manufacture, and shall state whether the unit meets the performance standards of §110.12 of this title (relating to Performance Standards).

§110.17. Exemptions.

A covered air conditioning unit may be exempted from all or part of this chapter, by the executive director in writing, if the air conditioning unit manufacturer can demonstrate to the executive director's satisfaction that no ozone reduction technology compliant with §110.12 of this title (relating to Performance Standards) is available for, or adaptable to, any of the covered air conditioning manufacturer's units

§110.19. Affected Counties and Compliance Schedules.

Effective January 1, 2002, persons subject to this rule in the following counties shall be in compliance with §§110.12, 110.14 - 110.17 of this title (relating Performance Standards; Technology Registration; Testing Requirements; Labeling Requirements; and Exemptions):

(1) Beaumont/Port Arthur counties including Hardin, Jefferson, and Orange;

(2) Dallas/Fort Worth counties including Collin, Dallas, Denton, and Tarrant;

(3) Houston/Galveston counties including Brazoria, Chambers, Fort Bend, Galveston, Harris, Liberty, Montgomery, and Waller; and

(4) East and Central Texas counties including Anderson, Angelina, Aransas, Atascosa, Austin, Bastrop, Bee, Bell, Bexar, Bosque, Bowie, Brazos, Burleson, Caldwell, Calhoun, Camp, Cass, Cherokee, Colorado, Comal, Cooke, Coryell, De Witt, Delta, Ellis, Falls, Fannin, Fayette, Franklin, Freestone, Goliad, Gonzales, Grayson, Gregg, Grimes, Guadalupe, Harrison, Hays, Henderson, Hill, Hood, Hopkins, Houston, Hunt, Jackson, Jasper, Johnson, Karnes, Kaufman, Lamar, Lavaca, Lee, Leon, Limestone, Live Oak, Madison, Marion, Matagorda, McLennan, Milam, Morris, Nacogdoches, Navarro, Newton, Nueces, Panola, Parker, Polk, Rains, Red River, Refugio, Robertson, Rockwall, Rusk, Sabine, San Jacinto, San Patricio, San Augustine, Shelby, Smith, Somervell, Titus, Travis,

Trinity, Tyler, Upshur, Van Zandt, Victoria, Walker, Washington, Wharton, Williamson, Wilson,

Wise, and Wood.