

The commission proposes new §114.400 (Definitions), §114.402 (Control Requirements), §114.406 (Reporting and Recordkeeping Requirements), and §114.409 (Affected Counties). The commission proposes these revisions to new Subchapter I (Non-Road Engines), new Division 1 (Airport Ground Support Equipment) of Chapter 114 (Control of Air Pollution from Motor Vehicles) and to the State Implementation Plan (SIP) in order to control ground-level ozone in the Dallas/Fort Worth (DFW) ozone nonattainment area through the electrification of airport ground support equipment (GSE).

BACKGROUND AND SUMMARY OF THE FACTUAL BASIS FOR THE PROPOSED RULES

The North Texas Clean Air Steering Committee (steering committee) representing the DFW ozone nonattainment area counties requested an ozone pollution control strategy to limit the use of airport GSE to electric-powered GSE to reduce NO_x emissions necessary for the counties included in the DFW ozone nonattainment area to be able to demonstrate attainment with the ozone national ambient air quality standard (NAAQS). At the request of the steering committee, the commission developed an airport GSE electrification strategy in the DFW nonattainment area which requires the conversion of GSE to electric-powered GSE at the airports which have the most GSE. The GSE conversion is to be phased in over time and be complete by December 31, 2003. The proposed rules are necessary for the DFW nonattainment area to be able to demonstrate attainment with the ozone NAAQS.

Airport GSE is used the moment an aircraft lands and until it takes off. Airport GSE is comprised of a variety of vehicles and equipment that are necessary to service aircraft during ground-based operations, including cargo loading and unloading, passenger loading and unloading, potable water storage, lavatory waste tank drainage, aircraft refueling, engine and fuselage examination and maintenance, and food and

beverage catering. Airlines employ specially designed GSE to support all these operations. Moreover, electrical power and conditioned air are generally required throughout gate operational periods for both passenger and crew comfort and safety, and many times these services are also provided by GSE. Airport GSE includes, but is not limited to, aircraft pushback tugs, baggage and cargo tugs, carts, forklifts, lifts, ground power units, air conditioning units, air start units, and belt loaders. Electric-powered versions of baggage tugs and belt loaders, which represent about a third of all GSE, are available and in use. Also, electric-powered versions of aircraft pushback tugs, air start units, air conditioning units, forklifts, lifts, ground power units, and other specialty GSE are available in the marketplace.

The initial cost of purchasing electric-powered GSE is higher compared to diesel-powered and gasoline-powered GSE. A recent report by the United States Environmental Protection Agency (EPA) estimates that the cost of an electric baggage tractor would be \$30,000 while the gasoline-powered version would be \$17,000 and the diesel-powered version would be \$22,000. However, electricity is a less expensive fuel, so there will be savings in the cost of fuel. This fuel savings will offset the increased electric GSE price in two to three years.

The majority of GSE engines are “uncontrolled” from an emission perspective. A majority of GSE use engines that have not been designed for low emissions. Therefore, GSE emit significant amounts of volatile organic compounds (VOC) and oxides of nitrogen (NO_x). A recent EPA study of four major airports in the United States indicated that GSE is responsible for 15-20% of airport-related NO_x and 10-15% of airport-related VOC.

The DFW area is nonattainment for ozone. Precursors to ozone include VOC and NO_x. The replacement of internal combustion engine GSE with electric-powered GSE at the airports that use this equipment will eliminate the VOC and NO_x emissions from this source and, therefore, help control ground-level ozone. GSE emissions for the DFW nonattainment area are projected to be 12.3 tons per day of NO_x. This proposed rule will eliminate the emissions from the source thereby greatly helping control ground-level ozone.

SECTION-BY-SECTION DISCUSSION

The proposed new §114.400 adds definitions for air carrier, air carrier operations, electric-powered, ground support equipment, and ground support equipment fleet.

The proposed new §114.402 will require owners or operators of ground support equipment fleets at airports in Collin, Dallas, Denton, and Tarrant Counties, and with more than or equal to 100 commercial air carrier operations per year (excluding air taxi and commuter carriers), as averaged over a three-year period, meet the electrification requirements specified in subsections(b) or (c). This proposed rule contains the 100 air operations three-year average requirement to ensure that the number of air carrier operations per year is representative of the level of activity at an airport. The number 100 air operations was chosen in order to limit the proposed rule effectivity to the four largest commercial airports (DFW International, Dallas Love Field, Alliance, and Meachem) in the DFW ozone nonattainment area, which would have the vast majority of GSE. These proposed rules will not affect the general aviation airports who have very little GSE, nor the military airports who must have GSE that is able to be deployed and operated in any part of the world. Subsection (b) specifies the compliance schedule for the electrification of GSE for

owners or operators of GSE fleets at airports that are subject to this rule at the time of the effective date of this rule. Subsection (c) specifies the compliance schedule for the electrification of GSE for owners or operators at airports that become subject at a time after the effective date of this rule. Subsection (d) specifies that the lowest emitting equipment must be used when there is no electric-powered GSE available. Finally, subsection (e) specifies that the requirements of the proposed rules will not apply if the EPA, the United States Department of Transportation, and the GSE owners/operators adopt an enforceable agreement by December 31, 2000, that implements the full electrification of GSE by December 31, 2003, or includes alternate measures to achieve equivalent emission reductions, such as a requirement to perform single-engine taxiing. The alternate measures are subject to executive director approval.

The proposed new §114.406(a) requires that owners or operators subject to §114.402 to submit annual GSE fleet reports. Subsection (b) requires them to maintain copies of the submitted reports for a minimum of three years.

The proposed new §114.409 specifies the counties that are subject to the new requirements. The counties are Collin, Dallas, Denton, and Tarrant.

FISCAL NOTE

Bob Orozco, Technical Specialist with Strategic Planning and Appropriations, has determined that for the first five-year period the proposed amendments to Chapter 114 are in effect there will be no significant fiscal implications for units of state and local government as a result of administration or enforcement of the proposed amendments. The airlines and businesses that serve the DFW International Airport in Dallas

and Tarrant county, Dallas Love Field Airport in Dallas county, the Fort Worth Meacham International Airport in Tarrant county, and the Fort Worth Alliance Airport in Tarrant county will be affected by the phase-in of electrically powered GSE by the end of calendar year 2003.

The proposed amendments to Chapter 114 would require that GSE be electrically powered at airports, with more than or equal to 100 air carrier operations per year (excluding air taxi and commuter carriers), averaged over a three-year period, in the DFW ozone nonattainment area. Owners or operators of ground support equipment subject to this section at the time of the effective date must have 30% of the GSE fleet electric-powered by December 31, 2001; 60% of the GSE fleet must be electric-powered by December 31, 2002; and 100% of the GSE fleet electric-powered by December 31, 2003. If owners or operators of ground support equipment at a certain airport become subject to the proposed amendments at a time after the effective date of the rule, then 30% of the GSE fleet must be electric-powered by December 31 of the next calendar year; 60% of the GSE fleet must be electric-powered by the end of the second calendar year; and 100% of the GSE fleet must be electric-powered by the end of the third calendar year. Owners and operators of GSE affected by the proposed amendments will also be required to submit annual ground support equipment fleet reports to the commission. The reporting is designed to demonstrate compliance with the implementation schedule. This air pollution control program is part of the strategy to reduce NO_x emissions necessary for the counties included in the DFW nonattainment area to be able to demonstrate attainment with the NAAQS for ozone. The steering committee representing the DFW ozone nonattainment area counties has requested an air pollution control strategy, including this program to electrify ground support equipment at medium to large airports, be established to reduce NO_x emissions necessary to demonstrate attainment with the ozone NAAQS. Dallas, Collin, Denton, and Tarrant counties

are in the DFW nonattainment areas. The proposed amendments are part of the commission response to the request from the DFW steering committee and one element of the proposed DFW Attainment SIP. A SIP is a plan developed for any region where existing (measured and modeled) ambient levels of pollutant exceeds the levels specified in a national standard. The plan sets forth a control strategy that provides emission reductions necessary for attainment and maintenance of the national standards.

The cities of Dallas and Fort Worth, which own and operate the four affected airports, will be affected and will be required to assure that affected air carriers and owners of ground support equipment at these airports comply with the proposed amendments. There are no significant fiscal implications anticipated for the cities of Dallas and Fort Worth or other units of state and local government as a result of administration because cities don't own GSEs, and enforcement of the proposed amendments.

PUBLIC BENEFIT

Mr. Orozco also has determined that for each year of the first five years the proposed amendments to Chapter 114 are in effect, the public benefit anticipated from enforcement of and compliance with the proposed amendments will be the potential reduction in NO_x emissions from affected airports, potentially improved air quality, and contribution toward demonstration of attainment with the ozone NAAQS.

It is anticipated that owners and operators of GSE within the DFW nonattainment area and subject to the proposed amendments will incur significant additional costs in the short term to purchase or lease electric-powered GSE. It is anticipated that initial electric-powered GSE is more expensive to purchase relative to fossil-fueled GSE. However, with electric powered GSE, the avoided cost of purchasing fossil fuels and

lower maintenance costs may offset the additional purchase/lease costs over time. It is estimated that the savings achieved from the avoided cost for fossil fuels over the life cycle of the equipment will offset the incremental purchase cost of the electric-powered GSE. At DFW International Airport, the following airlines will be affected: AeroLitoral, AeroMexico, AirTran, American, America West, British Airways, Canadian Airlines, Continental, Delta, Northwest, TWA, United, US Airways, Grupo Taca, American Trans Air, Frontier, Japan Airlines, Atlantic Southeast, Korean Air, Lufthansa, National, Midwest Express, Sun Country, and Vanguard Airlines. At Fort Worth Alliance Airport, Federal Express will be affected. At Dallas Love Field Airport, Southwest, Continental, American, and Casino Airlines will be affected. At Meacham Airport, there are no commercial airline departures, however, maintenance is performed on large commercial aircraft. Other businesses at the four affected airports that support airline operations and use GSE will also be required to adhere to the proposed amendments requiring electrically-powered GSE. The following is a paraphrased excerpt from an EPA report titled "Technical Support for Development of Airport Ground Support Equipment Emission Reductions" (EPA420-R-99-007, May 1999) that indicates the cost savings for electric-powered GSE.

Initial purchase costs for electric GSE are high relative to their fossil fueled counterparts. The cost premium is almost entirely associated with the required battery pack and recharger. Table 3 presents a comparison of electric baggage tractor first costs relative to those of fossil-fueled GSE. As indicated, the cost premium ranges from about \$8,000 relative to a diesel powered tractor to about \$13,000 relative to a gasoline-powered tractor. These purchase price premiums are augmented by periodic battery replacement requirements (at about \$4,500 every five to six years) that are two to four times higher on a life cycle basis than corresponding fossil fuel engine rebuild or replacement costs. However, these cost premiums are

counterbalanced by a substantial reduction in fuel costs. Electric GSE use no fuel during idle periods and such periods can comprise as much as 50% of typical GSE operation. Using an estimated electricity cost of \$.045 per kilowatt-hour, the overall fuel savings associated with high-use GSE operations such as baggage tractors can range from \$2,500 per year relative to diesel equipment to over \$6,000 per year relative to gasoline and compressed natural gas equipment. While lower-use GSE fuel cost savings will be smaller, it is clear that fuel savings alone can offset the entire electric GSE purchase price premium in two to three years. Moreover, electric GSE fuel cost savings will increase as more efficient electric motors and motor controllers continue to evolve.

In addition to reduced fuel costs, the latest generation of electric GSE have demonstrated significantly reduced maintenance requirements. Costs have been estimated to be reduced by as much as two-thirds relative to gasoline- and diesel-powered GSE. Table 3 presents the results of a life cycle cost comparison for a baggage tractor under a high-use operating scenario (i.e., generally used to service aircraft continuously throughout an operating day such as occurs at high-traffic airports). The tabulated costs represent the net present value of the various expenditures required over the 16-year useful life of the tractor. Regardless of whether maintenance costs are assumed to be reduced, the electric-powered tractor consistently exhibits the lowest life cycle costs. Life cycle costs for the electric baggage tractor are estimated to be over 40% lower than the next lowest cost diesel option under a reduced maintenance scenario and still 10% lower even if maintenance costs are assumed to be identical to conventional gasoline- and diesel-powered GSE maintenance costs.

It is difficult to provide precise cost effectiveness estimates for electric GSE because the impact of such equipment varies across the pollutants examined and relative to the fossil-fuel equipment being replaced and the emissions performance of local utilities. However, it is clear from the data presented in Table 3 that electric GSE represent the lowest cost option relative to all fossil-fuel GSE. Therefore, if an appropriate battery recharging schedule and infrastructure can be established, all derived emission reductions accrue for free. Assuming local utility emissions performance is not too different from average United States utility emission levels, electric GSE are cost effective from an economic standpoint alone.

Figure: 30 TAC Chapter 114 - Preamble

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Table 3. Life Cycle Costs for Baggage Tractors

Fuel Type	Purchase Cost	Rebuild or Replacement Costs	Fuel Costs	Reduced Maintenance Costs	Total Costs If Reduced Maintenance	Total Costs If Same Maintenance
Gasoline	\$17,000	\$2,568	\$59,481	\$47,089	\$126,139	\$126,139
Diesel	\$22,000	\$1,351	\$27,386	\$47,089	\$97,826	\$97,826
LPG	\$19,000	\$2,568	\$49,072	\$37,176	\$107,816	\$117,729
CNG	\$21,000	\$2,568	\$65,058	\$37,176	\$125,802	\$135,715
Electric	\$30,000	\$5,147	\$5,574	\$15,696	\$56,418	\$87,810

Assumptions:

1. 16 year equipment life;
2. 6 year engine replacement interval for gasoline, liquified petroleum gas (LPG), and compressed natural gas (CNG);
3. 8 year engine rebuild interval for diesel;
4. 5 year battery life for electric;
5. \$2,500 unit cost for all rebuilds;
6. \$4,500 unit cost for all battery replacements, equipment used 8 hours per day for 350 days per year;
7. idle is 40 percent of operating day;
8. gasoline use is 3.2 gallons per hour at \$0.75 (after tax credits) per gallon;
9. diesel use is 1.7 gallons per hour at \$0.65 (after tax credits) per gallon;
10. LNG use is 3.3 gallons per hour at \$0.60 per gallon;
11. CNG use is 3.5 gallons per hour at \$0.75 per gallon (including the cost of refueling facility operation and amortization);
12. electric use is 8.33 kilowatts per operating hour;
13. maintenance costs are \$1.90 per hour for gasoline and diesel;
14. maintenance costs are \$1.50 per hour for LPG and CNG under a reduced maintenance scenario or \$1.90 per hour under a "same maintenance" scenario;
15. maintenance costs are \$0.63 per hour for electric under a reduced maintenance scenario or \$1.90 per hour under a "same maintenance" scenario.

The same study stated that “...generally, there are no technical limitations to the size or type of ground support equipment that can be converted to or replaced with electrically powered equipment. Electrically powered versions of baggage tugs and belt loaders, which together account for over a third of all ground support equipment, are available and in use (although current usage constitutes only a minor fraction of total activity). Additionally, electric powered versions of aircraft pushback tractors, air start units, conditioned air units, forklifts, ground power units, lifts, general purpose vehicles (cars, trucks, and vans), and other specialty ground support equipment are currently available in the marketplace. Electric carts are already fulfilling about half of overall ground support equipment cart demand.”

A study titled “Assessment of Airport Ground Support Equipment Using Electric Power or Low-Emitting Fuels” (Arcadis, Geraghty and Miller, July 20, 1999) estimated costs for electric-powered GSE. The study estimated an electric baggage tractor to be \$24,250, an electric belt loader at \$30,000, and an electric aircraft tug at \$85,000. Their gasoline-powered equivalents are \$16,000, \$27,000, and \$72,000 respectively. The diesel-powered equivalents are \$19,000, \$29,000, and \$72,000 respectively. The study also estimated the population of GSE in California. If airport GSE within the DFW CMSA is similar, then the baggage tractors make up 40%; belt loaders make up 20%; and aircraft tugs make up 6% of the total GSE. If the estimated 3008 pieces of GSE at the affected airports are equally proportional and assuming none of the current GSE is electrically powered, it is estimated there are 1,324 baggage tractors, 602 belt loaders, and 180 aircraft tugs. Applying the cost from the Arcadis, Geraghty, and Miller study, the estimated total cost for 70% of the equipment at the affected airports is \$65.5 million. Assuming that the remaining 30% of the equipment or 902 units are lower cost equipment in the \$10,000 to \$20,000 range, the total cost should not be in excess of \$83.5 million less trade-in, transfer, or sale of current equipment.

As stated previously, it is also anticipated that additional costs associated with replacing current GSE with electric-powered GSE will be offset with fuel and maintenance savings over time. It is estimated that the cost of the reporting requirements in the proposed amendments will not be significant.

SMALL BUSINESS AND MICRO-BUSINESS IMPACT ANALYSIS

There are no anticipated adverse fiscal implications to small businesses and micro-businesses as a result of implementing the proposed amendments because there are no known small or micro-businesses that own and operate ground support equipment. If there are small or micro-businesses that own GSE for the purpose of delivering their products to the aircraft, provide maintenance support for aircraft at affected airports, or rent or lease GSE to airlines or related companies which provide services to the airlines; their costs will be similar to those specified for businesses in general in the PUBLIC BENEFIT section of this preamble.

A study titled "Assessment of Airport Ground Support Equipment Using Electric Power or Low-Emitting Fuels" (Arcadis, Geraghty and Miller, July 20, 1999) estimated costs for electric-powered GSE. The study estimated an electric baggage tractor to be \$24,250, an electric belt loader at \$30,000, and an electric aircraft tug at \$85,000. It is anticipated that some of the equipment used by affected small or micro-businesses may be lower cost units in the \$10,000 to \$30,000 range. Actual total costs would be dependent on the amount and types of GSE used by the business. It is also anticipated that costs will be mitigated by the trade-in, transfer, or sale of current equipment. As stated previously, it is anticipated that additional costs associated with replacing current GSE with electric-powered GSE will be offset with fuel and

maintenance savings over time. It is estimated that the cost of the reporting requirements in the proposed amendments will not be significant.

DRAFT 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 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. The proposed amendments to Chapter 114 are intended to protect the environment or reduce risks to human health from environmental exposure to ozone and may affect in a material way, a sector of the economy, competition, and the environment. The proposed amendments are intended to implement the conversion of fossil-fueled GSE to electric-powered GSE over a three to four year period. This air pollution control program is part of the strategy to reduce NO_x emissions necessary for the counties included in the DFW ozone nonattainment area to be able to demonstrate attainment with the ozone NAAQS. The steering committee representing the DFW ozone nonattainment area counties has requested an air pollution control strategy, including the use of electric-powered GSE, to be established to reduce NO_x emissions necessary to demonstrate attainment with the ozone NAAQS. The proposed amendments are part of the commission response to the request and one element of the proposed DFW Attainment Demonstration SIP. Although the proposed amendments meet the definition of a “major environmental rule” as defined in the Texas Government Code, and is considered a major environmental rule, §2001.0225

only applies to a major environmental rule, the result of which is to: 1. exceed a standard set by federal law, unless the rule is specifically required by state law; 2. exceed an express requirement of state law, unless the rule is specifically required by federal law; 3. exceed a requirement of a delegation agreement or contract between the state and an agency or representative of the federal government to implement a state and federal program or; 4. adopt a rule solely under the general powers of the agency instead of under a specific state law. This rulemaking is not subject to the regulatory provisions of §2001.0225(b), because the proposed rule does not meet any of the four applicability requirements. Specifically, the program to convert airport GSE in the DFW nonattainment area to electric-powered GSE was developed in order to meet the ozone NAAQS set by EPA under Federal Clean Air Act (FCAA), §7409, and therefore meet a federal requirement. States are primarily responsible for ensuring attainment and maintenance of NAAQS once EPA has established those standards. Under FCAA, §7410 and related provisions, states must submit, for approval by EPA, SIPs that provide for the attainment and maintenance of NAAQS through control programs directed to sources of the pollutants involved. This proposal is not an express requirement of state law, but was developed specifically in order to meet the air quality standards established under federal law as NAAQS, as authorized under the Texas Clean Air Act (TCAA), §382.012 (concerning State Air Control Plan). This proposal is intended to help bring the DFW ozone nonattainment areas into compliance. The proposed amendments do not exceed a standard set by federal law, exceed an express requirement of state law unless specifically required by federal law, nor exceed a requirement of a delegation agreement. The proposed amendments 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. The commission invites public comment on the draft regulatory impact analysis.

TAKINGS IMPACT ASSESSMENT

The commission has 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 airport GSE to be electric-powered which will act as an air pollution control strategy to reduce NO_x emissions necessary for the four counties included in the DFW ozone nonattainment area to be able to demonstrate attainment with the ozone NAAQS. The proposed affected area consists of the four-county DFW ozone nonattainment area, which includes Collin, Dallas, Denton, and Tarrant Counties. Promulgation and enforcement of the rules may burden private real property, because this proposed rulemaking action may result in investment in the permanent installation of supplied utilities at the major airports in the DFW area. Some airports, such as DFW International, can and have installed utilities (aircraft power, fuel, hydraulics, and air conditioning) at the gates which in effect eliminates the need for a large portion of the GSE fleet. Although the proposed rule revisions do not directly prevent a nuisance or prevent an immediate threat to life or property, they do prevent a real and substantial threat to public health and safety and partially fulfill a federal mandate under the FCAA, §7410. Specifically, the emission limitations and control requirements within this proposal were developed in order to meet the ozone NAAQS set by the EPA under the FCAA, §7409. States are primarily responsible for ensuring attainment and maintenance of the NAAQS once the EPA has established them. Under the FCAA, §7410 and related provisions, states must submit, for approval by EPA, SIPs that provide for the attainment and maintenance of NAAQS through control programs directed to sources of the pollutants involved. Therefore, the purpose of the rule proposal is to implement an electric GSE program in the DFW ozone nonattainment area which is necessary for the area to meet the air quality standards established under federal law as NAAQS. Consequently, the exemption which applies to these proposed rules is that of an

action reasonably taken to fulfill an obligation mandated by federal law. Therefore, these proposed revisions will not constitute a takings under the Texas Government Code, Chapter 2007.

COASTAL MANAGEMENT PROGRAM CONSISTENCY REVIEW

The commission has 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 Resource 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 action for consistency with the CMP goals and policies in accordance with the rules of the Coastal Coordination Council, and has determined that the action is consistent with the applicable CMP goals and policies. The CMP policy applicable to this rulemaking action is the policy that commission rules comply with regulations in 40 Code of Federal Regulations, to protect and enhance air quality in the coastal area (31 TAC §501.14(q)). No new sources of air contaminants will be authorized by the rule amendments. Therefore, in compliance with 31 TAC §505.22(e), the commission affirms that this rulemaking is 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.

PUBLIC HEARING

The commission will hold public hearings on this proposal at the following times and locations: January 24, 2000, 2:00 p.m., City of El Paso Council Chambers, 2 Civic Center Plaza, 2nd floor, El Paso; January 25, 2000, 10:00 a.m., Building E, Room 201S, Texas Natural Resource Conservation Commission Complex, 12100 Park 35 Circle, Austin; January 26, 2000, 10:00 a.m., Longview City Hall Council Chambers, 300 West Cotton Street, Longview; January 26, 2000, 7:00 p.m., City of Irving Central Library Auditorium, 801 West Irving Boulevard, Irving; January 27, 2000, 10:00 a.m., Dallas Public Library Auditorium, 1515 Young Street, Dallas; January 27, 2000, 7:00 p.m., Lewisville City Council Chambers, Municipal Center, Lewisville; January 28, 2000, 10:00 a.m., Council Chambers, 2nd floor, Fort Worth City Hall, 1000 Throckmorton Street, Fort Worth; January 31, 2000, 1:30 p.m., John Grey Institute, 855 Florida Avenue, Beaumont; and January 31, 2000, 7:00 p.m., Houston-Galveston Area Council, 3555 Timmons Lane, Houston. The hearings are 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 will not be permitted during the hearings; however, agency staff members will be available to discuss the proposal 30 minutes prior to the hearings and will answer questions before and after the hearings.

Persons with disabilities who have special communication or other accommodation needs, who are planning to attend the 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 Ms. Lola Brown, Office of Environmental Policy, Analysis, and Assessment, MC 205, P.O. Box 13087, Austin, Texas 78711-3087 or faxed to (512) 239-4808. All comments should reference Rule Log Number 99055E-114-AI. Comments must be received by 5:00 p.m., February 1, 2000. For further information, please contact Alan J. Henderson, (512) 239-1510 or Kenneth Gathright at (512) 239-0599.

STATUTORY AUTHORITY

The new sections are proposed under the Texas Health and Safety Code, TCAA, §382.011, which provides the commission the authority to control the quality of the state's air; §382.012, which provides the commission the authority to prepare and develop a general, comprehensive plan for the control of the state's air; §382.017, which provides the commission the authority to adopt rules consistent with the policy and purposes of the TCAA; and §382.019, which provides the commission the authority to adopt rules to control and reduce emissions from engines used to propel land vehicles.

The new sections implement TCAA, §382.002, relating to Policy and Purpose; §382.011, relating to General Powers and Duties; §382.012, relating to State Air Control Plan; and §382.019, relating to Methods Used to Control and Reduce Emissions from Land Vehicles.

SUBCHAPTER I: NON-ROAD ENGINES

DIVISION 1: AIRPORT GROUND SUPPORT EQUIPMENT

§§114.400, 114.402, 114.406, 114.409

§114.400. 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 control. In addition to the terms which are defined by the TCAA, the following words and terms, when used in this division, shall have the following meanings, unless the context clearly indicates otherwise.

(1) **Air carrier** - A person providing air transportation of persons or goods for remuneration.

(2) **Air carrier operations** - Landings and takeoffs of air carriers (excluding air taxis and commuter carriers) at airports for the purpose of transportation of persons and/or goods, or for the purpose of maintenance.

(3) **Electric-powered** - Engineered and designed to be operated only on electricity.

(4) **Ground support equipment (GSE)** - Equipment that is used to service aircraft during passenger and/or cargo loading and unloading, maintenance, and other ground-based operations.

This includes, but is not limited to, aircraft pushback tugs, baggage and cargo tugs, carts, forklifts, lifts, ground power units, air conditioning units, air start units, and belt loaders.

(5) **Ground support equipment fleet** - A group of ground support equipment controlled by the owner or operator at the same location.

§114.402. Control Requirements.

(a) In the counties listed in §114.409 of this title (relating to Affected Counties), owners or operators of ground support equipment (GSE) at airports with more than or equal to 100 air carrier operations per year, averaged over a three-year period, must ensure that their GSE fleet meets the requirements of subsections (b) - (d) of this section.

(b) Owners or operators of GSE subject to this section at the time of the effective date of this rule shall ensure that:

(1) 30% of the GSE fleet is electric-powered by December 31, 2001;

(2) 60% of the GSE fleet is electric-powered by December 31, 2002; and

(3) 100% of the GSE fleet is electric-powered by December 31, 2003.

(c) Owners or operators of GSE at airports that become subject to this section at a time after the effective date of this rule shall ensure that:

(1) 30% of the GSE fleet is electric-powered by December 31 of next calendar year;

(2) 60% of the GSE fleet is electric-powered by the end of the second calendar year; and

(3) 100% of the GSE fleet is electric-powered by the end of the third calendar year.

(d) Subject to the executive director's approval, if electric-powered GSE is not available for purchase or through conversion, the owner or operator shall ensure that the GSE purchased or converted is the lowest emitting equipment available.

(e) In the event that the EPA, the United States Department of Transportation, and the GSE owners/operators adopt an enforceable agreement by December 31, 2000, that implements the full electrification of GSE by December 31, 2003, or includes alternate measures to achieve equivalent emission reductions, such as a requirement to perform single-engine taxiing, these rules will no longer apply. The alternate measures are subject to executive director approval.

§114.406. Reporting and Recordkeeping Requirements.

(a) Owners or operators affected by §114.402 of this title (relating to Control Requirements) must submit annual ground support equipment fleet reports for the previous year starting on February 1, 2002, and every February 1 thereafter. The report shall be submitted to the executive director and must contain, at a minimum:

(1) the ground support equipment (GSE) fleet identification number (when assigned);

(2) area in which the affected GSE operate primarily;

(3) the purchase date, make, model, model year, and fuel type for each unit of GSE;

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(4) a demonstration of compliance with the applicable implementation schedule under §114.402 of this title (relating to Control Requirements); and

(5) any other information requested by the executive director necessary to determine compliance with this subchapter.

(b) The owner or operator of GSE shall maintain copies of submitted reports required by subsection (a) of this section on-site at the reported fleet address for a minimum of three years, and upon

request shall make such reports available to the executive director or air pollution control agencies having jurisdiction in the area.

§114.409. Affected Counties.

Owners or operators of ground equipment at affected airports in Collin, Dallas, Denton, and Tarrant Counties shall be in compliance with §114.402 of this title (relating to Control Requirements), and §114.406 of this title (relating to Reporting and Recordkeeping Requirements) no later than the dates specified in §114.402(b) and (c) of this title.