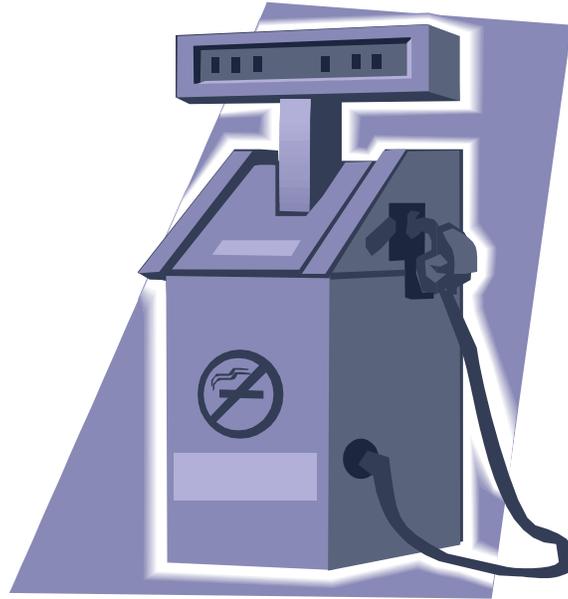


Alternative Motor Vehicle Fuels in Louisiana

June 2005 Update

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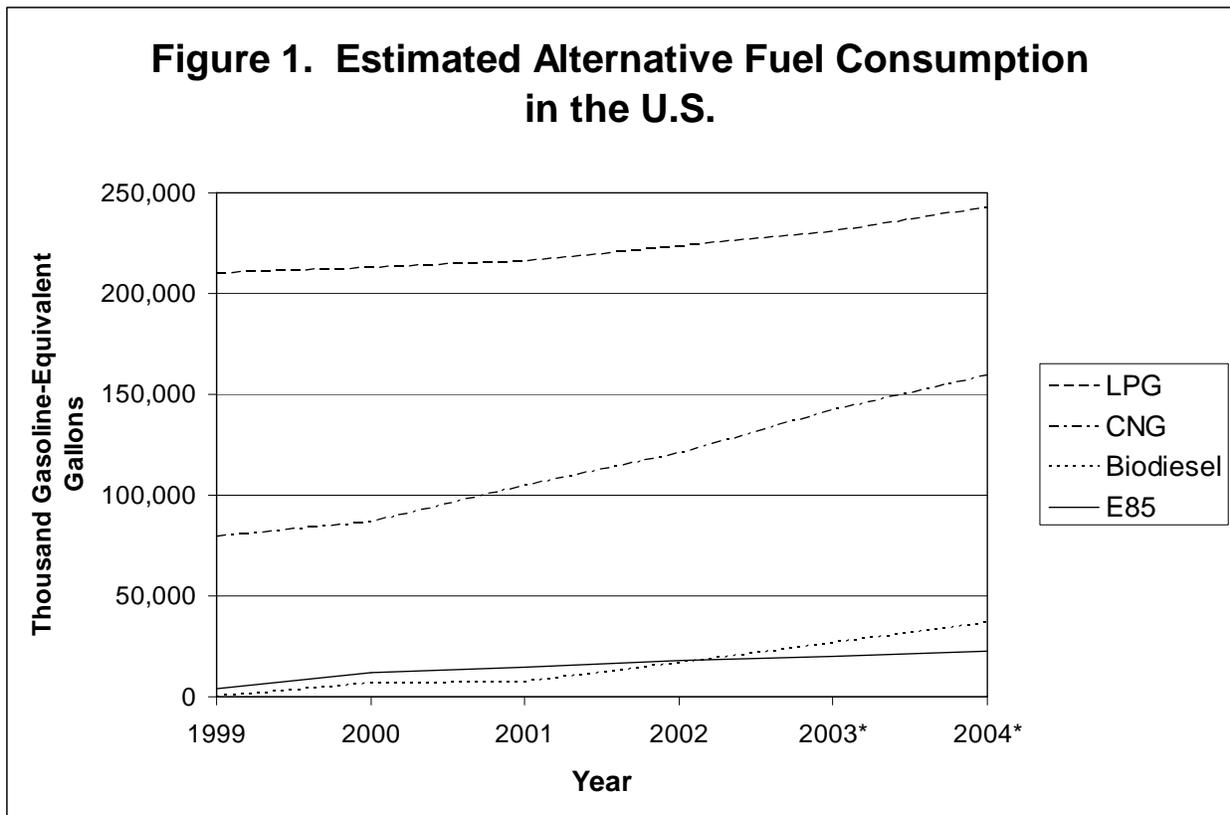
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EXECUTIVE SUMMARY

Alternative fuel usage in the U.S., as well as in Louisiana, remains a minor fraction of total motor vehicle fuel consumption. In 2004, motor vehicles in the U.S. consumed over 177 billion gasoline-equivalent gallons of fuel ¹ (a gasoline-equivalent gallon, also referred to as a gallon-gasoline equivalent, or gge, is a unit that expresses different fuels on an equivalent energy per volume basis). Out of the 177 billion gge of fuel consumed, about 2.5 billion gge (less than 1.5% of the total) were alternative fuels, which includes about 2 billion gge of ethanol used to blend with gasoline to make gasohol ¹. Figure 1 shows the estimated consumption of the four most used alternative motor vehicle fuels in the U.S.



* Projected

Typical motivations to use alternative motor vehicle fuels include energy security, energy sustainability, and environmental sustainability. In addition, recent high oil prices and a post-911 awareness of the vulnerability of our oil supplies have served to increase national attention on alternative fuels. In Louisiana, these effects have been amplified by the Baton Rouge area's classification as an ozone non-attainment area by the U.S. Environmental Protection Agency (EPA); this has served to increase interest and activity related to alternative fuels. The major obstacles to wide-spread alternative fuel usage continue to be the generally higher cost of alternative fuels and vehicles, and the lack of fueling infrastructure.

These motivations translated into goals are: to reduce crude oil imports, to find a replacement for crude oil, and to reduce emissions resulting from fuel combustion. Two of the more recent

developments that are gaining momentum nationally and helping to accomplish these goals are hybrid-electric vehicles and biodiesel. Making gasoline or diesel fueled vehicles more fuel efficient also helps to reach these goals. Such is the case with hybrid-electric vehicles (HEVs). HEVs are not alternative fuel vehicles (they use gasoline or diesel), but employ advanced technology to increase miles per gallon. HEVs are rapidly increasing in sales and availability, and their use reduces both emissions and our nation's dependence on imported crude oil. Biodiesel is a newer alternative fuel that is rapidly gaining popularity due to its ease of use, emission reduction benefits, and renewable status. Biodiesel also has much potential as an additive to regular diesel to restore the lubricity that will be lost when Environmental Protection Agency regulations take effect in mid 2006 that require the sulfur content in diesel to be reduced from 500 parts per million to 15 parts per million.

Fuel cells probably have the greatest potential for replacing internal combustion engines in vehicles. Fuel cell vehicles and related technologies continue to advance, but still remain in the experimental stage. Several test fleets are in operation in the U.S. and Japan, and are providing valuable data to manufacturers. Many technological and economic barriers still exist and must be overcome before mass produced fuel cell vehicles and fueling infrastructure becomes a reality.

INTRODUCTION

Alternative Motor Vehicle Fuels in Louisiana originated as a progress report for the state's efforts to convert its motor vehicle fleet to alternative fuels. These efforts, in the form of legislative mandates, were spurred by federal mandates in the early 1990s. The report has also chronicled the ethanol industry in Louisiana. Through subsequent editions, the report has evolved to include more general and up-to-date information on, and to be a serial reference source for, alternative fuels and alternative fuel vehicles. This edition begins with a discussion of the motives to use alternative fuels followed by an overview of alternative fuels and alternative fuel vehicles. The final two sections discuss alternative fuels at the State and Federal levels respectively. These sections also include discussions of trends, programs, laws, and incentives. The appendices include a list of compressed natural gas filling stations in Louisiana and the text of major State legislation pertaining to alternative fuels.

MOTIVATION

What will we fuel our vehicles with fifty years from now? No attempt will be made here to arrive at an answer; but one of the primary factors among the many that will determine the answer, is the question of how much cheap crude oil remains in the ground. Virtually all transportation fuels are derived from crude oil, and as long as crude oil remains cheap and available, relative to the alternatives, we will use it. Considerable effort is required to obtain crude oil, so what truly matters is crude oil production. The most widely accepted theory states that crude oil production, whether from an individual well, a particular region or worldwide, is shaped like a bell curve with respect to time. Production ramps up after a discovery is made, tapers off as the peak approaches, peaks, and then begins to decline. This theory was formulated by Dr. M. King Hubbert in 1956, a geophysicist who worked for Shell and then the United States Geological Survey. Dr. Hubbert correctly predicted that U.S. crude oil production would peak in 1970. Since then, the U.S. has been able to meet its growing crude oil demand by increasing imports. The worldwide peak and subsequent decline will have much greater implications.

Economic growth and rising standards of living have been largely dependent on crude oil since the industrial revolution. A point will be reached during the decline, before crude oil reserves are completely exhausted, where the cost to produce crude oil will exceed its selling price. This price will depend on the price and availability of the alternatives. The debate rages over when the world wide peak will occur (some say it has already occurred), but estimates range from immediately to 70 years from now^{2,3}. The range in estimates illustrates the uncertainty and complexity involved in making them. The motivation is that sooner or later crude oil will no longer be affordable; therefore an alternative will have to be used.

Motivation also exists to use alternative fuels before crude oil becomes uneconomic. This motivation concerns the availability of crude oil. As stated earlier, the U.S. crude oil demand is met by imports. In 2003, 63% of the crude oil input to U.S. refineries was imported⁴; much of it from politically unstable regions. This dependence, along with the threat of terrorist attacks, highlights the vulnerability of our vital oil supplies. The use of alternative motor vehicle fuels has the ability to reduce our dependence on foreign oil supplies and, thereby, increase U.S. energy security.

The final motivation discussed is pollution. Exhaust gasses from gasoline and diesel burning engines contain carbon monoxide (CO), oxides of nitrogen (NO_x), particulate matter, and unburned or partially burned hydrocarbons that are referred to as volatile organic compounds (VOCs). These emissions are a major source of urban air pollution. Of particular concern to Louisiana are NO_x and VOCs, which react chemically in the presence of sunlight to create ground-level ozone. Ozone, also known as smog, irritates lung tissue, causing difficult breathing and reduced breathing capacity. It also aggravates asthma and increases susceptibility to respiratory illnesses. Long term or repeated exposure can permanently reduce lung function. Alternative fuel usage and more efficient use of gasoline and diesel can reduce ground level ozone production.

Until recently, the parishes of East Baton Rouge, West Baton Rouge, Ascension, Livingston, and Iberville were classified by the EPA as a “severe” ozone non-attainment area. In June 2005, the EPA removed the one-hour average ozone standard, which effectively upgraded the five-parish area’s status to “marginal”. The reclassification means that the area will not be required to use reformulated gasoline (RFG), and that fewer businesses and industrial facilities will face increased regulation. The new deadline for the area to reach attainment is June 2007.

ALTERNATIVE FUELS AND VEHICLES

The alternative motor vehicle fuels recognized by federal regulations and defined under the Energy Policy Act of 1992 include: biodiesel, electricity, ethanol, hydrogen, methanol, natural gas, and liquefied petroleum gas. These plus RFG are recognized as alternative fuels by Louisiana regulations.

Biodiesel

Biodiesel is a renewable fuel that can be made from virgin or waste vegetable oils, animal fats, and even algae, by reacting the base oil (vegetable oil, etc.) with alcohol and a catalyst. Unlike vegetable oil, biodiesel has combustion properties very similar to crude-based diesel, and is biodegradable, non-toxic, and sulfur free. Using biodiesel reduces VOC emissions by 67%; CO

and particulate matter emissions by almost 50%; and CO₂ emissions by almost 80%. NO_x is increased by approximately 10%. Biodiesel can be blended with crude-based diesel in any proportion and is referred to as “BXX” with the “XX” standing for the percentage of biodiesel in the blend. Common blends are B2, B5, and B20. The term “biodiesel” refers to B100, or pure biodiesel. Only B100 qualifies as an alternative fuel under EPACT regulations, but EPACT covered fleets earn one credit per 450 gallons of B100 purchased if used in blends of 20% or higher.

Any biodiesel blend can be used in any diesel engine subject to the following cautions. Biodiesel has excellent solvent properties, and as such, can dissolve deposits left behind by regular diesel (which can clog fuel filters). Fuel filters should be changed more frequently until the biodiesel has had sufficient time to remove deposits. The second caution concerns cold weather usage. Just like regular diesel, biodiesel can gel at low temperatures. The temperature at which biodiesel becomes problematic is higher than that of regular diesel, but the same methods of intervention that are used for regular diesel (external heating and additives) can be used for biodiesel. As a general rule, B20 has a 3 to 5 degree F increase in cold flow properties over regular diesel. The higher the blend, the higher the temperature at which gelling will occur.

Biodiesel production has grown from 5 million gallons in 2000 to over 25 million gallons in 2003. No biodiesel is currently produced in Louisiana. B100 costs range from \$2 to over \$3 per gallon. B20 currently sells for \$0.20 to \$0.30 per gallon more than regular diesel.

Biodiesel is also an excellent lubricity additive for regular diesel fuel. A diesel engine relies on the inherent lubricity of diesel fuel to lubricate its fuel injection system. Diesel fuel derives most of its lubricity from the sulfur it contains. In 2006, federal ultra low sulfur diesel regulations go into effect and will reduce the amount of sulfur in diesel to below 15 parts per million and thereby reduce lubricity to unacceptable levels. A B2 blend can restore the lost lubricity.

The National Biodiesel Board is the premier trade association for the biodiesel industry. Their website (URL: <http://www.biodiesel.org/>) contains a wealth of information on all things related to biodiesel.

Electricity

The main benefit of using electricity as a transportation fuel is the lack of tailpipe emissions. Electric vehicles (EVs) also require less maintenance and “fuel” costs are lower than conventional gasoline powered vehicles. Drawbacks to EVs include high initial costs, expensive battery replacement, short driving range, and the inconvenience of charging batteries. Available EVs are mostly large busses. There are no light duty EVs available as of this printing.

Ethanol

Fuel grade ethanol is essentially pure grain alcohol that has been made unsuitable to drink. It is made by fermenting and distilling any starch or cellulose containing feedstock, thus making ethanol a renewable fuel. Over 90% of U.S. ethanol is made from corn grown in the Midwestern states. Ethanol can be blended with gasoline in any ratio and is commonly used in 10% concentrations, or E10, also called “gasohol”. Ethanol is also one of the two main oxygenates used in RFG, with the other being methyl tertiary-butyl ether (MTBE). In order to be considered

an alternative fuel under EPCACT, ethanol/gasoline blends must consist of at least 85% (E85) ethanol. Vehicles that can use E85 can also run on regular gasoline and are called flex fuel vehicles (FFVs). FFVs are available from several of the major auto manufactures and generally cost little, if any, more than their gasoline only counterparts. The use of ethanol can modestly reduce vehicle emissions, but its real value lies in its ability to reduce gasoline usage and thereby reduce crude oil imports. However, there are some negatives associated with ethanol usage. Due to ethanol's lower energy content per volume, vehicles using E85 experience a 10% to 15% decrease in miles per gallon. Also, ethanol must be shipped by rail car, barge, or truck due to ethanol's affinity for water which contaminates pipelines. E85 prices, on a gge basis, have typically been 50 to 100 percent more than regular gasoline, but surging gasoline prices and a glut of new ethanol plants coming on-line has significantly reduced the price difference. More information about FFVs and E85 can be found on the National Ethanol Vehicle Coalition website (URL: www.e85fuel.com).

Hydrogen

Hydrogen can be utilized as a transportation fuel in a couple of ways. First, it can be burned in internal combustion engines as pure hydrogen, or as a mixture of hydrogen and natural gas. When hydrogen is combusted in an internal combustion engine, the only emission is pure water. BMW and Ford are pursuing the use of hydrogen as an alternative fuel. Second, it can be used to feed a fuel cell to produce electricity and power a vehicle. Only the former currently qualifies as an alternative fuel under EPCACT; while the latter ultimately holds more potential and is widely touted as the replacement for the internal combustion engine. Fuel cell vehicles are classified as advanced technology vehicles, and are discussed in the next section.

Methanol

Methanol is another alcohol fuel. It is principally made from natural gas, but can also be made from wood, municipal solid waste, biomass, or nearly any carbon based feedstock. Methanol has chemical and physical properties similar to ethanol, but current trends favor the use of ethanol over methanol due to economics, and the fact that ethanol is produced from renewable resources. Methanol is also very toxic and has a lower energy content than ethanol. See the Methanol Institute's website for more information at: <http://www.methanol.org/>

Natural Gas

Natural gas consists of about 90% methane and is a very clean burning alternative to gasoline and diesel (CO and particulate matter emissions are reduced up to 90%; NO_x emissions reduced approximately 50%; and CO₂ emissions are reduced 30%). In addition, natural gas vehicles (NGVs) emit no evaporative VOCs while tailpipe VOCs are reduced up to 75%, which, in combination with the reduction in NO_x emissions, greatly reduces ground level ozone production. Natural gas can be used in existing internal combustion engines with modifications, as well as OEM NGVs. Natural gas is stored on board a vehicle as either compressed natural gas (CNG) at 3000 or 3600 psi, or as liquefied natural gas (LNG) at about 150 psi. For more information regarding NGVs, refer to the Natural Gas Vehicle Coalition website at (URL: <http://www.ngvc.org>).

Liquefied Petroleum Gas

Liquefied petroleum gas (LPG) is a mixture of propane, propylene, butane, and butylene. Propane, the main ingredient, and the term LPG are used interchangeably. LPG is the most widely used alternative fuel due to the existing distribution infrastructure. Emission reductions over gasoline and diesel are similar to, but not as great as, natural gas.

ADVANCED TECHNOLOGY VEHICLES

Advanced technology vehicles (ATVs) are vehicles that achieve many of the same goals as AFVs, but did not exist when AFVs were defined under EPACT in 1992. The three main ATVs are fuel cell vehicles, hybrid electric vehicles, and neighborhood electric vehicles. Information about ATVs can be found on the federal Clean Cities Program ATV webpage (URL: <http://www.eere.energy.gov/cleancities/atv/>).

Fuel Cell Vehicles

A fuel cell is a device that combines hydrogen and oxygen to form water. A byproduct of this chemical reaction, and the purpose of it, is an electric current. Fuel cells are very much like batteries in that they convert chemical energy directly into electrical energy. Fuel cell vehicles (FCVs) are basically electric vehicles that obtain their electricity from a fuel cell. The only emissions from FCVs are pure water and heat. The lack of harmful emissions combined with the potential of hydrogen to be renewable, make fuel cells a likely candidate to replace internal combustion engines. Though FCVs are not yet available to the public, several test fleets are in operation around the country and in Japan.

Fuel cells have been around since 1839 when William Grove, an amateur physicist, discovered the principle behind the operation of the fuel cell and built the first one. The technology progressed little until NASA developed fuel cells for power during space flight in the 1960s. Industry recognized the potential and has been developing the technology for over thirty years. Although fuel cells have been around for some time, and are currently being used in stationary power applications, several formidable barriers need to be overcome before fuel cell vehicles become a reality.

One of the largest barriers to hydrogen-fueled, fuel cell vehicles has to do with hydrogen production. Hydrogen is the most abundant element in the universe, but rarely exists by itself in nature and therefore, must be separated from whatever it is chemically bound to, usually carbon and/or oxygen. Currently, most hydrogen is obtained by reacting natural gas (CH₄) with steam to produce hydrogen and carbon dioxide. Preferably, and in order to be considered renewable, hydrogen can be produced by splitting water molecules. The easiest way to split water molecules is by electrolysis. Electrolysis is a process that involves applying an electric current to water, causing it to separate into hydrogen and oxygen; basically a fuel cell in reverse. Although electrolysis is simple and works well, it is inefficient. Other methods of water splitting such as direct thermal, thermochemical, and biological systems are currently being investigated.

Another large barrier involves the storage and transportation of hydrogen. On an equal weight basis, hydrogen contains nearly triple the energy of gasoline, but because hydrogen is the lightest element in the universe, it (even when compressed to 5,000 psi) contains less than one-tenth of the energy of gasoline on an equal volume basis. This makes it difficult to store a sufficient

quantity of hydrogen onboard a vehicle, and makes it uneconomical to transport. Several advanced storage technologies are being investigated and show potential.

More information about fuel cells and hydrogen can be found on the U.S. Department of Energy's (DOE) Hydrogen, Fuel Cells & Infrastructure Technologies Program website (URL: <http://www.eere.energy.gov/hydrogenandfuelcells/>).

Hybrid Electric Vehicles

HEVs use electrical and mechanical energy to propel the vehicle by combining an internal combustion engine with an electric motor(s) and batteries. The result is a vehicle that is operated and fueled like a conventional vehicle, but is much more fuel efficient, and thus, less polluting.

An HEV can be designed to operate in one of three modes, series, parallel, or a combination of the two. An HEV configured for series operation uses an internal combustion engine to run a generator which charges batteries, which powers an electric motor, which then drives the wheels. Series HEVs allow the internal combustion engine to constantly run at its most efficient speed, thereby reducing emissions, but require large, expensive batteries due to the fact that all of the power required to propel the vehicle must come from the electric motor. An HEV configured for parallel operation can use either the internal combustion engine or the electric motor, or both in varying proportions, to drive the wheels. This configuration results in more power being available for acceleration, and allows the use of smaller, less expensive batteries. Parallel HEVs also are generally able to utilize smaller internal combustion engines due to the engines proportion of motive energy being applied directly rather than first being converted to electrical energy. Finally, combination HEVs are configured such that they can operate in either series or parallel mode.

HEVs also use regenerative braking to help charge the batteries. Regenerative braking recovers some of the energy that would normally be lost while a vehicle is decelerating. It works by using the rotational kinetic energy of a vehicles drivetrain while the vehicle is decelerating to drive a generator to charge the batteries. This, in turn, requires less use of the internal combustion engine to charge the batteries, which increases overall efficiency.

Honda, Toyota, and Ford have light-duty HEVs currently available ranging from a \$20,000 small two-seater to a \$50,000 mid-size sport utility vehicle. These HEVs sell at a \$3,500 to \$7,000 premium to comparable gasoline-only vehicles, and have fuel efficiencies ranging from 30 to 60 mpg. Several other major manufacturers will have light-duty HEVs for sale in the very near future. Heavy-duty HEVs, mainly busses and delivery vans, are available from several manufacturers. More information on HEVs, including a listing of available models, is available on the Clean Cities Program HEV webpage (URL: <http://www.eere.energy.gov/cleancities/hev>).

Neighborhood Electric Vehicles

Neighborhood electric vehicles (NEVs) are small, lightweight vehicles that must be licensed, registered, and insured, and may only operate on roads with posted speed limits of 35 miles per hour or less. NEVs are battery only electric vehicles that must be plugged in to recharge. They are ideal for use in downtown areas and on college campuses. Unfortunately, NEVs are not eligible for the federal EV tax credit.

ALTERNATIVE MOTOR VEHICLE FUELS AT THE FEDERAL LEVEL

Since the 1970s, national clean air and energy security issues have led to the enactment of federal laws and regulations. Alternative fuels did not become a part of these goals until the late 1980s. The aim of several federal actions during the late 1980s and early 1990s has been to clean the air, reduce energy consumption, cut U.S. dependence on foreign oil by promoting voluntary private sector efforts, implement alternative fuel use requirements, and regulate industry. Much of this legislation followed innovative state policies that addressed the same air quality and energy security objectives. The most notable federal efforts include the Energy Policy Act of 1992 (EPACT), implemented by DOE, and the 1990 Clean Air Act Amendments (CAAA), administered by the EPA. Other legislation, presidential executive orders, federal programs, and federal grants and funding also have stimulated the use of alternative fuel and AFVs.

Clean Air Act Amendments of 1990^{5,6,7}

The intent of the alternative fuel provisions of the CAAA is to reduce air pollution. Since conventional gasoline produces more air pollutants than clean alternative fuels, the CAAA require the use of these fuels on certain vehicles according to the following schedule:

- Vehicles covered include public and private fleets of 10 or more light-duty vehicles (up to 8,500 lbs.) and heavy-duty vehicles (up to 26,000 lbs.) capable of central refueling when based in an ozone non-attainment area that is classified under the Act as serious, severe, or extreme based on data for calendar years 1987, 1988, and 1989; and carbon monoxide (CO) non-attainment areas with a design value at or above 16.0 parts per million (ppm) based on data from 1988 and 1989. In addition, the areas must have had a 1980 population of 250,000 or more.
- The original compliance schedule required that fleet operators must begin purchasing clean-fuel vehicles in model year 1998 when replacing existing vehicles with new ones. Implementation was delayed one year by EPA. The minimum purchase requirement of passenger cars and light-duty trucks was 30% in 1999, 50% in 2000, and 70% in 2001. For heavy-duty trucks it is 50% for all three years.

There are no CO non-attainment areas in Louisiana. Among the 23 cities in the U.S. that were classified as “serious,” or worse, ozone non-attainment areas under the CAAA, Baton Rouge was the only Louisiana city listed, which includes the surrounding parishes of East Baton Rouge, West Baton Rouge, Livingston, Iberville, and Ascension.

The Louisiana Department of Environmental Quality (DEQ) is responsible for the implementation of the CAAA at the state level. In 1994, DEQ submitted a plan to EPA to implement a Clean Fuel Fleet program in the ozone non-attainment area and set up a vehicle inspection/maintenance program for the five-parish area. However, a legislative resolution prohibited use of state funds for the inspection/maintenance program that was proposed. In 1998, EPA granted a one-year extension to begin the Clean Fuel Fleet program, and DEQ requested to opt out of the program based on significant reductions achieved in pollutant emissions from static stationary sources. In 1999, DEQ successfully secured an increase in the annual safety inspection fee to pay for a less elaborate, but expanded, emission testing program

in the five-parish area. EPA approved the opt out request, contingent upon successful operation of the expanded emission testing procedure that was initiated in January 2000. For additional information related to the Clean Air Act Amendments, visit the EPA's Clean Air Act website (URL: http://www.epa.gov/air/oaq_caa.html/).

Energy Policy Act of 1992^{6,8,9}

The intent of EPACT is to lessen dependence on foreign oil as the source of the nation's transportation fuels. To displace foreign oil, certain provisions of EPACT, like the CAAA, mandate the use of alternative fuels in vehicles covered by the law. Fleet requirements affect those who own or control at least 50 vehicles in the U.S., and fleets of at least 20 vehicles that are centrally fueled or capable of being centrally fueled within a metropolitan area of 250,000 or more (based on the 1980 census). Three metropolitan areas in Louisiana fall within EPACT criteria: Baton Rouge, New Orleans, and Shreveport-Bossier City. The vehicles covered and the compliance schedule is as follows:

- Vehicles covered include federal fleets; state and local government fleets; fleets operated by alternative fuels producers, distributors, and marketers (including gas and electric utilities); and some private fleets.
- Separate compliance schedules apply for fleets operated by the federal and state governments and fuel providers. There are potential requirements for private companies and municipal governments if a prescribed number of AFVs are not voluntarily included in their fleets by certain dates. The percentage (unless otherwise noted) requirements and effective model year dates for covered Louisiana fleets are shown in Table 1, which includes changes by Presidential Executive Order 12844 and DOE adjustments.

Year	Federal Government	State Government	Fuel Providers	Private/Municipal**
1993	7,500*	-	-	-
1994	11,250*	-	-	-
1995	15,000*	-	-	-
1996	25	-	-	-
1997	33	10	30	-
1998	50	15	50	-
1999	75	25	70	-
2000	75	50	90	-
2001	75	75	90	-
2002	75	75	90	20
2003	75	75	90	40
2004	75	75	90	60
2005	75	75	90	70
2006	75	75	90	70

* Number of vehicles (if vehicles are available from auto companies)

** On January 29, 2004, DOE published a final rule announcing its decision not to implement an AFV acquisition mandate for private and local government fleets.

Source: References 8, 9

If a fleet is covered under both the CAAA and EPACT, it is required to conform to both laws. If covered, the percentages apply only to the new vehicles purchased during that year. Converted vehicles can be used to meet percentage requirements. For additional information related to EPACT, visit the Office of Energy Efficiency and Renewable Energy's EPACT website (URL: <http://www.eere.energy.gov/vehiclesandfuels/epact/>).

The information presented above on the CAAA and EPACT is only a portion of the provisions contained in the two Acts. The full text of the original legislation should be consulted as the final authority.

Alternative Motor Fuels Act of 1988 ⁶

The Alternative Motor Fuels Act of 1988 (AMFA) was the first national legislation to promote the purchase and use of alternative fuels and AFVs. The act amended Title III of the existing Energy Policy and Conservation Act (42 USC 6374) and encouraged federal government acquisition of the maximum number of OEM passenger automobiles and light duty trucks as practical. The act directed DOE to evaluate performance in cold weather and high altitude of fuel economy, safety, emissions, and operating and maintenance costs in comparison to standard autos and light trucks. DOE was also directed to study the use of alcohol and natural gas in

heavy duty trucks. The third program called for DOE to assist state and local agencies in testing urban transit buses capable of operating on alcohol and natural gas in comparison to diesel powered buses.

The AMFA was extended by the Automotive Fuel Economy Manufacturing Incentives for Alternative Fueled Vehicles Rule of 2004, which encourages manufacturers to produce alternative fuel vehicles by offering extra credit to the manufacturer's corporate average fuel economy (CAFE) rating for manufacturing AFVs. The National Highway Traffic Safety Administration maintains a website for the AMFA (URL: <http://www.nhtsa.dot.gov/cars/rules/CAFE/Rulemaking/AMFAFinalRule2004.htm>).

Intermodal Surface Transportation Efficiency Act of 1991 ⁶

The Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) represented the first major change in the relationship involving federal funding of state transportation programs since the authorization of the interstate highway system in 1956. ISTEA gave states the flexibility to disburse federal transportation funds by allowing states to tailor their transportation programs to meet specific needs. An example is the Congestion Mitigation and Air Quality (CMAQ) Improvement Program, in which states may choose to promote reduced conventional automobile use through mass transit, bicycle lanes, car-pools and ride-sharing, and AFVs. ISTEA expired September 30, 1997, and was replaced by the Transportation Equity Act for the 21st Century (TEA-21) June 9, 1998.

Transportation Equity Act for the 21st Century ¹⁰

TEA-21 was a six-year long program that built on the initiatives established in ISTEA. TEA-21 continued the CMAQ program and included the assurance of a guaranteed level of federal funds for surface transportation through fiscal year 2003. Eligible activities included transit improvements, travel demand management strategies, traffic flow improvements, and public fleet conversions to cleaner fuels, among others. Funding was available for areas that do not meet the National Ambient Air Quality Standards (non-attainment areas), as well as former non-attainment areas that are now in compliance (maintenance areas). Funds were distributed to states based on a formula that considers an area's population by county (parish) and the severity of its air quality problems within the non-attainment or maintenance area. The funding of public/private partnerships as well as nonprofit entities was also allowed.

Executive Orders ⁶

Executive Order 12759 was signed by President Bush on April 19, 1991 to strengthen the AMFA and the CAAA. The order requires federal agencies with more than 300 vehicles to reduce gasoline and diesel consumption by at least 10 percent by 1995 (compared to 1991 fuel consumption). Use of alternative fuels to meet this goal was encouraged, and the order required federal agencies to purchase the maximum number of alternative fuel vehicles possible when practical.

Executive Order 13031 was signed by President Clinton December 13, 1996 and superseded an earlier order (12844). It requires that 33 percent of the vehicles acquired by federal agencies during 1997 be AFVs. This requirement increased to 50 percent in 1998 and 75 percent in 1999 and thereafter. The order specifies that DOE shall no longer request or require specific

appropriations to fund the incremental costs of AFVs for other agencies; agencies are directed to use “existing and requested funds, but shall not be exempt from the requirements of the Act, or this order, due to limited appropriations.”

Executive Order 13123 was signed by President Clinton June 3, 1999 to encourage effective energy management in the federal government and to build on work begun under EPACT and previous executive orders. Three earlier executive orders were revoked (12902 of 1994, 12759 of 1991, and 12845 of 1993). Although primarily applicable to fixed federal buildings and facilities, guidelines for mobile equipment are included for use of alternative or renewable-based fuels. Two specific goals for Federal agencies include:

- Each agency shall strive to expand the use of renewable energy within its facilities and in its activities by implementing renewable energy projects and by purchasing electricity from renewable energy sources. The Federal government shall strive to install 2,000 solar energy systems at Federal facilities by the end of 2000, and 20,000 systems by 2010.
- Each agency shall reduce the use of petroleum within its facilities by switching to a less greenhouse gas-intensive, non-petroleum energy source such as natural gas or renewable energy sources by eliminating unnecessary fuel use, or by other appropriate means.

Research and Development ⁶

In an effort to make AFVs available to the public at a price comparable to gasoline powered vehicles, three vehicle manufacturers joined forces. Ford, DaimlerChrysler (then Chrysler), and General Motors began a cooperative precompetitive research agreement in 1988. In 1992 these manufacturers established the United States Council for Automotive Research (USCAR). USCAR’s goals include advancing U.S. manufacturing, developing technologies to increase the efficiency of standard vehicle designs, and developing a new class of vehicle that is up to three times more fuel efficient than current models. The federal government joined this group in 1993, and the consortium became known as the Partnership for a New Generation of Vehicles (PNGV). Basic goals remain focused on decreasing dependence on foreign energy sources, the environmental benefits of lowering harmful emissions, and boosting the United States’ economic competitiveness.

Clean Cities Program ^{6, 11, 12}

The Clean Cities program was established by the DOE under the Office of Energy Efficiency and Renewable Energy (EERE) to facilitate voluntary cooperation among metropolitan governmental and private entities for the purpose of reducing petroleum consumption in the transportation sector. To accomplish this, the program focuses on the use of alternative fuels and vehicles, hybrid electric vehicles, fuel economy practices, fuel blends, and idle reduction technologies. These objectives are carried out through a network of community-based coalitions designated as Clean Cities Coalitions. The Greater Baton Rouge Clean Cities Coalition is the only designated Clean City in Louisiana. Shreveport and New Orleans are actively working toward being designated. The Louisiana Department of Natural Resources (DNR) is a stakeholder in these coalitions. The following is a list of federal and local contacts for the Clean Cities Program:

U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy:
Shelley Launey, Clean Cities Program Director
E-mail: shelley.launey@ee.doe.gov
Phone: 202-586-1573
<http://www.eere.energy.gov/cleancities/index.html>.

Louisiana Department of Natural Resources, Technology Assessment Division:
Darrell Winters, P.E.
Email: darrellw@dnr.state.la.us
Phone: 225-342-4593
<http://dnr.state.la.us/sec/execdiv/techasmt/programs/transportation/cleancities.htm>

Greater Baton Rouge Clean Cities Coalition:
Tammy Morgan, Coordinator
Email: tmorgan@ci.baton-rouge.la.us
Phone: 225-389-8560
<http://www.gbrecc.org/>

Shreveport Clean Cities Coalition:
Wes Wyche, Coordinator
Phone: 318-673-6072
Email: wes.wyche@ci.shreveport.la.us

New Orleans Clean Cities Coalition:
Vicki Cappel, Coordinator
Phone: 504-568-6611
Email: vcappel@norpc.org

The Alternative Fuels Data Center

The Alternative Fuels Data Center was created in 1991 in response to the AMFA and the CAAA, as an online information resource for alternative fuels and alternative fuel vehicles. The website is maintained by EERE, and contains a wide range of materials produced by government, academic, and industry sources. The Center also offers the National Alternative Fuels Hotline to assist the general public and interested organizations in improving their understanding of alternative fuels. The Hotline consists of a toll free telephone number, an email address, and an online request form.

Alternative Fuels Data Center website:
<http://www.eere.energy.gov/afdc/>

National Alternative Fuels Hotline
Phone: 800-423-1363
Email: hotline@afdcweb.nrel.gov
<http://www.eere.energy.gov/afdc/resources/hotline.html>

Tax Incentives

A federal tax deduction for clean-fuel vehicle property was authorized under EPACT according to the following schedule:

- Up to \$50,000 for a truck or van with a gross vehicle weight rating over 26,000 pounds, or for a bus that seats at least 20 adults plus a driver.
- Up to \$5,000 for a truck or van with a gross vehicle weight rating between 10,000 and 26,000 pounds.
- Up to \$2,000 for any other on-road vehicle, including HEVs.
- Up to \$100,000 per location for clean-fuel refueling property or recharging property.

A federal electric vehicle tax credit was also authorized under EPACT. The amount of the credit is equal to the lesser of 10% of the cost of an electric vehicle or \$4000.

Both the clean-fuel vehicle property tax deduction and the electric vehicle tax credit were scheduled to be gradually phased out over the period from 2001 to 2004; however, the Working Families Tax Relief Act of 2004 extended the full amount of the incentives through 2005. The incentives will be reduced by 75% for 2006 and eliminated after that.

The American Jobs Creation Act of 2004 authorized an excise tax credit for producers and blenders of biodiesel and ethanol. The credit for ethanol is \$0.51 per gallon; the credit for biodiesel is \$1.00 per gallon for agri-biodiesel (biodiesel produced solely from virgin oils and animal fats) and \$0.50 per gallon for any other biodiesel.

The Alternative Fuels Data Center website contains a page with up to date information on federal tax incentives (URL: http://www.eere.energy.gov/afdc/progs/search_state.cgi?afdc/US).

ALTERNATIVE MOTOR VEHICLE FUELS AT THE STATE LEVEL

In response to federal alternative fuel initiatives, Louisiana began enacting its own alternative fuel legislation in 1990, and began converting the state motor vehicle fleet to natural gas in 1994. State policy prefers natural gas-derived fuels because they are produced in the state, play a large role in the state's economy, and are very clean burning fuels. The conversion of the state's fleet was halted in 1995 due to the lack of infrastructure development and poor economics. The number of registered LPG and CNG vehicles in the state peaked in 1995 at 2,010 and has steadily decreased since then, but high gasoline prices and environmental concerns have recently renewed interest in NGVs. Several new projects have recently been completed or announced.

In 2003, the Baton Rouge Metropolitan Airport officially opened its CNG station with the assistance of a grant from the Federal Aviation Administration's ILEAV (Inherently Low Emissions Airport Vehicle) program. The station is operated by Texaco as part of Texaco's existing fuel station on Veterans Memorial Blvd. The station serves airport vehicles and is open to the public.

In 2003, Baton Rouge's Capital Transportation Corporation, now the Capital Area Transit System (CATS), began operating CNG trolleys in downtown Baton Rouge. CATS is working with the Greater Baton Rouge Clean Cities Coalition towards building a CNG refueling station and converting their fleet to CNG.

The East Baton Rouge city-parish Department of Public Works recently acquired 4 CNG Honda Civics and one CNG Chevrolet pickup truck. A grant from the federal Clean Cities Program was used to offset the higher purchase price of the CNG vehicles. The East Baton Rouge Parish Recreation and Park Commission is applying for a similar grant to purchase 5 CNG vehicles.

Ethanol in Louisiana

State subsidies drove ethanol production in Louisiana from 1984 to 1990 with a peak of 32 million gallons in 1986. When the subsidies ended in 1988, ethanol production was no longer economically feasible and the last plant ceased production in 1990. Gasohol consumption also peaked in 1986 at 336 million gallons and has since declined to almost nothing. There has been some renewed interest in ethanol in Louisiana and it may be produced in Louisiana again in the near future.

In 1994, the Shepherd Oil refinery (already converted to an ethanol plant) in Jennings, LA, was purchased by Massachusetts firm BC International with plans to convert it into a 20 million gallon per year (MM GPY) biomass-to-ethanol facility. The plant would utilize mainly bagasse as a feedstock, although the process is able to use a wide variety of agricultural and paper or wood waste products. The patented BCI process uses a genetically engineered microorganism that breaks down complex sugars contained in biomass. These complex sugars cannot be broken down by fermentation, the process used in conventional ethanol plants that converts the simple sugars contained in sugar cane and starchy raw materials such as corn into ethanol. The ability to make ethanol from wood and cellulosic biomass such as bagasse, wood chips, and waste paper opens up an opportunity to utilize much cheaper feedstocks than starch and sugar based crops. Due to the high yield of ethanol from the process, and the low cost of the feedstock, the ethanol produced at the facility is expected to be economically competitive with fossil fuels. The Louisiana State Bond Commission approved the issuance of \$120 million in bonds in February, 2000, but BCI couldn't find buyers for the bonds due to unfavorable market conditions. BCI has since switched to private financing and has secured \$100 million of the \$120 million needed to complete the project. Construction is being delayed until the remainder of the financing can be secured.

State Agriculture Commissioner Bob Odom was investigating the possibility of a 60 MM GPY ethanol plant near Lacassine, but the idea was put on hold when the estimated cost to build the plant came in higher than expected. Dubbed "The Louisiana Green Fuels Project", the plant was to produce ethanol from sugar cane and other agricultural products and be constructed with proceeds from the sale of bonds. The bonds were to be paid off with profits from the sale of ethanol. The plant is now going to be built privately by Supercritical Recovery Systems Inc. and will employ a patented ethanol conversion process.

Transportation Fuel Excise Taxes Applied to Alternative Fuels¹³

Motor fuel taxes play a significant role in the price differential between conventional and alternative fuels. The Omnibus Budget Reconciliation Act of 1993, signed into law by President Clinton on August 10, 1993, increased the federal excise tax on gasoline, diesel fuel, gasohol, and other transportation fuels by 4.3¢ per gallon (effective October 1, 1993). The 1997 omnibus budget bill reduced the federal excise tax on LNG, LPG, and methanol, but, as shown in Table 2 below, CNG is still taxed at a lower rate than the other fuels.

Table 2. Excise Taxes on Motor Fuels			
Fuel		Federal	Louisiana
		\$/gallon	\$/gallon
Gasoline		0.1830	0.2000
Diesel		0.2430	0.2000
Gasohol	10% Ethanol	0.1290	0.2000
	7.7% Ethanol	0.1414	0.2000
	5.7% Ethanol	0.1522	0.2000
Gasohol	10% Methanol	0.1230	0.2000
	7.7% Methanol	0.1368	0.2000
	5.7% Methanol	0.1488	0.2000
CNG		0.4844/mcf*	0.1600
LNG		0.1190	0.1600
Propane		0.1360	0.1600

* mcf = 1,000 standard cubic feet. Depending upon the Btu values used in conversion, the gasoline gallon equivalent value for CNG varies from \$0.054 to \$0.060/gallon.

The total state excise tax on all motor fuels, conventional and alternative, except CNG, LPG, and LNG, is 20¢/gallon. This rate is the sum of the 16¢/gallon rate specified in the gasoline tax law and the special fuels tax law, plus 4¢/gallon specified in the Transportation Infrastructure Model for Economic Development Law of 1989 (TIMED). The TIMED tax applies to all private and public entities, including state agencies and local governmental bodies, although it is not explicitly related to the subject of alternative fuels.

The tax on CNG, LPG, and LNG with vehicles weighing less than 10,000 lbs. is the lesser of a flat annual rate of 80% of \$150, or a variable rate of 80% of the current rate (\$0.20 / gal.) based on an estimated mileage of 12 mpg. The tax on CNG, LPG, and LNG with vehicles over 10,000 lbs. is 80% of the current rate (\$0.20 / gal.) based on the schedule for calculating MPG provided by law (see Appendix A), but not less than 80% of \$150. The tax for school buses transporting Louisiana students and using CNG, LPG, or LNG is the lesser of one-half the flat rate or one-half the variable rate.

Tax Incentives

Louisiana Revised Statute 47:38 offers a state income tax credit of 20% of the incremental cost of purchasing a factory-equipped AFV, 20% of the cost for converting a vehicle to alternative fuels, and 20% of the cost for alternative fuel refueling stations. If a taxpayer is unable or elects not to determine the incremental value of an OEM AFV, the taxpayer may claim a credit of 2% of the cost of the vehicle or \$1500, whichever is less.

The Louisiana Department of Revenue has issued two recent rulings regarding what qualifies for the alternative fuel income tax credit. Ruling 02-019 concludes that hybrid-electric vehicles qualify for the tax credit, and ruling 03-004 concludes that low-speed vehicles qualify for the credit. The text of the rulings is included in Appendix B, and is also available on the Department of Revenue's website (URL: <http://www.rev.state.la.us/sections/lawspolicies/pd.asp>).

Summary of Current Louisiana Alternative Fuels Legislation

Act 927 of 1990 requires that 30% of new state agency vehicles must have a clean-fuel capability by September 1, 1994, and 50% by September 1, 1996. The act specifies that the Secretary of DEQ shall have reviewed the program by December 31, 1996 to determine whether emissions are effectively reduced; in which case at least 80% of the fleet must be capable of using alternative fuels by September 1, 1998. The vehicles can be leased or purchased, or existing state vehicles can be converted. The law provides two exceptions: if there is no alternative fuel source, or if conversion to alternative fuels is more expensive than conventional fuels, the conversion targets may be waived.

Act 927 also gives the DNR Office of Conservation regulatory authority over CNG safety including refueling stations and the installation of conversion equipment in a vehicle. The regulations were adopted in January of 1992 as LAC Title 43, Part XI, Subpart 5, Chapter 25, Paragraphs 2501-2543. All questions pertaining to them should be directed to:

Louisiana Department of Natural Resources
Office of Conservation, Pipeline Division
P.O. Box 94275
Baton Rouge, LA 70804-9275
Phone: 225-342-5513 or -5516
<http://dnr.louisiana.gov/cons/CONSERPI/Conserpi.ssi>

The Act also directs the Louisiana Liquefied Petroleum Gas Commission to make safety inspections on vehicles equipped for, and capable of, using LPG.

Act 954 of 1990 has the same provisions for vehicles of political subdivisions of the state as Act 927 does for state government vehicles. The governing authority of each political subdivision is responsible for having reviewed the program by December 31, 1996.

Act 531 of 1990 deregulates the price of natural gas for use in vehicles capable of using CNG as a motor fuel.

Act 1060 of 1991 provides an income tax credit for AFVs and fueling infrastructure costs. A tax credit can be claimed for 20% of the cost of the equipment to modify a gasoline fueled vehicle to use an alternative fuel, as well as for property which is directly related to the dispensing of the fuel.

Act 169 of 1992 primarily provides that the tax credit authorized in Act 1060 shall apply only to vehicles registered in Louisiana.

Act 516 of 1991* provides for an alternate method of paying the Special Fuels Tax on CNG, LPG, and LNG, when used as a motor vehicle fuel.

Act 1067 of 1992* created the Louisiana Natural Gas Marketing Commission within DNR to promote and market gas in general. This commission was abolished by **Act 1116 of 1997**.

Act 666 of 1993* reduces the Special Fuels Tax rate previously provided by Act 516 to an annual flat rate of \$150.00 or a variable rate of 16¢/gallon based on the present total tax of 20¢/gallon.

Act 7 of 1994* lowers the Special Fuels Tax for owners of school buses to one-half the rate specified in Act 666.

Act 1210 of 1997* exempts from Special Fuels Tax recordkeeping requirements light vehicles rated at one ton or less and operated exclusively for commercial use, and private passenger motor vehicles or trucks having a gross weight of 6,000 pounds or less, which use special fuels other than CNG or LPG.

Act 35 of 1998* exempts from local sales taxes diesel fuel, butane, propane, and other liquefied petroleum gases used for farming purposes.

*These acts have been incorporated into the state's **Special Fuel Tax Law of 1964: R.S. 47:801 to 47:815**. As amended through the 2004 legislative session, the law now levies a 16¢/gallon excise tax on alternative vehicle fuels and prescribes the method of collection, which includes paying an annual flat rate for CNG, LNG, or LPG. Application forms and additional information may be obtained from:

Louisiana Department of Revenue
Excise Taxes Division
P.O. Box 201
Baton Rouge, LA 70821-0201
Phone: 225-219-7656
<http://www.rev.state.la.us/>

The **Transportation Infrastructure Model for Economic Development of 1989 (TIMED): R.S. 47:820.1 to 47:820.6**, as amended through the 2002 legislative session, levies an additional 4¢/gallon tax on all motor vehicle fuels already subject to the 16¢/gallon tax. This tax added to the gasoline and Special Fuels Tax gives a total tax of 20¢/gallon. This tax is levied, collected, and administered in the same manner as the gasoline and Special Fuels Tax, but the proceeds must be used solely to fund the TIMED program. The TIMED program itself is not relevant to the subject of alternative fuels; the tax applies to CNG, LNG, and LPG when used as a vehicle fuel.

In addition to the above legislation, former Governor Edwards' **Executive Order EWE 93-9**, March 9, 1993, ordered the conversion of approximately 25% of the state's motor vehicle fleet to natural gas. The project was terminated in 1995.

The complete text of the laws and legislation mentioned in this section (except Executive Order EWE 93-9) is provided in Appendix B. Note that historical and statutory notes are not included, so the original documents should be consulted as the final authority.

CONCLUSION

Louisiana began enacting legislation containing mandates and incentives regarding alternative motor vehicle fuels in the early 1990s. The state's conversion of its motor vehicle fleet to alternative fuels was terminated in 1995 due to fueling infrastructure failing to sufficiently develop. The lack of fueling infrastructure, along with higher costs, has also prevented widespread public usage of alternative fuels.

Recently, increased concerns over energy security and high crude oil prices have led to renewed national interest in alternative energy and energy conservation, which, in addition to the Baton Rouge area's air quality problems, have led to renewed interest in alternative fuels as well as increased alternative fuel activity in Louisiana.

In general, price ultimately determines what transportation fuel is consumed. As long as crude oil based fuels remain the significantly cheaper option, they will likely remain the dominant option. Since crude oil is a non-renewable resource, crude oil based fuel prices will increase over time and eventually exceed alternative fuel prices. This fact highlights the importance of current alternative fuel usage and research and development as these things work to bring prices of alternative fuels down thereby speeding up their adoption.

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APPENDIX A. Compressed Natural Gas Stations in Louisiana

Compressed Natural Gas Stations in Louisiana					
Name	Phone	Contact	Address	City	Status
Department of Public Works	225-389-3179	Terry Blades	333 Chippewa St.	Baton Rouge	Public
Entergy Gas Operations	800-NGV-7411	Robert Borne	1 Palm Dr.	New Orleans	Public
Entergy Gas Operations	800-NGV-7411	Robert Borne	4637 Florida Blvd.	Baton Rouge	Public
Entergy Gas Operations	800-NGV-7411	Robert Borne	8968 S. Choctaw Dr.	Baton Rouge	Public
Entergy Gas Operations	800 NGV 7411	Robert Borne	5755 Choctaw Dr.	Baton Rouge	Private
Entergy Gas Operations	800-NGV-7411	Robert Borne	1600 Perdido St.	New Orleans	Private
Entergy Gas Operations	800-NGV-7411	Robert Borne	3700 Tulane Ave.	New Orleans	Private
Atmos Energy - Bridgedale	504-849-4362	George Strain	2000 Arnoult Rd.	Metairie	Private
Atmos Energy - Monroe	504-849-4362	George Strain	2809 Louisville Ave.	Monroe	Shutdown
Atmos Energy - Norco	504-849-4362	George Strain	101 Apple St.	Norco	Shutdown
Atmos Energy - Prairieville Office	504-849-4362	George Strain	38144 Post Office Rd.	Prairieville	Shutdown
Atmos Energy - Taravella Rd.	504-849-4362	George Strain	5241 Taravella Rd.	Marrero	Shutdown
Atmos Energy - Westbank Expy.	504-849-4362	George Strain	1233 Westbank Expy	Harvey	Shutdown
CenterPoint Energy	337-373-5224	Danny Hebert	2500 Louisiana Hwy. 14	New Iberia	Private
CenterPoint Energy	337-373-5224	Danny Hebert	3700 Gerstner Memorial Blvd.	Lake Charles	Private
CenterPoint Energy	337-373-5224	Danny Hebert	1262 Dalzell St.	Shreveport	Shutdown
South Coast Gas Company, Inc.	504-537-5281	Michael St. Romain	4076 Hwy. 1 South	Raceland	Private

More details of this table are available at:

<http://www/SEC/EXECDIV/TECHASMT/programs/transportation/incentives.htm>. Although most of the fueling stations are for fueling private CNG vehicle fleets, special arrangements are possible.

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APPENDIX B. Selected Louisiana Alternative Motor Vehicle Fuels Legislation

	<u>Page</u>
Act 927 of 1990 provides for the conversion to alternative fuels of a certain percentage of state-owned vehicles, and for the regulation of compressed natural gas.....	24
Act 954 of 1990 provides for the conversion to alternative fuels of a certain percentage of vehicles owned by political subdivisions of the state.....	28
Act 531 of 1990 provides for the deregulation of direct sales of natural gas used in CNG fueled vehicles.....	31
Act 1060 of 1991 provides an income tax credit for conversion of vehicles to alternative fuels usage.....	32
Act 169 of 1992 provides that the tax credit specified in Act 1060 shall apply only to vehicles registered in Louisiana.....	35
Special Fuels Tax Law: R.S. 47:801 to 47:815.1 levies a tax on alternative vehicle fuels and prescribes methods of collection.....	37
Transportation Infrastructure Model for Economic Development of 1989 (TIMED): R.S. 47:820.1 to 47:820.6 levies an additional tax on all motor vehicle fuels.....	56
Compressed Natural Gas Regulations of DNR, Office of Conservation, Pipeline Division.....	57
Revenue Ruling No. 02-019 considers hybrid vehicle tax credit qualification.....	69
Revenue Ruling No. 03-004 considers low-speed vehicle tax credit qualification.....	70

ACT No. 927 of 1990

— — —
SENATE BILL NO. 2

BY MESSRS. NUNEZ, BANKSTON, CHABERT AND HAINKEL AND
REPRESENTATIVES ANDING, HOLDEN, PATTI AND WARNER

AN ACT

To enact Part X of Chapter 7 of Title 30 of the Louisiana Revised Statutes of 1950, consisting of R.S. 30:751 and 752*, and R.S. 39:362.1*, relative to alternative fuels; to provide for the regulation of certain alternative fuels; to provide for conversion to alternative fuels of a certain percentage of state owned vehicles; to provide for reports; to provide for standards; to provide exceptions; and to provide for related matters.

Be it enacted by the Legislature of Louisiana:

Section 1. Part X of Chapter 7 of Title 30 of the Louisiana Revised Statutes of 1950, consisting of R.S. 30:751 and 752*, is hereby enacted to read as follows:

**PART X. REGULATION OF COMPRESSED NATURAL GAS USED AS A
VEHICULAR FUEL**

§751*.Definitions

As used in this Part, the following words and phrases shall have the meanings hereinafter ascribed to them:

- a. "Assistant secretary" means the assistant secretary of the Office of Conservation of the Department of Natural Resources.
- b. "Compressed natural gas" means natural gas designated for vehicular use that is under pressures exceeding twenty-four hundred pounds per square inch.
- c. "Compression and conversion equipment" means all equipment used in the compression, storage, transmission, and decompression of natural gas for the purpose of powering motor vehicles.

§752*.Regulation of compressed natural gas

The assistant secretary shall have the authority to regulate all activities related to the safety of compressed natural gas and shall establish by regulation minimum safety standards for compressed natural gas compression and conversion equipment including the installation and operation of such equipment. For vehicles equipped for and capable of using liquefied petroleum gas, each vehicle shall first be inspected for safety of operation by an inspector of the Louisiana Liquefied Petroleum Gas Commission.

Section 2. R.S. 39:362.1* is hereby enacted to read as follows:

362.1.* Purchase or lease of fleet vehicles; use of alternative fuels; exceptions

A.(1) After September 1, 1991, the commissioner of administration shall not purchase or lease any motor vehicle for use by any state agency unless that vehicle is capable of and equipped for using an alternative fuel which results in lower emissions of oxides of nitrogen, volatile organic compounds, carbon monoxide, or particulates or any combination thereof which meet or exceed federal Clean Air Act standards. Alternative fuels shall include compressed natural gas, liquefied petroleum gas, reformulated gasoline, methanol, ethanol, electricity, and any other fuels which meet or exceed federal Clean Air Act standards.

(2) A state agency may acquire or be provided equipment or refueling facilities necessary to operate such vehicles using alternative fuels by any of the following methods:

(a) Purchase or lease as authorized by law provided that the state shall recoup its actual costs, including finance charges, through reduced costs of operating such vehicles within forty-eight months of the purchase or lease.

(b) Gift or loan of the equipment or facilities.

(c) Gift or loan of the equipment or facilities or other arrangement pursuant to a service contract for the supply of alternative fuels.

(d) Performance-based energy efficiency contracts under the provisions of R.S. 39:1496.1.

(3) The commissioner may waive the requirements of this Subsection for any state agency upon receipt of certification supported by evidence acceptable to the commissioner that either of the following situations applies:

(a) The agency's vehicles will be operating primarily in an area in which neither the agency nor a supplier has or can reasonably be expected to establish a central refueling station for alternative fuels.

(b) The agency is unable to acquire or be provided equipment or refueling facilities necessary to operate vehicles using alternative fuels at a projected cost that is reasonably expected to result in no greater net costs than the continued use of traditional gasoline or diesel fuels measured over the expected useful life of the equipment or facilities supplied.

B.(1) The commissioner shall achieve the following percentages of vehicles capable of using alternative fuels by the times specified:

(a) The percentage shall be equal to or greater than thirty percent of the number of fleet vehicles operated by September 1, 1994.

(b) The percentage shall be equal to or greater than fifty percent of the number of fleet vehicles operated by September 1, 1996.

(2) The secretary of the Department of Environmental Quality shall review this alternative fuel use program on or before December 31, 1996, and, if the secretary determines that the program

has been effective in reducing total annual emissions from motor vehicles in the area, the commissioner shall achieve a percentage of fleet vehicles capable of using alternative fuels equal to or greater than eighty percent of the number of fleet vehicles operated by September 1, 1998, and thereafter.

(3) The division of administration in its annual fiscal report to the legislature shall show its progress in achieving these percentage requirements by itemizing purchases, leases, and conversions of motor vehicles and usage of alternative fuels.

C. The commissioner, in the development of the alternative fuel use programs, shall consult with state agency fleet operators, vehicle manufacturers and converters, fuel distributors, and others to delineate the vehicles to be covered, taking into consideration range, specialty uses, fuel availability, vehicle manufacturing and conversion capability, safety, resale values, and other relevant factors. In order to maximize the savings to the state, the commissioner shall attempt to the extent possible to first convert those vehicles that are used the most often for the most miles. The commissioner may meet the percentage requirements of this Section through purchase or lease of new vehicles or the conversion of existing vehicles, in accordance with federal and state requirements and applicable safety laws and standards, to use the alternative fuels.

D. The commissioner may reduce any percentage specified or waive the requirements of Subsection B of this Section for any state agency upon receipt of certification supported by evidence acceptable to the commissioner that either of the following situations apply:

(1) The agency's vehicles will be operating primarily in an area in which neither the agency nor a supplier has or can reasonably be expected to establish a central refueling station for alternative fuels.

(2) The agency is unable to acquire or be provided equipment or refueling facilities necessary to operate vehicles using alternative fuels at a projected cost that is reasonably expected to result in no greater net costs than the continued use of traditional gasoline or diesel fuels measured over the expected useful life of the equipment or facilities supplied.

E. The provisions of this Section shall apply to any vehicles operated by law enforcement agencies or used as emergency vehicles but only to the extent deemed feasible after consultations and considerations of this Section provided in Subsections C and D and a proper determination made thereon as to the feasibility thereof.

F. The joint legislative committee on the budget shall exercise oversight over the implementation of the provisions of this Section.

Section 3. At no time shall the state enter into any program providing subsidies or incentive payments for the production of compressed natural gas, liquefied petroleum gas, reformulated gasoline, methanol, or ethanol.

Approved by the Governor, July 25, 1990

Published in the Official Journal of the State:
August 17, 1990.
A true copy:
W. Fox McKeithen
Secretary of State

* Subsequently redesignated as R.S. 30:731 and 732, and R.S. 39:364

ACT No. 954 of 1990

— — —
SENATE BILL NO. 309

BY MR. NUNEZ AND REPRESENTATIVES ANDING AND HOLDEN

AN ACT

To enact Part XIII of Chapter 2 of Title 33 of the Louisiana Revised Statutes of 1950, to be comprised of R.S. 33:1418, relative to vehicles owned by political subdivisions; to provide for conversion to alternative fuels of a certain percentage of vehicles owned by political subdivisions; to provide for standards; to provide exceptions; to provide definitions; and to provide for related matters.

Be it enacted by the Legislature of Louisiana:

Section 1. Part XIII of Chapter 2 of Title 33 of the Louisiana Revised Statutes of 1950, comprised of R.S. 33:1418, is hereby enacted to read as follows:

PART XIII. GENERAL PROVISIONS

§1418. Purchase or lease of fleet vehicles; use of alternative fuels; exceptions; definitions

A.(1) A political subdivision may purchase or lease, after September 1, 1991, any motor vehicle, for use by any agency of the political subdivision, if that vehicle is capable of and equipped for using an alternative fuel which results in lower emissions of oxides of nitrogen, volatile organic compounds, carbon monoxide, or particulates, or any combination thereof which meet or exceed federal Clean Air standards. Alternative fuels shall include compressed natural gas, liquefied petroleum gas, reformulated gasoline, methanol, ethanol, electricity, and any other fuels which meet or exceed federal Clean Air standards.

(2) An agency of a political subdivision may acquire or be provided equipment or refueling facilities necessary to operate such vehicles using alternative fuels by any of the following methods:

(a) Purchase or lease as authorized by law.

(b) Gift or loan of the equipment or facilities.

(c) Gift or loan of the equipment or facilities or other arrangement pursuant to a service contract for the supply of alternative fuels.

(3) If such equipment or facilities are donated, loaned, or provided through other arrangement with the supplier of alternative fuels, the supplier shall be entitled to recoup its actual cost of donating, loaning, or providing the equipment or facilities through its fuel charges under the supply contract.

(4) The governing authority of a political subdivision may waive the requirements of this Subsection for any agency of a political subdivision upon receipt of certification supported by evidence acceptable to that governing authority that either of the following situations apply:

(a) The agency's vehicles will be operating primarily in an area in which neither the agency nor a supplier has or can reasonably be expected to establish a central refueling station for alternative fuels.

(b) The agency is unable to acquire or be provided equipment or refueling facilities necessary to operate vehicles using alternative fuels at a projected cost that is reasonably expected to result in no greater net costs than the continued use of traditional gasoline or diesel fuels measured over the expected useful life of the equipment or facilities supplied.

B.(1) Each political subdivision shall achieve the following percentages of vehicles capable of using alternative fuels by the times specified:

(a) The percentage shall be equal to or greater than thirty percent of the number of fleet vehicles operated by September 1, 1994.

(b) The percentage shall be equal to or greater than fifty percent of the number of fleet vehicles operated by September 1, 1996.

(2) The governing authority of each political subdivision shall review this alternative fuel use program on or before December 31, 1996, and, if the governing authority determines that the program has been effective in reducing total annual emissions from motor vehicles in the area, the governing authority shall achieve a percentage of fleet vehicles capable of using alternative fuels equal to or greater than eighty percent of the number of fleet vehicles operated by September 1, 1998, and thereafter.

C. The governing authority of each political subdivision, in the development of the alternative fuel use program, shall consult with vehicle manufacturers and converters, fuel distributors, and others to delineate the vehicles to be covered, taking into consideration range, specialty uses, fuel availability, vehicle manufacturing and conversion capability, safety, resale values, and other relevant factors. The governing authority may meet the percentage requirements of this Section through purchase or lease of new vehicles or the conversion of existing vehicles, in accordance with federal and state requirements and applicable safety laws and standards, to use the alternative fuels.

D. The governing authority of a political subdivision may reduce any percentage specified or waive the requirements of Subsection B of this Section for any agency of a political subdivision upon receipt of certification supported by evidence acceptable to the governing authority that either of the following situations apply:

(1) The agency's vehicles will be operating primarily in an area in which neither the agency nor a supplier has or can reasonably be expected to establish a central refueling station for alternative fuels.

(2) The agency is unable to acquire or be provided equipment or refueling facilities necessary to operate vehicles using alternative fuels at a projected cost that is reasonably expected to result in no greater net costs than the continued use of traditional gasoline or diesel fuels measured over the expected useful life of the equipment or facilities supplied.

E. The provisions of this Section shall not apply to any vehicles operated by law enforcement agencies or used as emergency vehicles.

F. As used in this Part, "political subdivision" means a parish, municipality, and any other unit of local government, including a school board and a special district, authorized by law to perform governmental functions.

Section 2. At no time shall a political subdivision enter into any program providing subsidies or incentive payments for the production of compressed natural gas, liquefied petroleum gas, reformulated gasoline, methanol, or ethanol.

Approved by the Governor, July 25, 1990.
Published in the Official Journal of the State:
August 22, 1990.
A true copy:
W. Fox McKeithen
Secretary of State

ACT No. 531 of 1990

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SENATE BILL NO. 3

BY MESSRS. NUNEZ AND BANKSTON AND REPRESENTATIVES HOLDEN AND PATTI

AN ACT

To amend and reenact R.S. 45:1163(A), relative to regulation by the Public Service Commission; to provide for deregulation of direct sales of natural gas used in certain motor vehicles; and to provide for related matters.

Be it enacted by the Legislature of Louisiana:

Section 1. R.S. 45:1163(A) is hereby amended and reenacted to read as follows:

§1163. Power to regulate rates and service; exceptions

A.(1) The commission shall exercise all necessary power and authority over any street railway, gas, electric light, heat, power, waterworks, or other local public utility for the purpose of fixing and regulating the rates charged or to be charged by and service furnished by such public utilities.

(2) However, no aspect of direct sales of natural gas by natural gas producers, natural gas pipeline companies, natural gas distribution companies, or any other person engaging in the direct sale of natural gas to industrial users for fuel or for utilization in any manufacturing process, or to any person for use in vehicles capable of using compressed natural gas which when combusted results in comparably lower emissions of oxides of nitrogen, volatile organic compounds, carbon monoxide, or particulates or any combination thereof, shall be subject to such regulation by the commission.

(3) In addition, a schedule of rates of an electric cooperative shall not require approval of the commission if the schedule previously was approved by the board of directors of the electric cooperative and by the federal government or any agency thereof, nor shall the authority of the commission extend to the service rendered by electric cooperatives except to the extent provided in R.S. 45:123 and in orders of the commission promulgated to effectuate the purposes of R.S. 45:123.

Approved by the Governor, July 19, 1990.
Published in the Official Journal of the State:
August 7, 1990.
A true copy:
W. Fox McKeithen
Secretary of State

ACT No. 1060 of 1991

— — —
SENATE BILL NO. 537

BY SENATOR BANKSTON AND REPRESENTATIVES ADLEY, ALARIO, R. ALEXANDER, ANDING, ANSARDI, ARMSTRONG, ATER, BACQUE', BRADLEY, BRUN, CARRIER, CRANE, DASTUGUE, DIXON, DOWNER, DUKE, FORSTER, HAIK, HEBERT, HOLDEN, IVON, JACKSON, KIMBALL, LABORDE, MCCLEARY, MCDONALD, MCFERREN, ODINET, ORR, PATTI, PRATT, REILLY, ROACH, ST. RAYMOND, SALTER, SINGLETON, SIRACUSA, SITTING, JACK SMITH, SOUR, STELLY, STINE, STRAIN, STEVE THERIOT, THOMPSON, VOLENTINE AND WARNER

AN ACT

To enact R.S. 47:38 and 287.756 relative to taxation; to provide with respect to an income tax credit for conversion of vehicles to alternative fuel usage; to provide for definitions; to provide for the calculation of such credit; to provide for carry forwards; and to provide for related matters.

Be it enacted by the Legislature of Louisiana:

Section 1. R.S. 47:38 and 287.756 are hereby enacted to read as follows:

§38. Tax credit for conversion of vehicles to alternative fuel usage

A. The intent of this Section is to provide an incentive to persons or corporations to invest in qualified clean-burning motor vehicle fuel property. Any person or corporation investing in such property as specified herein shall be allowed a credit against the tax liability due under the income tax as determined pursuant to Subsection C of this Section.

B. As used in this Section, the following words and phrases shall have the meaning ascribed to them in this Subsection.

(1) "Alternative fuel" means a fuel which results in comparably lower emissions of oxides of nitrogen, volatile organic compounds, carbon monoxide, or particulates, or any combination thereof and includes compressed natural gas, liquefied natural gas, liquefied petroleum gas, reformulated gasoline, methanol, ethanol, electricity, and any other fuels which meet or exceed federal clean air standards.

(2) "Qualified clean-burning motor vehicle fuel property" means:

(a) Equipment installed to modify a motor vehicle which is propelled by gasoline so that the vehicle may be propelled by an alternative fuel provided such motor vehicle is registered with the Louisiana Department of Public Safety and Corrections.

(b) A motor vehicle originally equipped to be propelled by an alternative fuel but only to the extent of the portion of such motor vehicle which is attributable to the storage of such fuel, the

delivery to the engine of such motor vehicle of such fuel, and the exhaust of gases from combustion of such fuel provided such motor vehicle is registered with the Louisiana Department of Public Safety and Corrections.

(c) Property which is directly related to the delivery of an alternative fuel into the fuel tank of a motor vehicle propelled by such fuel, including compression equipment, storage tanks, and dispensing units for such fuel at the point where such fuel is so delivered provided such property is located in Louisiana.

C. The credit provided for in Subsection A of this Section shall be twenty percent of the cost of the qualified clean-burning motor vehicle fuel property.

D. In cases where no credit has been claimed pursuant to Subsection C of this Section and in which a motor vehicle is purchased by a taxpayer with qualified clean-burning motor vehicle fuel property installed by the manufacturer of such motor vehicle and the taxpayer is unable or elects not to determine the exact basis which is attributable to such property, the taxpayer may claim a credit in an amount not exceeding the lesser of twenty percent of ten percent of the cost of the motor vehicle or one thousand five hundred dollars provided such motor vehicle is registered with the Louisiana Department of Public Safety and Corrections.

E. If the tax credit allowed pursuant to Subsection A of this Section exceeds the amount of income taxes due or if there are no state income taxes due on the income of the taxpayer, the amount of the credit not used as an offset against the income taxes of a taxable year may be carried forward as a credit against subsequent income tax liability for a period not to exceed three tax years.

F. A husband and wife who file separate returns for a taxable year in which they could have filed a joint return may each claim only one-half of the tax credit that would have been allowed for a joint return.

§287.756. Tax credit for environmental equipment purchases

A. Any business entity authorized to do business in the state of Louisiana and subject to the state corporation income tax imposed by this Part, except a corporation classified under the Internal Revenue Code as a Subchapter S Corporation, shall be allowed a tax credit for the purchase of environmental equipment designed to recover or recycle chlorofluorocarbons used as refrigerants in commercial, home, and automobile air-conditioning systems, refrigeration units, and industrial cooling applications.

B. The tax credit shall be twenty percent of the purchase price of the equipment if paid for in a single taxable year. If the equipment purchased is financed over two or more taxable years, the tax credit in a taxable year shall be twenty percent of that portion of the original purchase price paid in that taxable year.

C. All environmental equipment for which a tax credit is sought shall conform with technical standards set by the secretary of the Department of Environmental Quality. The secretary of the

Department of Revenue shall utilize those standards in the promulgation of such rules and regulations as may be deemed necessary to carry out the purposes of this Section.

D. The tax credit allowed by this Section shall apply only to equipment purchased between July 1, 1989 and December 31, 1991. The credit for equipment purchased prior to January 1, 1991 shall be claimed on either an amended return for the applicable tax year or in the first taxable year filing following January 1, 1991.

E. The tax credit allowed by this Section shall not exceed the total income tax liability of the corporation.

Section 2. The provisions of this act shall be effective for all taxable periods beginning after December 31, 1990.

Approved by the Governor, July 29, 1991.
Published in the Official Journal of the State:
August 28, 1991.
A true copy:
W. Fox McKeithen
Secretary of State

ACT No. 169 of 1992

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HOUSE BILL NO. 527

BY REPRESENTATIVES STEVE THERIOT, ACKAL, ALARIO, COPELIN, AND DEWITT
AND SENATORS BANKSTON, BRINKHAUS, FIELDS, KELLY, NUNEZ, AND JOHNSON

AN ACT

To amend and reenact R.S. 47:38(B)(2) and (D) and 287.757(B)(2) and (D), to provide that the tax credit for the purchase of qualified clean burning motor vehicles or for certain cost incurred to convert motor vehicles to use certain alternative fuels shall apply only to vehicles registered in Louisiana; and to provide for related matters.

Be it enacted by the Legislature of Louisiana:

Section 1. R.S. 47:38(B) (2) and (D) and 287.757(B) (2) and (D) are hereby amended and reenacted to read as follows:

§38. Tax credit for conversion of vehicles to alternative fuel usage

B. As used in this Section, the following words and phrases shall have the meaning ascribed to them in this Subsection.

(2) "Qualified clean-burning motor vehicle fuel property" means:

(a) Equipment installed to modify a motor vehicle which is propelled by gasoline so that the vehicle may be propelled by an alternative fuel provided such motor vehicle is registered with the Louisiana Department of Public Safety and Corrections.

(b) A motor vehicle originally equipped to be propelled by an alternative fuel but only to the extent of the portion of such motor vehicle which is attributable to the storage of such fuel, the delivery to the engine of such motor vehicle of such fuel, and the exhaust of gases from combustion of such fuel provided such motor vehicle is registered with the Louisiana Department of Public Safety and Corrections.

(c) Property which is directly related to the delivery of an alternative fuel into the fuel tank of a motor vehicle propelled by such fuel, including compression equipment, storage tanks, and dispensing units for such fuel at the point where such fuel is so delivered provided such property is located in Louisiana.

D. In cases where no credit has been claimed pursuant to Subsection C of this Section and in which a motor vehicle is purchased by a taxpayer with qualified clean-burning motor vehicle fuel property installed by the manufacturer of such motor vehicle and the taxpayer is unable or elects not to determine the exact basis which is attributable to such property, the taxpayer may claim a credit in an amount not exceeding the lesser of twenty percent of ten percent of the cost of the

motor vehicle or one thousand five hundred dollars provided such motor vehicle is registered with the Louisiana Department of Public Safety and Corrections.

§287.757. Tax credit for conversion of vehicles to alternative fuel usage

B. As used in this Section, the following words and phrases shall have the meaning ascribed to them in this Subsection.

(2) "Qualified clean-burning motor vehicle fuel property" means:

(a) Equipment installed to modify a motor vehicle which is propelled by gasoline so that the vehicle may be propelled by an alternative fuel provided such motor vehicle is registered with the Louisiana Department of Public Safety and Corrections.

(b) A motor vehicle originally equipped to be propelled by an alternative fuel but only to the extent of the portion of such motor vehicle which is attributable to the storage of such fuel, the delivery to the engine of such motor vehicle of such fuel, and the exhaust of gases from combustion of such fuel provided such motor vehicle is registered with the Louisiana Department of Public Safety and Corrections.

(c) Property which is directly and exclusively related to the delivery of an alternative fuel into the fuel tank of a motor vehicle propelled by such fuel, including compression equipment, storage tanks, and dispensing units for such fuel at the point where such fuel is so delivered, provided such property is located in Louisiana.

D. In cases where no credit has been claimed pursuant to Subsection C of this Section and in which a motor vehicle is purchased by a taxpayer with qualified clean-burning motor vehicle fuel property installed by the manufacturer of such motor vehicle and the taxpayer is unable or elects not to determine the exact basis which is attributable to such property, the taxpayer may claim a credit in an amount not exceeding the lesser of twenty percent of ten percent of the cost of the motor vehicle or one thousand five hundred dollars, provided such motor vehicle is registered with the Louisiana Department of Public Safety and Corrections.

Section 2. The provisions of this Act shall be effective for all taxable periods beginning on or after January 1, 1992.

Approved by the Governor, June 8, 1992.

Published in the Official Journal of the State:

July 1, 1992.

A true copy:

W. Fox McKeithen

Secretary of State

Special Fuels Tax Law

R.S. 47:801 to 47:815.1

(As amended through the 2004 Regular Session)

§801. Definitions

As used in this Part the following words, terms and phrases have the meaning ascribed to them in this Section, except where the context indicates a different meaning:

- (1) "Bulk", as used in connection with the sale and handling of special fuels, means a quantity of distillate fuel in excess of five (5) gallons, and any quantity of liquefied gas other than in cylinders containing one hundred (100) pounds or less.
- (2) "Dealer" means and includes every person who sells special fuels at retail and delivers such special fuels into the fuel supply tanks of motor vehicles.
- (3) "Dyed fuel" means any fuel meeting the definition of special fuels that is required to be dyed pursuant to the requirements of the Internal Revenue Service and is destined for tax-exempt uses or other uses as specifically authorized.
- (4) "Exporting" means taking special fuels out of this state in the fuel supply tanks of a motor vehicle.
- (5) "Fire truck" means vehicles built with the capability of operating fire fighting equipment such as hoses, ladders, and pumps and carrying teams of firefighters to fire scenes.
- (6) "Importing" means bringing special fuels into this state in the fuel supply tanks of a motor vehicle.
- (7) "Interstate User" means any person who imports or exports special fuels into or out of this state in the fuel supply tanks of motor vehicles owned or operated by him.
- (8) "Motor Vehicle" means and includes any automobile, truck, truck-tractor, tractor, bus, vehicle, or other conveyance which is propelled by an internal combustion engine or motor, and is licensed, or required to be licensed, for highway use.
- (9) "Person" includes, in addition to the definition contained in R.S. 47:2, all cities, municipalities, and other subdivisions, departments, agencies, boards and instrumentalities of a state.
- (10) "Special Fuels" means and includes all combustible gases and liquids used or suitable for use in an internal combustion engine or motor for the generation of power for motor vehicles, except such fuels as are subject to the tax imposed by Part I of Chapter 7 of Title 47 of the Louisiana Revised Statutes of 1950.

(11) "Supplier" means any person who sells or delivers special fuels to a user or dealer in this state for resale or use.

(12) "Use" or "Used" means,

(a) Keeping special fuels in storage and selling, using or otherwise dispensing, for the operation of motor vehicles.

(b) Selling special fuels in this state to be used for operating motor vehicles.

(c) Operating a motor vehicle in this state with special fuels.

(d) Importing special fuels into this state.

(13) "User" means and includes every person who delivers or causes to be delivered any special fuels into the fuel supply tanks of motor vehicles owned or operated by him.

§802. Imposition of tax

A. There is hereby levied a tax of sixteen cents per gallon on all special fuels, as defined in R.S. 47:801, when sold, used, or consumed in the state of Louisiana for the operation of motor vehicles, licensed or required to be licensed for highway use, to be computed, collected, reported, and paid as hereafter set forth, except that whenever liquefied petroleum gas or compressed natural gas is sold to, delivered to, or used by any person who pays the annual fuel tax levied under the provisions of R.S. 47:802.3, the imposition of the tax levied under the provisions of this Section shall not apply.

B. The full amount of taxes collected pursuant to this Section shall be credited to the Bond Security and Redemption Fund.

C. The monies shall be used solely to fund projects of the Highway Priority Program (R.S. 48:228 et seq.), the Parish Transportation Fund (R.S. 48:751 et seq.), the Statewide Flood-Control Program (R.S. 38:90.1 et seq.), and the Parish Bridge Replacement Program. Such monies shall be expended solely from year to year as appropriated by the legislature for the purposes of the Highway Priority Program, the Parish Transportation Fund, and the Statewide Flood-Control Program.

§802.1. Refunds; undyed diesel fuel used for other than highway purposes

A. Prior to purchasing undyed special fuel for nontaxable purposes, a user must meet the following requirements and conditions in order to file a claim for refund or credit.

(1) The user must make application to receive approval from the Department of Revenue, on forms prescribed by the secretary, stating the purposes for which such fuel will be used.

(2) The user must furnish a copy of the department's approval to his supplier prior to purchasing fuel.

B. Users, meeting the qualifications of Subsection A, who have paid the taxes levied under R.S. 47:802(A) and 820.1(A) on undyed special fuels may obtain a refund when the fuel is used for a purpose other than in a vehicle licensed or required to be licensed for highway use. This refund can be exercised under one of the following options, each of which shall foreclose the user from exercising any other option as related to the same period and fuel:

(1) Users may file a quarterly refund claim with the secretary of the Department of Revenue setting forth the amount of fuel purchased during the quarter with the amount of tax paid, the licensed suppliers from which the fuel was purchased and the purpose for which the fuel was used on forms prescribed by the secretary.

(2) Users may assign the right to their refund to the licensed suppliers who sold or delivered the fuel to the user. Such licensed suppliers shall issue a credit to the user for the tax and, having done so, may then claim the credit on the return filed for the reporting period in which the credit was given.

C. The secretary shall promulgate rules and regulations for the administration and enforcement of this Section.

§802.2. Refunds; licensed vehicles used by commercial fishermen

A. The secretary of the Department of Revenue shall make refunds of special fuels taxes on undyed tax-paid special fuels used in any vehicle utilized by a licensed commercial fisherman in the administration of business associated with commercial fishing only when the requirements of this Section have been fully complied with.

B. A claimant for a refund pursuant to this Section shall be registered with the secretary of the Department of Revenue prior to filing for a refund. Claims for refund must be filed within six months after the date of purchase on forms prescribed by the secretary. Purchases that are dated six months prior to filing the claim shall be disallowed and the claim reduced by the amount shown on the invoice. No more than one claim shall be filed for any particular period and all claims shall be signed by the claimant or his authorized agent.

C. An authorized refund claimant shall submit a claim indicating the miles traveled and gallons purchased for the period in which the claim is filed, together with the original special fuels invoice completely filled out. Special fuels invoices which do not meet the requirements of R.S. 47:806(B)(2)(a) shall be disallowed.

§802.3. Users of liquefied petroleum gas or compressed gas annual fuel tax; certain vehicles excepted

A. The owner or operator of a motor vehicle having a gross weight of ten thousand pounds or less which is propelled by an internal combustion engine or motor capable of using liquefied

petroleum gas or compressed natural gas as fuel shall pay the special fuels tax by paying either an annual flat rate in the amount of eighty percent of one hundred fifty dollars, based on a sixteen-cent-per-gallon special fuels tax rate or a variable rate of eighty percent of the current special fuels tax rate. The variable tax computation shall be based on estimated fuel efficiency of twelve miles per gallon, but not to exceed the annual flat rate. In the event of an increase or reduction of the special fuels tax, the annual flat rate shall increase or decrease based on one hundred fifty dollars at a sixteen-cent-per-gallon special fuels tax rate rounded to the nearest dollar, and the variable rate shall be based on eighty percent of the per-gallon special fuels tax in effect.

B. The owner or operator of a motor vehicle having a gross weight of more than ten thousand pounds and which is propelled by an internal combustion engine or motor capable of using liquefied petroleum gas or compressed natural gas, shall pay the special fuels tax by paying the rate of eighty percent of the special fuels tax rate in effect on all such fuel so used. The aggregate annual tax paid by such person shall not be less than eighty percent of one hundred fifty dollars based on a sixteen-cent-per-gallon special fuels tax per motor vehicle. For the purpose of determining the amount of the tax and enforcing this Subsection, the number of gallons of liquefied petroleum gas or compressed natural gas used the previous year on the highways of this state shall be determined by using the following schedule for calculating the number of miles per gallon:

TYPE OF VEHICLE	MILES PER GALLON
1. Any motor vehicle with two axles which has a gross license tag weight classification of 10,000 pounds to 20,000 pounds	9
2. Any motor vehicle with two axles which has a gross license tag weight classification in excess of 20,000 pounds	7
3. Any motor vehicle or motor vehicles with a combination of three axles	6
4. Any motor vehicle or motor vehicles with a combination of four axles	5
5. Any motor vehicle or motor vehicles with a combination of five axles	4

C. The full amount of taxes collected pursuant to this Section shall be credited to the Bond Security and Redemption Fund. After a sufficient amount is allocated from that fund to pay all obligations secured by the full faith and credit of the state which become due and payable within any fiscal year, the treasurer shall pay one-half of the amount of taxes collected pursuant to this Section into a special fund, which is hereby created in the state treasury and designated as the Louisiana Highway, Flood Control, and Drainage Priority Fund. The treasurer shall credit the remainder of taxes collected pursuant to this Section into the state general fund.

D. The monies in said fund shall be used solely to fund projects of the Highway Priority Program (R.S. 48:228, et seq.), the Parish Transportation Fund (R.S. 48:751, et seq.), the Statewide Flood-

Control Program (R.S. 38:90.1, et seq.), and the Parish Bridge Replacement Program. Any surplus remaining to the credit of the fund on June thirtieth of each year, after all appropriations of the preceding fiscal year have been made, shall remain to the credit of the fund. Such monies shall be expended solely from year to year as appropriated by the legislature for the purposes of the Highway Priority Program, the Parish Transportation Fund, and the Statewide Flood-Control Program, and no part thereof shall revert to the general fund. Any amounts earned through investment of the monies in the fund shall remain to the credit of the fund and shall not revert to the state general fund.

E. Nothing in this Section shall be construed to apply to nonresident private carriers of passengers temporarily located in or operated on the highways of this state for a period of not more than thirty days; nor shall this Section apply to motor vehicles which are owned and operated by persons who have furnished a bond as required by R.S. 47:807(C) and which are domiciled in a state other than Louisiana.

F. The owner of any school bus, including school board owned buses, which transports Louisiana students and which is propelled by an internal combustion engine or motor capable of using liquefied petroleum gas or compressed natural gas as fuel shall pay the special fuels tax by paying an annual flat rate in the amount of one-half of the lesser of the regular flat rate or one-half of the variable rate as determined in Subsection A of this Section. In the event of an increase or reduction of the sixteen cent per gallon special fuels tax, the annual flat rate shall be based on one-half of the flat rate levied under the provisions of Subsection A of this Section.

G. In order to enforce the provisions of this Section as applicable to motor vehicles which are propelled by an internal combustion engine or motor capable of using liquefied petroleum gas or compressed natural gas, no such vehicle shall be issued a motor vehicle inspection certificate, as required by R.S. 32:1304, without a current decal as evidence of tax payment.

§802.4. Louisiana Truck Center, authorization

The secretary of the Department of Revenue shall provide the personnel and equipment required to fully implement the provisions of R.S. 32:390.23 as it relates to taxes and fees assessed and collected by this department.

§803. Collection and payment of tax

A.(1) The tax levied hereunder shall be collected or paid by suppliers on all special fuels sold or delivered by them, except the following:

(a) Those fuels required to be indelibly dyed and chemically marked in accordance with regulations issued by the secretary of the Treasury of the United States under 26 U.S.C. 4082 and pursuant to the regulations of the United States Environmental Protection Agency.

(b) Those fuels sold and delivered in bulk to state agencies, parish and municipal governments, and other political subdivisions of the state of Louisiana who have obtained a certificate from the

Department of Revenue, and which fuels are to be used for purposes other than in a vehicle licensed or required to be licensed for highway use.

(c) Liquefied petroleum gas and compressed natural gas.

(2) The tax shall be collected and paid by suppliers on dyed fuel authorized for highway use by certain vehicles under 26 U.S.C. 4082 and the regulations adopted thereunder.

(3) Undyed special fuels when sold or delivered to a user for a purpose other than a vehicle licensed or required to be licensed for highway use, may be subject to a refund or credit under R.S. 47:802.1.

B. The tax levied hereunder shall be paid by any interstate user on special fuels imported into this state by him.

C. The tax levied hereunder shall be paid by any person who uses special fuels in this state on which the tax levied hereunder has not been paid.

§803.1. Cooperative agreements between states for collection and payment of taxes

A. In lieu of the requirements of this Part with respect to licensing, bonding, reporting, and auditing, the secretary may, when in the interest of the state and its residents, enter into the International Fuel Tax Agreement or other cooperative compacts or agreements with another state or other states or provinces to permit base state or base jurisdiction licensing of persons importing motor fuel or diesel fuel into this state and liable for the tax levied by this Part, and to provide for the cooperation and assistance among the member states and provinces in the administration and collection of motor fuels consumption or use taxes.

B. The secretary is authorized to enter into such agreement on behalf of the state of Louisiana; but such agreement, arrangement, declaration, or amendment shall not be effective until stated in writing and filed with the secretary.

C. An agreement may provide:

(1) For determining the base state for users, user records requirements, audit procedures, exchange of information, and persons eligible for tax licensing;

(2) For defining qualified motor vehicles;

(3) For determining if bonding is required;

(4) For specifying reporting requirements and periods including defining uniform penalty and interest rates for late reporting;

(5) For determining methods for collecting and forwarding of motor fuel taxes and penalties to another jurisdiction; and

(6) For any other provisions as will facilitate the administration of the agreement.

D. The secretary may, as required by terms of the agreement, forward to officers of another state any information in the secretary's possession relative to the manufacture, receipt, sale, use, transportation, or shipment of motor fuels by any person. The secretary may disclose to officers of another state the location of offices, motor vehicles, and other real and personal property of users of motor fuels.

E. The agreement may provide for each state to audit the records of persons based in the state to determine if the motor fuel taxes due each state are properly reported and paid. Each state shall forward the finding of the audits performed on persons based in the state to each state in which the person has taxable use of motor fuels. For persons not based in this state and who have taxable use of motor fuels in this state, the secretary may serve the audit findings received from another state in the form of a proposed assessment of the person as though an audit was conducted by the secretary.

F. Any agreement entered into under this Section shall not preclude the secretary from auditing the records of any person covered by the provisions of this Part.

G. The secretary may promulgate rules and regulations for the administration and enforcement of any such agreement.

H. The legal remedies and procedures for any person served with an order or proposed assessment under this Part shall be as prescribed by law.

I. Persons licensed in accordance with the provisions of such agreement shall be considered fully licensed in Louisiana as a Motor Fuel/Diesel Fuel Importer For Use.

§803.2. Dyed special fuel; taxable use by fire trucks

A. Notwithstanding any other law to the contrary, a fire department/district may purchase dyed fuel for use in the operation of fire trucks as defined in R.S. 47:801(5) when all of the following apply:

(1) The fire department/district or a fire company within a fire department or a fire district does not have access to bulk storage for tax-paid special fuels to be used in their fire trucks.

(2) It has been certified to the Department of Revenue that undyed special fuel is regularly not available within the respective fire district.

(3) The only special fuel available within the respective fire district for use in the fire trucks is dyed special fuel.

B. Any fire department/district meeting the qualifications in Subsection A that purchases dyed fuel for highway use shall remit the tax due under this Part directly to the Department of Revenue.

C. Prior to purchasing dyed special fuel to be used for taxable purposes, fire departments/districts that meet the criteria established in Subsection A must obtain a direct payment number, hereinafter referred to as an "FD Number".

D. Upon application to the department for an FD Number, the department shall review the application and shall make a visual inspection of the respective area to determine that the qualifications have been met.

E. If the qualifications are not met, the application for an FD Number will be denied.

F. If the qualifications are met, the department shall issue an FD Number and provide a certificate to the applicant that will allow for the purchase of dyed special fuel to be used for the operation of the fire trucks only. A copy of this certificate must also be maintained in the fire truck.

G. Once an FD Number is issued, the fire department/district shall maintain a complete record of all dyed special fuel purchased for use in the fire trucks. The records shall include a serially numbered invoice issued in not less than duplicate counterparts on which shall be the name and address of the supplier, dealer, or user from whom the fuel is purchased, the date of purchase, the number of gallons, the kind of special fuel delivered, the mileage of the vehicle to be evidenced by the odometer, and the state highway license number or unit number of the fire truck. The invoice shall reflect that the tax was not paid at the time of purchase. One counterpart of the invoice shall be kept by the dealer as part of his record. Another counterpart shall be delivered to the operator of the fire truck and carried in the cab compartment of the fire truck.

H. The holder of the FD Number shall on or before the twentieth day of each calendar month, file with the secretary, on forms prescribed by him, a report accounting for the dyed special fuel purchased during the preceding calendar month for the operation of the fire trucks and remit the applicable state special fuels tax.

I. The department shall review the procedures and practices, records and reports of the holder of the FD Number.

J. The FD Number issued by the department under this Section may be revoked by the secretary at any time if the holder fails to meet the qualifications provided for in this Section.

K. Purchase of dyed special fuel for taxable use in vehicles other than fire trucks as provided herein, failure to maintain the records as required or to timely remit the applicable tax will result in the withdrawal of the FD Number and shall subject the noncomplying fire department/district to the provisions of this Chapter.

§804. Separate storage tanks for taxable special fuels and for tax-free storage

A. All users, dealers, and suppliers of special fuels who maintain their own storage tanks in this state except users of liquefied petroleum gas or compressed natural gas as fuel, are required to have a separate storage tank for taxable special fuels, which tanks are to be physically separate

and apart from any other tanks or fueling units, and to indicate it by placing thereon or nearby in a conspicuous place the words "Tax-Paid Fuels" in letters not less than five inches high. Suppliers are required to collect the tax on all special fuels delivered into such tanks.

B. All suppliers, dealers, and users who have facilities for storing special fuels other than liquefied petroleum gas or compressed natural gas not intended for motor vehicle use and which facilities are suitable to fuel motor vehicles using special fuels other than liquefied petroleum gas or compressed natural gas, shall mark such storage facilities with the words "Dyed Fuel - Not for Motor Vehicle Use" in letters not less than five inches high, and suppliers may deliver into such storage without collecting the tax levied hereunder. If such tanks are not provided then all special fuels delivered by suppliers into storage tanks suitable for fueling motor vehicles become taxable.

C. Any special fuel other than liquefied petroleum gas or compressed natural gas which is not intended for motor vehicle use and is stored in separate facilities as provided in Subsection B of this Section must be indelibly dyed and chemically marked in accordance with regulations issued by the secretary of the Treasury of the United States under 26 U.S.C. 4082.

§805. Bulk sales

Except in the case of tax-paid deliveries into the fuel supply tanks of motor vehicles, it shall be unlawful to make bulk sales of special fuels to any user or dealer who is not licensed as such, when the supplier knows, or reasonably should know the purchaser is not a licensed user or dealer. When a user or dealer's license has been revoked and written notice of the revocation has been received by the supplier from the secretary, it shall be unlawful for the supplier to make bulk sales or deliveries to such user or dealer of special fuels on which the tax has not been paid unless delivery is into facilities which are not suitable for fueling motor vehicles.

§806. Records required; invoices; false records a violation

A.(1) Every supplier, dealer, or user licensed, or required by law to secure a license, to sell, deliver, or to use special fuels, shall keep a complete record of all special fuels purchased or received and sold, delivered, or used by them showing for each purchase, receipt, sale, delivery, or use:

(a) The date;

(b) The name and address of the seller or of the person from whom received, and if sold or delivered in bulk quantities, the name and address of the purchaser or recipient;

(c) An accurate record of the number of gallons of each product used for taxable purposes with quantities measured by a meter; and

(d) Inventories of special fuels on hand at the end of each month except for those special fuels in a tank marked "Not for Motor Vehicle Use."

(2) These records shall be kept until the taxes to which they relate have prescribed, and shall be open to inspection by the secretary of revenue or his authorized representative upon request.

B.(1) For each bulk sale and delivery of special fuels, whether or not subject to tax hereunder, the record required shall include an invoice with serial numbers printed thereon showing the name and address of both the supplier and purchaser, and the complete information set out hereinabove for each such sale, one counterpart of which shall be delivered to the purchaser and another counterpart kept by the supplier or dealer for the period of time and purpose above provided.

(2)(a) For each delivery of special fuels into the fuel supply tank of a motor vehicle, the required record shall include a serially numbered invoice issued in not less than duplicate counterparts on which shall be printed, or stamped with a rubber stamp the name and address of the supplier, dealer, or user making such delivery and on which shall be shown, in spaces to be provided on such invoice, the date of delivery, the number of gallons, the kind of special fuels delivered, the total mileage of the motor vehicle into which delivered, such mileage to be evidenced by odometer or hub meter reading or in the case of interstate passenger buses registered with the Interstate Commerce Commission by such documentation acceptable by the secretary, and the state highway license number or unit number of said motor vehicle. The invoice shall reflect that the tax has been paid or accounted for on each of the products delivered. One counterpart of the invoice shall be kept by the supplier, dealer, or user making such delivery as a part of his record and for the period of time and purposes hereinabove provided. Another counterpart shall be delivered to the operator of the motor vehicle and carried in the cab compartment of the motor vehicle for inspection by the secretary or his representatives, until the fuel it covers has been consumed.

(b) With respect to users who purchase in bulk, for each delivery of special fuels into the fuel supply tank of a motor vehicle the required record shall include a serially numbered invoice issued in not less than duplicate counterparts on which shall be typed, handwritten, printed, or stamped with a rubber stamp the name and address of the supplier, dealer, or user making such delivery and on which shall be shown, in spaces to be provided on such invoice, the date of delivery, the number of gallons, the kind of special fuels delivered, the total mileage of the motor vehicle into which delivered, such mileage to be evidenced by odometer or hub meter reading or in the case of interstate passenger buses registered with the Interstate Commerce Commission by such documentation acceptable by the secretary, and the state highway license number or unit number of said motor vehicle. The invoice shall reflect that the tax has been paid or accounted for on each of the products delivered. One counterpart of the invoice shall be kept by the supplier, dealer, or user making such delivery as a part of his record and for the period of time and purposes hereinabove provided. Another counterpart shall be delivered to the operator of the motor vehicle and carried in the cab compartment of the motor vehicle for inspection by the secretary or his representatives, until the fuel it covers has been consumed.

(3) In lieu of the invoices required herein, a computer record generated by a cardlock or meter system may be used for purposes of substantiating a claim for a tax refund otherwise provided by law which is submitted by a Louisiana bonded interstate user or a user licensed under the provisions of the International Fuel Tax Agreement to the Department of Revenue for special

fuels purchased or received, and sold, delivered or used, where such special fuels were purchased or received from an attended or unattended location through use of a cardlock or meter system maintained and controlled by a supplier licensed for the tax free purchase of special fuels, provided that such records contain the information required in Subsection A of this Section as applicable, and notwithstanding that the computer record may contain such information for multiple special fuels transactions.

C.(1) The provisions of this Section shall not apply to the owner or operator of a private passenger motor vehicle or truck having a gross weight of six thousand pounds or less which is propelled by an internal combustion engine or motor which uses a fuel taxed under the provisions of this Part other than liquefied petroleum gas or compressed natural gas and which is licensed, or required to be licensed, for highway use.

(2) The provisions of this Section shall not apply to the owner or operator of a motor vehicle, truck, or truck-tractor which is owned and operated exclusively for commercial use within this state by a business domiciled within this state, which is propelled by an internal combustion engine or motor which uses a fuel taxed under the provisions of this Part other than liquefied petroleum gas or compressed natural gas, and which is licensed, or required to be licensed, for highway use.

D. On all deliveries of special fuels to a user by common or contract carriers, the shipper shall stamp on the manifest or bill of lading in letters not less than one-quarter inch high "Tax Paid" whenever the tax levied hereunder has been paid, and "Not For Motor Vehicle Use" whenever the tax levied hereunder has not been paid. It shall be a violation of this Part for any driver for a carrier to deliver special fuels covered by a manifest or bill of lading stamped "Not For Motor Vehicle Use" into a tank marked "Tax-Paid Special Fuels".

E. The willful issuance of any invoice, bill of sale or receipt which is false, untrue or incorrect in any material particular or the alteration, or changing except for errors, or forging any such invoice, bill of sale or receipt, or any duplicate of any such receipt pertaining to special fuels, shall constitute a violation of this Part.

F.(1) The provisions of this Section shall not apply to the owner or operator of a motor vehicle having a gross weight of ten thousand pounds or less which is propelled by an internal combustion engine or motor which uses liquefied petroleum gas or compressed natural gas as fuel if the owner or operator elects to pay the flat rate available under R.S. 47:802.3.

(2) If the owner or operator of a vehicle described in Paragraph (1) elects to pay the variable rate available under R.S. 47:802.3, said owner or operator shall maintain records to verify total mileage of that vehicle in order to comply with the provisions of R.S. 47:802.3. The secretary shall provide for a procedure for such recordkeeping.

G. The owner or operator of a motor vehicle having a gross weight in excess of ten thousand pounds which is propelled by an internal combustion engine or motor which uses liquefied petroleum gas or compressed natural gas as fuel shall maintain records to verify total mileage of

that vehicle in order to comply with the provisions of R.S. 47:802.3(B). The secretary shall provide for a procedure for such recordkeeping.

H. In lieu of the invoices required herein, a computer-generated record may be used for the purposes of substantiating the same information required on the invoices for which substituted.

§806.1. Records and reports required by installers of liquefied petroleum gas and compressed natural gas carburetion equipment

Any person who installs or alters liquefied petroleum gas or compressed natural gas carburetion equipment shall file with the secretary of the Department of Revenue a written report, on forms prescribed by the secretary, whenever he installs or alters such equipment. This report shall be filed not later than fifteen days after the installation or alteration of the equipment. This person shall maintain records of every installation or alteration for a period of three years, which records shall be open to inspection at all reasonable times by the secretary or his authorized representative.

§807. Licenses and bond for suppliers, dealers, and users

A. No person shall commence operations as a supplier, dealer, or user without first procuring a license for that purpose from the secretary, which license shall be issued without charge and remain in effect until revoked as hereinafter provided.

B. Each application for a license as a supplier, dealer, or user of special fuels and each such license shall have as a condition that the applicant and holder shall comply with the provisions of this Part. Each application for a license as a dealer or user and each such license shall have as a further condition that the applicant and holder shall not deliver or permit delivery into the fuel supply tanks of motor vehicles of any special fuels which have been purchased tax free by the applicant or holder, except for liquefied petroleum gas or compressed natural gas which is delivered to a user under the provisions of R.S. 47:802.3. A taxable use of special fuels purchased tax free by an applicant for, or a holder of, a dealer or user's license, in addition to the penal provisions hereafter prescribed, shall in the discretion of the secretary forfeit the right of the applicant or holder to purchase special fuels tax free for a period of not more than one year from the date of such offense.

C.(1) Each application submitted by a supplier or interstate user for a license shall be accompanied by a surety bond of a surety company authorized to do business in this state, in favor of the secretary of the Department of Revenue and satisfactory to him and in an amount to be fixed by him of not less than two thousand dollars nor more than eighty thousand dollars for a supplier and not less than one thousand dollars nor more than forty thousand dollars for an interstate user, guaranteeing the payment of any and all taxes, penalties, interest, attorney fees, and costs levied by, accrued, or accruing under this Part. However, the secretary is authorized to waive the furnishing of this surety bond by any supplier who has and agrees to maintain assets in Louisiana of a net value of not less than one and one-fourth times the amount of the bond which would otherwise be required, who has had a bond on file with the department for a period of not less than three years, and who has not been delinquent in remitting taxes accrued or accruing

under this Part during the three-year period immediately preceding application by the supplier for waiver of the bond. If any supplier whose bond has been waived by the secretary becomes delinquent in remitting taxes due under this Part, the secretary may require that such supplier furnish a bond in the amount required in this Subsection, and such supplier shall not be eligible for a waiver of a bond for a period of three years thereafter. Any violation of this Part shall be cause for revocation of any license issued hereunder.

D. A supplier may operate under his supplier's license as a dealer or as a user without securing a separate license but he shall be subject to all other conditions, requirements, and liabilities imposed by this Part upon a dealer or a user.

A licensed dealer may use special fuels in motor vehicles owned or operated by him without securing a separate license as a user, subject to all conditions, requirements, and liabilities imposed herein upon a user.

§807.1. Application, payment of tax, decals; penalties

A. Any person who wishes to operate, upon the highways of this state, a motor vehicle which uses or is capable of using liquefied petroleum gas or compressed natural gas as motor fuel shall make application, on or before July thirty-first of each year, to the secretary of the Department of Revenue for a permit to operate the motor vehicle on the highways of this state. The application shall be made on a form furnished and prescribed by the secretary and shall contain any information which the secretary may reasonably require.

B. The applicant shall pay to the secretary, at the time that application for a permit is made, the tax levied under R.S. 47:802.3. Upon payment of the tax and approval of the application, the secretary shall issue to the taxpayer a permit to operate the motor vehicle upon the highways of this state for the period from July first to June thirtieth. If a person makes application after July thirty-first, the amount of the tax due shall be reduced by one-twelfth for each month which has elapsed since July first.

C. Any person who operates more than one motor vehicle using or capable of using liquefied petroleum gas or compressed natural gas shall pay the tax and obtain a permit for each motor vehicle which he wishes to operate upon the highways of this state.

D. Upon issuance of a permit, the secretary shall issue to the taxpayer a decal for each motor vehicle, which shall be in a form prescribed by the secretary. Each decal shall be affixed to the motor vehicle in the manner prescribed by the secretary so that the decal is clearly visible.

E. The secretary shall provide a procedure for the payment of the tax and the issuance on an annual basis.

F. Any person who sells or transfers title of a motor vehicle which is propelled by an internal combustion engine or motor capable of using liquefied petroleum gas or compressed natural gas as fuel shall transfer the permit at the time of the transfer of the vehicle. The secretary shall

prescribe a procedure for such transfer of permits and the Department of Revenue shall be notified at the time of any such transfer.

G. It shall be a violation of this Part for any person to operate or cause to be operated a motor vehicle upon the highways of this state which is subject to the requirements of this Part upon which the tax has not been paid or for which no permit has been issued or to which no decal has been attached. In addition to all other liability, such person shall be liable for a penalty of twenty-five dollars for the first violation and a penalty of seventy-five dollars for each subsequent violation.

§808. Reports; deductions in computing tax; revocation of license; flat rate accounts

A.(1) Every supplier shall, on or before the twentieth day of each calendar month, file with the secretary, on forms prescribed by him, a report accounting for the special fuels handled during the preceding month, showing:

(a) Total quantity of each kind of special fuels purchased and received from sources within this state and total quantity received from sources outside of this state.

(b) Total quantities of special fuels sold or delivered to dealers and users upon which the tax levied hereunder was collected and total quantity sold and delivered without collecting the tax levied hereunder.

(c) Quantities of special fuels sold and delivered into the fuel supply tanks of motor vehicles.

(d) Quantities of special fuels delivered into fuel supply tanks of motor vehicles owned, leased, or operated by the supplier and quantities used by him for other purposes.

(e) Quantities of special fuels lost by fire or other accident.

(f) Quantities of special fuels lost by shrinkage or evaporation; and

(g) Quantities of special fuels on hand at the beginning and at the end of the month covered by the report.

(2) With the report the supplier shall remit the total amount of the tax due.

B. All interstate users who have furnished a surety bond required under R.S. 47:807 shall file a quarterly report with the secretary of the Department of Revenue. The quarters shall end on March thirty-first, June thirtieth, September thirtieth, and December thirty-first of each year, and the report shall be mailed together with payment of the tax due by the twenty-fifth day of the month following the end of each quarter. Reporting forms shall be prescribed by the secretary of the Department of Revenue and shall show itemized quantities of special fuels purchased along with the fuels purchased and used in all other states and the miles traveled in each state, together with any other information requested by the secretary.

C. In computing the tax due, a supplier may make a deduction in the amount of three percent of the net taxable gallons after deducting approved refunds sold during the preceding calendar month as compensation for collecting and remitting the tax, and as an allowance for evaporation.

D. The license of a supplier, dealer, or user may be revoked by the secretary for violation of any of the provisions of this Part after a hearing as provided by R.S. 47:1544 through 1547. Should his license be revoked after such hearing, any supplier, dealer, or user may bring an action against the secretary in the district court of his domicile within fifteen days of the date of revocation to determine whether or not said supplier, dealer, or user has in fact violated any of the provisions of this Part. If the court determines that the provisions of the law have been violated by said supplier, dealer, or user, it shall maintain the secretary's action in revoking said license.

E. Special fuels, when sold, used, consumed, or otherwise acquired and measured in liters rather than gallons, shall be converted to gallons for tax reporting purposes by dividing the liters by the metric conversion factor of 3.7854, the accepted metric system equivalent of one U.S. gallon.

F. The provisions of this Section shall not apply to suppliers of or users who purchase in bulk liquefied petroleum gas or compressed natural gas as a motor fuel.

G. Repealed by Acts 1995, No. 603, § 2, eff. Jan. 1, 1996.

§809. Power to stop and investigate vehicles; assessment and collection

A. In order to enforce the provisions of this Part, the secretary or his authorized representative or any weights and standards police officer is empowered to stop any motor vehicle which appears to be operating with special fuels for the purpose of examining the invoices and for such other investigative purposes reasonably necessary to determine whether the taxes imposed by this Part have been paid, or whether the vehicle is being operated in compliance with the provisions of this Part.

B. If, after such examination or investigation, it is determined by the secretary or his authorized representative or any weights and standards police officer that the tax imposed by this Part has not been paid with respect to the fuels being used in said vehicle, the secretary or his representative, or any weights and standards police officer shall immediately assess the tax due together with the penalty hereinafter provided, to the owner of said vehicle, and give said owner written notice of the assessment by handing it to the driver of the vehicle.

C. The secretary or his representative or any weights and standards police officer is hereby empowered to impound any vehicle found to be operating in violation of this Part or any vehicle for which inspection has been refused until such time as inspection has been completed or any tax and penalties assessed as provided herein have been paid.

D. Upon issuance of the written notice of assessment in the form of a violation ticket by the secretary or his representative or any weights and standards police officer, the procedure for

collection and payment of the penalty assessed shall be the same as that provided for the payment and collection of penalty in R.S. 32:389(C).

§810. Prima facie presumptions

A. Any supplier, dealer, or user who shall fail to keep the records, issue the invoices, or file the reports required by this Part, shall be prima facie presumed to have sold, delivered, or used for taxable purposes all special fuels shown by a duly verified audit by the secretary, or any authorized representative, to have been delivered to such supplier, dealer, or user and unaccounted for at each place of business or place of storage from which special fuels are sold, delivered, or used for any taxable purposes.

B. The secretary is hereby authorized to fix or establish the amount of taxes, penalties, and interest due the state of Louisiana from such records of deliveries or from any records or information available to him, and, if the tax claim as developed from such procedure is not paid, such claim, and any audit made by the secretary, or an authorized representative, or any report filed by such supplier, dealer, or user, shall be admissible in evidence in any suit or judicial proceedings filed by the secretary and shall be prima facie evidence of the correctness of said claim or audit; provided that the prima facie presumption of the correctness of the claim may be overcome by evidence adduced by the supplier, dealer, or user.

§811. Export of tax paid special fuels; tax refunds or credit; interstate users

A. An interstate user of special fuels who is a bonded user of special fuels in the state of Louisiana may receive a tax refund or tax credit on that amount of tax paid on special fuels purchased in this state which exceeds the amount of fuel that would be consumed, based on the total motor vehicle mileage in the state. An interstate user of special fuels must be bonded and file reports in all states in which he operates in accordance with the requirements of those states.

B. An interstate user may determine his average number of miles of motor vehicle travel per gallon of fuel by dividing the total miles traveled by the number of gallons consumed in the entire operation of his vehicles. If an interstate user cannot furnish satisfactory evidence of his average number of miles per gallon of fuel, the Department of Revenue shall determine the rate to be applied to such user, which in no event shall exceed an average of five miles per gallon of fuel.

§812. Violations; cargo tank to carburetor connection; operation without speedometer or hub meter; operation without name and address on trucks; invoice

A. It shall be a violation of the Special Fuels Tax Law for a motor vehicle to operate within the state of Louisiana:

(1) When transporting special fuels in any cargo tank from which special fuels are sold or delivered that is connected by pipe, tube, valve, or otherwise with the carburetor or with the fuel supply tank feeding the carburetor of the motor vehicle transporting said products.

(2) Without an odometer or hub meter which is kept at all times in good operating condition to correctly measure and register the miles traveled by such vehicle. Interstate passenger buses registered with the Interstate Commerce Commission not so equipped shall not be in violation of this Part if a record of miles traveled is maintained on a form or report approved by the secretary of the Department of Revenue and is carried in the vehicle at all times.

(3) Without the true owner's name and address or adequate identification, or in the case of an interstate motor carrier under whose authority the vehicle is operated and who is registered with the Interstate Commerce Commission, the name or trade name only, on the cab in letters not less than two inches high. The name and address of the owner must be legible at a distance of twenty-five feet. Pickup trucks or any truck of manufacturer's rating carrying capacity of two thousand pounds or less is excluded from this Subsection, unless the truck is a public for hire truck used primarily for transporting cargo.

(4) Unless the person operating the vehicle has in his possession an invoice for the fuel which meets the requirements of R.S. 47:806.

(5) In addition to any other penalties which may be incurred, there is hereby levied a specific penalty of fifty dollars for each violation of the provisions of this Subsection. This penalty shall be assessed by the secretary of the Department of Revenue or his representative or the weights and standards police officer and shall be collected in the same manner as is provided for the collection of tax in R.S. 47:809.

B.(1) It shall be unlawful for any person to operate motor vehicles registered for or required to be registered for highway use with undyed special fuel that has not been taxed or with special fuel which contains any evidence of the dye or chemical marker as required pursuant to the regulations promulgated under 26 U.S.C. 4082. Those vehicles allowed to use dyed fuel on the highway under 26 U.S.C. 4082 or regulations adopted thereunder, but which are subject to the state tax, shall not be considered in violation of this Subpart.

(2) No supplier or dealer of special fuels or any other person shall sell or offer to sell special fuels that contain any evidence of the dye or chemical marker unless the fuel dispensing device is clearly marked with a notice that the fuel is dyed or chemically marked. Any dyed fuel that is sold or held for sale by any person for any use that is not a nontaxable use; any dyed fuel held for use or used by any person for a use other than a nontaxable use and such person knew, or had reason to know, that such fuel was dyed; or any person who willfully alters, or attempts to alter, the strength or composition of any dye or marker in any dyed fuel is subject to a penalty.

(3) Any person violating any provision of this Subsection is subject to a penalty in the amount of ten dollars for every gallon of fuel involved or one thousand dollars whichever is greater. The penalty increases with subsequent violations by multiplying the penalty amount by the number of prior violations. If the penalty is imposed on any business entity, each officer, employee, or agent of the entity who willfully participated in any act giving rise to the penalty is jointly and severally liable with the entity for the penalty. This penalty shall be assessed and collected in the same manner as is provided for in Paragraph (5) of Subsection A of this Section.

(4) Any authorized representative of the secretary of the Department of Revenue or officer authorized under R.S. 47:809 who has reasonable grounds to suspect a violation of this Subsection may inspect the fuel in the fuel supply tank of any motor vehicle or the fuel storage facilities and dispensing devices of any special fuels supplier, dealer, and user to determine compliance.

C. All specific penalties collected by the Department of Public Safety and Corrections or the Department of Transportation and Development in accordance with this Part shall be paid to the secretary of the Department of Public Safety and Corrections or the Department of Transportation and Development, whichever agency issued the violation ticket, who shall pay said penalties into the state treasury on or before the twenty-fifth day of each month following their collection and, in accordance with Article VII, Section 9 of the Constitution of Louisiana, such funds shall be credited to the Bond Security and Redemption Fund.

§813. Violations declared misdemeanors

Any person who shall violate any of the provisions of this Part shall be guilty of a misdemeanor, and, upon conviction, be fined in an amount not exceeding one thousand dollars (\$1,000.00), or imprisonment not to exceed two (2) years, or both, at the discretion of the court.

§814. Administration; rules and regulations; costs of administration; disposition of monies collected

A. The administration of this Part shall be by the secretary of the Department of Revenue who shall have authority to adopt and enforce rules and regulations not inconsistent with this Part of this Chapter 7 necessary and convenient for the enforcement of the provisions of this Part and collection of the taxes, penalties, and interest in this Part provided.

B. In the case of farmers who operate trucks licensed for farm use, which trucks use undyed special fuels other than liquefied petroleum gas and compressed natural gas for their operation, the secretary shall, when requested, reach an agreement with such farmers wherein the amount of fuel used in each truck shall be determined by an estimate and the tax paid each month on the basis of said estimate. In no case is the secretary authorized to estimate the number of gallons used by any farmer at less than seventy-five gallons per month per vehicle. This provision applies only to farmers operating vehicles and equipment on the same special fuels except liquefied petroleum gas and compressed natural gas for both taxable and nontaxable purposes, and in such case the farmer shall be relieved of the necessity of compliance with the provisions of R.S. 47:804, 806, and 812(A)(4) in reference to such use.

§815. Special fuels dispensing machines; requirements

Each tank through which a special fuel is dispensed shall have clearly displayed on it only one sign which refers to taxes and it shall state "ABOVE PRICE INCLUDES ALL LOCAL, STATE, AND FEDERAL TAXES."

§815.1. Special fuel; advertised price; requirement

The advertised price of special fuels dispensed by a retail dealer shall include all taxes levied and collected on such fuel. Any advertisement of a price shall also clearly state whether the price is a "cash price" or a "credit price".

Transportation Infrastructure Model For Economic Development

R.S. 47:820.1 to 47:820.6*

(As amended through the 1999 Regular Session)

§820.1. Imposition of tax

A. There is hereby levied a tax of four cents per gallon on all gasoline and motor fuels as presently taxed by the provisions of Part I of this Chapter and on special fuels as presently taxed by the provisions of Part V of this Chapter. The tax imposed herein shall be in addition to any other tax imposed on gasoline and motor fuels and special fuels.

B. The tax imposed herein shall be levied, collected, and administered in the same manner as provided in this Chapter for the taxes levied on gasoline and motor fuels and on special fuels. The secretary may promulgate rules and regulations as necessary for the administration of this Part.

* Only R.S. 47:820.1 is reproduced here. R.S. 47:820.2 to 820.6 deal with the distribution of the proceeds of the tax imposed by R.S. 47:820.1.

Compressed Natural Gas Regulations

Published by the Louisiana Department of Natural Resources, Office of Conservation, Pipeline Division. A link to the latest version can be found on the Department's internet web site. For additional information, contact the Pipeline Division, P.O. Box 94275, Baton Rouge, LA 70804-9275; telephone 225-342-5505.

Louisiana Administrative Code

Title 43

NATURAL RESOURCES

Part XI. Office of Conservation—Pipeline Division

Subpart 5. Compressed Natural Gas

Chapter 25. Compressed Natural Gas

§2501. Scope

- A. This Chapter applies to the design and installation of compressed natural gas (CNG) engine fuel systems on vehicles of all types and CNG systems used for compression, storage, sale, transportation, delivery, or distribution of CNG for use in motor vehicles.
- B. This Chapter also applies to all CNG mobile fuel systems used for filling vehicles.
- C. This Chapter does not extend to the design and installation of any CNG system on ships, barges, sailboats, or other types of watercraft. Such installation is subject to the American Boat and Yacht Council (ABYCO) and any other applicable standards.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:751 and 752.

HISTORICAL NOTE: Promulgated by the Department of Natural Resources, Office of Conservation, Pipeline Division, LR 18:60 (January 1992).

§2503. Retroactivity

- A. Unless otherwise stated, the regulations for compressed natural gas are not retroactive. Any installation of a CNG system must meet the requirements of the rules and regulations outlined herein.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:751 and 752.

HISTORICAL NOTE: Promulgated by the Department of Natural Resources, Office of Conservation, Pipeline Division, LR 18:60 (January 1992).

§2505. Definitions

- A. The following words and terms, when used in this Chapter, shall have the following meanings, unless the context clearly indicates otherwise.

Approved - acceptable to the commissioner of conservation.

Cascade Storage System - storage of CNG in multiple cylinders.

CNG Cylinder - a cylinder or other container designed for use or used as part of a CNG system.

CNG Facility - a nonvehicular CNG system.

CNG System - a system of safety devices, cylinders, piping, fittings, valves, compressors, regulators, gauges, relief devices, vents, installation fixtures, and other CNG equipment intended for use or used in any building or public place by the general public or in conjunction with a motor vehicle fueled by CNG and any system of equipment designed to be used or used in the compression, sale, storage, transportation for delivery, or distribution of CNG in portable CNG cylinders, but does not include a natural gas pipeline located upstream of the inlet of the compressor.

Commissioner - the commissioner of Conservation of the state of Louisiana.

Compressed Natural Gas (CNG) - natural gas which is a mixture of hydrocarbon gases and vapors, consisting principally of methane (CH₄) in gaseous form that is compressed and used, stored, sold, transported, or distributed for use by or through a CNG system.

CNG Cargo Tank - a container in accordance with American Society of Mechanical Engineers (ASME) or Department of Transportation (DOT) specifications and used to transport CNG for delivery.

Cylinder Service Valve - a hand-wheel-operated valve connected directly to a CNG cylinder.

Dispensing Station - a CNG installation that dispenses CNG from any source by any means into fuel supply cylinders installed on vehicles or into portable cylinders.

Filled by Pressure - a method of transferring CNG into cylinders by using pressure differential.

Fuel Supply Cylinder - a cylinder mounted in a vehicle for storage of CNG as fuel supply to an internal combustion engine.

Manifold - the assembly of piping and fittings used for interconnecting cylinders.

Mobile Fuel System - any CNG system installed on a vehicle designed to furnish CNG to any apparatus that uses or consumes CNG.

Motor Vehicle - a self-propelled vehicle licensed for highway use or used on a public highway.

Outlet - a site operated by a certified CNG facility at which the business conducted materially duplicates the operations for which the facility is initially granted a

certificate. Elements to be considered in determining the existence of an outlet include, but are not limited to, the following:

1. storage of CNG on the site;
2. sale or distribution of CNG from the site;
3. supervision of employees at the site;
4. proximity of the site to other outlets;
5. communication between the site and other outlets; and
6. nature of activities.

Person - an individual, sole proprietor, partnership, joint venture, corporation, or other entity.

Point of Transfer - the point where the fueling connection is made.

Pressure Relief Valve - a device designed to prevent overpressure of a normally charged cylinder.

Settled Pressure - the pressure in a container at 70 degrees F, which cannot exceed the marked service or design pressure of the cylinder.

Transport - any vehicle or combination of vehicles and CNG cylinders designed or adapted for use or used principally as a means of moving or delivering CNG from one place to another. This shall include, but not be limited to, any truck, trailer, semitrailer, cargo tank, or other vehicle used in the distribution of CNG.

Ultimate Consumer - the individual controlling CNG immediately prior to its ignition.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:751 and 752.

HISTORICAL NOTE: Promulgated by the Department of Natural Resources, Office of Conservation, Pipeline Division, LR 18:60 (January 1992).

§2507. Applicability

- A. The provisions of this Chapter apply to pressurized components of a compressed natural gas (CNG) system, and are applicable to both engine fuel systems and compression, storage, and dispensing systems.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:751 and 752.

HISTORICAL NOTE: Promulgated by the Department of Natural Resources, Office of Conservation, Pipeline Division, LR 18:61 (January 1992).

§2509. Odorization

- A. Compressed natural gas shall have a distinctive odor potent enough for its presence to be detected down to a concentration in air of not over one-fifth of the lower limit of flammability.
- B. Compressed natural gas shall be odorized according to the provisions of LAC 43:XIII.2725 (Odorization of Gas).

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:751 and 752.

HISTORICAL NOTE: Promulgated by the Department of Natural Resources, Office of Conservation, Pipeline Division, LR 18:61 (January 1992).

§2511. Severability

- A. If any item, clause, or provision of these rules is for any reason declared invalid, the remainder of the provisions shall remain in full force and effect and shall in no way be affected, impaired, or invalidated.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:751 and 752.

HISTORICAL NOTE: Promulgated by the Department of Natural Resources, Office of Conservation, Pipeline Division, LR 18:61 (January 1992).

§2513. Application for Construction or Certification of Existing Facilities

- A. An application must be submitted to the commissioner for construction for each CNG facility and all applications must be accompanied by a filing fee in accordance with LAC 43:XIX. The application must have the following information:
 - 1. the exact legal name of the applicant; its principal place of business; the state under the laws of which applicant was organized or authorized; if a corporation, a certificate of good standing and authorization to do business from the secretary of state of Louisiana, the location and mailing address of applicant's registered office, the name and post office address of each registered agent in Louisiana, and the name and address of all its directors and principal offices;
 - 2. the nature of service to be rendered by applicant, sale to public, applicant's fleet, private fleet, and/or public transportation;
 - 3. if any, location of applicant's existing CNG facilities;
 - 4. a table of contents which shall list all exhibits and documents filed with the application;
 - 5. a schematic of applicant's proposed facilities, which shall reflect the location and capacity of all compressor sites, point of connection with piping between compressor(s) and dispensing units;
 - 6. a listing of applicant's gas supply for compression at the point the gas enters service facility for ultimate compression;

7. a CNG Form 100;

8. subsequent filings may be required by the commissioner to complete an evaluation.

B. The commissioner shall determine whether the design, manufacture, construction, or use of the depicted items, system, operation, procedure, or installation meets the minimum standards set forth by the American Society of Mechanical Engineers, Underwriters Lab and/or American Gas Association. At the discretion of the commissioner an administrative order shall be issued authorizing the construction of a CNG facility. If the commissioner requires a public hearing on the matter, the applicant shall be notified within 15 working days from receipt of application and a hearing date shall be set. When an application is submitted to the commissioner, automatic approval is hereby granted and construction can begin 30 days after receipt of the application by the commissioner in lieu of a written order. However, any correspondence from the commissioner during the 30-day period may set aside the 30-day automatic approval.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:751 and 752.

HISTORICAL NOTE: Promulgated by the Department of Natural Resources, Office of Conservation, Pipeline Division, LR 18:61 (January 1992).

§2515. Acquisition of an Existing CNG Facility

A. Notice must be given to the commissioner by anyone wishing to acquire an as -built CNG facility. The notice shall include information outlined in §2513.A.1 and 3.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:751 and 752.

HISTORICAL NOTE: Promulgated by the Department of Natural Resources, Office of Conservation, Pipeline Division, LR 18:62 (January 1992).

§2517. Changes in Service

A. If any owner of a CNG facility wishes to change the nature of service as listed in §2513.A.2 by adding additional services or deleting services, the operator of the facility shall notify the commissioner in writing and submit a Form CNG 101 "Change of Service". No change in service may occur without written approval from the commissioner; however, the applicant may make the changes applied for if the commissioner has not responded within 21 days after receipt of the change request.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:751 and 752.

HISTORICAL NOTE: Promulgated by the Department of Natural Resources, Office of Conservation, Pipeline Division, LR 18:62 (January 1992).

§2519. Approval of CNG Systems Equipment and Components for Vehicles

A. All CNG equipment installed on a vehicle must meet the minimum standards set forth in Section 52 of the National Fire Protection Association (Vehicle Fuel System Standards).

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:751 and 752.

HISTORICAL NOTE: Promulgated by the Department of Natural Resources, Office of Conservation, Pipeline Division, LR 18:62 (January 1992).

§2521. Design and Construction of Cylinders and Pressure Vessels

- A. Cylinders and pressure vessels shall be fabricated of steel, aluminum, or composite materials.

- B. Cylinders shall be manufactured, inspected, marked, tested, and retested in accordance with U.S. Department of Transportation (DOT) regulations and exemptions for compressed natural gas (CNG) service. Fuel supply cylinders shall have a rated service pressure of not less than 2,400 psig at 70 degrees F. Cascade storage cylinders shall have a rated service pressure of not less than 3,600 psig at 70 degrees F. Note: Currently, there are no cylinder specifications in DOT regulations for CNG. Current documents covering these cylinders are DOT exemptions. These are single purpose documents issued to a single company for a specific CNG application.

- C. Pressure vessels and containers other than cylinders shall be manufactured, inspected, marked, and tested in accordance with the "Rules for the Construction of Unfired Pressure Vessels," "American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code, Section VIII (Division 1)."

- D. In addition to other marking requirements, cylinders shall be labeled with the words, "FOR CNG ONLY" in letters at least one inch high in a contrasting color and in a location which will be visible after installation. Decals or stencils are acceptable.

- E. Field welding or brazing for the repair or alteration of a cylinder or ASME pressure vessel is prohibited.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:751 and 752.

HISTORICAL NOTE: Promulgated by the Department of Natural Resources, Office of Conservation, Pipeline Division, LR 18:62 (January 1992).

§2523. Pressure Relief Devices

- A. Each fuel supply cylinder in vehicles shall be fitted with a pressure relief device in accordance with the following:
 - 1. pressure relief devices for cylinders shall be in accordance with Compressed Gas Association (CGA) Pamphlet -1.1 and be of the "Combination Rupture Disk Fusible Plug CG-5 "type in which the fusible plug has a nominal yield temperature of 212 degrees F;

 - 2. only one combination rupture disk-fusible plug shall be installed in any pressure relief device opening;

 - 3. the pressure relief device shall communicate with the fuel and be vented to the atmosphere by a method that will withstand the maximum pressure which will result;

4. the discharge flow rate of the pressure relief device shall not be reduced below that required for the capacity of the container upon which the device is installed;
 5. the pressure relief device on cylinders shall be permanently marked with the manufacturer's name, initials, or trademark, the temperature rating (212 degrees F) of the fuse plug, and the maximum pressure rating of the rupture disk.
- B. The minimum rate of discharge of pressure relief devices shall be in accordance with Compressed Gas Association (CGA) pamphlet S-1.1 (cylinders); S-1.2 (cargo and portable tanks); S-1.3 (storage cylinders); or the ASME Code, whichever is applicable.
- C. Pressure relief valves for CNG service shall not be fitted with lifting devices. The adjustment, if external, shall be provided with means for sealing the adjustment to prevent tampering by unauthorized persons. If at any time such seal is broken, the valve shall be removed from service until it has been reset and sealed. Any adjustments necessary shall be made by the manufacturer or his authorized representative(s).
- D. Each pressure relief valve shall be plainly marked by the manufacturer of the valve, as follows:
1. with the pressure in pounds per square inch (psi) at which the valve is set to start-to-discharge;
 2. with the discharge capacity in cubic feet per minute (cfm); or
 3. any other marking(s) as required by the Department of Transportation (DOT) or the ASME Code.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:751 and 752.

HISTORICAL NOTE: Promulgated by the Department of Natural Resources, Office of Conservation, Pipeline Division, LR 18:62 (January 1992).

§2525. Pressure Gauges

- A. Pressure gauges shall be designed for the normal pressure and temperature conditions to which the devices may be subjected with a burst pressure safety factor of at least four.
- B. Dials shall be graduated to read 1.2 times the operating pressure of the system to which the gauge is attached.
- C. A gauge shall have an opening not to exceed 0.055 inches (number 54 drill size) at the inlet connection.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:751 and 752.

HISTORICAL NOTE: Promulgated by the Department of Natural Resources, Office of Conservation, Pipeline Division, LR 18:63 (January 1992).

§2527. Pressure Regulators

- A. A pressure regulator inlet and each chamber shall be designed for its maximum working pressure with a pressure safety factor of at least four.
- B. Low pressure chambers shall provide for excessive pressure relief or be able to withstand the operating pressure of the upstream pressure chamber.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:751 and-752.

HISTORICAL NOTE: Promulgated by the Department of Natural Resources, Office of Conservation, Pipeline Division, LR 18:63 (January 1992).

§2529. Piping

- A. Pipe, tubing, fittings, gaskets, and packing material shall be compatible with the fuel under the service conditions.
- B. All tubing shall be a minimum of type 304 stainless steel. All tubing connections shall be made of manufactured multifarrel compression fittings.
- C. Piping, tubing, fittings, and other piping components between a cylinder or pressure vessel and the first shutoff valve shall be capable of withstanding a hydrostatic test of at least four times the rated working pressure without structural failure.
- D. Compressed natural gas piping shall be fabricated and tested in accordance with "American National Standard Code for Chemical Plant and Petroleum Refinery Piping," "American National Standards Institute (ANSI) B31.3." Such piping shall be "American Standard Testing Material (ASTM)" steel, Schedule 80, or better. All pipe fittings shall be forged steel stamped 6,000 psi or greater.
- E. The following components or materials shall not be used:
 - 1. fittings, street ells, and other piping components of cast iron or semi-steel other than those complying with "American Society for Testing and Materials (ASTM) Specifications A-536 (Grade 60-40-18), A-395, and A-47 (Grade 35018)";
 - 2. plastic pipe, tubing, and fittings for high pressure service;
 - 3. galvanized pipe and fittings;
 - 4. aluminum pipe, tubing, and fittings;
 - 5. pipe nipples for the initial connection to a cylinder or pressure vessel;
 - 6. copper alloy with copper content exceeding 70percent.

- F. Piping components such as strainers, snubbers, and expansion joints shall be permanently marked by the manufacturer to indicate the service ratings.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:751 and 752.

HISTORICAL NOTE: Promulgated by the Department of Natural Resources, Office of Conservation, Pipeline Division, LR 18:63 (January 1992).

§2531. Valves

- A. Valves, valve packing, and gaskets shall be suitable for the fuel over the full range of pressures and temperatures to which they may be subjected under normal operating conditions.
- B. Shutoff valves shall have a design working pressure not less than the rated working pressure of the entire system with a safety factor of four.
- C. Valves of cast iron or semi -steel other than those complying with "ASTM Specifications A-536 (Grade 60-40-18), A-395, and A-47 (Grade 35018)" shall not be used as primary shutoff valves.
- D. Valves of a design that will allow the stem to be removed without removal of the complete bonnet or disassembly of the valve body, and valves with valve stem packing glands which cannot be replaced under pressure shall not be used. Exception: where there is a shutoff valve of acceptable type between them and the container or pressure vessel (this does not apply to service valves).
- E. The manufacturer shall stamp or otherwise permanently mark the valve body to indicate the service ratings. Exception: fuel supply container valves need not be marked as such.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:751 and 752.

HISTORICAL NOTE: Promulgated by the Department of Natural Resources, Office of Conservation, Pipeline Division, LR 18:63 (January 1992).

§2533. Hose and Hose Connections

- A. Hose and metallic hose shall be of or lined with materials that are resistant to corrosion and the actions of compressed natural gas (CNG).
- B. Hose, metallic hose, flexible metal hose, tubing, and their connections shall be suitable for the most severe pressure and temperature conditions expected under normal operating conditions with a burst pressure of at least four times the maximum working pressure.
- C. Hose assemblies shall be tested by the manufacturer or its designated representative prior to use at pressures equal to not less than twice the service pressure.
- D. Hose shall be continuously and distinctly marked, indicating the manufacturer's name or trademark, CNG service, and working pressure. Metallic hose shall have a manufacturer's permanently attached tag marked with the manufacturer's name or trademark, CNG service, and working pressure.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:751 and 752.

HISTORICAL NOTE: Promulgated by the Department of Natural Resources, Office of Conservation, Pipeline Division, LR 18:63 (January 1992).

§2535. Compression Equipment

- A. Compression equipment shall be designed for use with compressed natural gas (CNG) and for the pressures and temperatures to which it may be subjected under normal operating conditions. It shall have pressure relief devices which shall limit each stage pressure to the maximum allowable working pressure for the cylinder and piping associated with that stage of compression.
- B. When CNG compression equipment is operated unattended, it shall be equipped with a high discharge and low suction pressure automatic shutdown control.
- C. Control devices shall be designed for the pressure, temperature, and service expected under normal operating conditions.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:751 and 752.

HISTORICAL NOTE: Promulgated by the Department of Natural Resources, Office of Conservation, Pipeline Division, LR 18:64 (January 1992).

§2537. Vehicle Fueling Connection

- A. A vehicle fueling connection shall provide for the reliable and secure connection of the fuel system cylinders to a source of compressed natural gas (CNG).
- B. The fueling connection shall be suitable for the pressure expected under normal conditions and corrosive conditions which might be encountered.
- C. The fueling connection shall prevent escape of gas when the connector is not properly engaged or becomes separated.
- D. The refueling receptacle on an engine fuel system shall be firmly supported, and shall:
 - 1. receive the fueling connector and accommodate the working pressure of the vehicle fuel system;
 - 2. incorporate a means to prevent the entry of dust, water, and other foreign material. If the means used is capable of sealing system pressure, it shall be capable of being depressurized before removal.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:751 and 752.

HISTORICAL NOTE: Promulgated by the Department of Natural Resources, Office of Conservation, Pipeline Division, LR 18:64 (January 1992).

§2539. External Corrosion Control

- A. All buried pipe and/or tubing must be protected against external corrosion as outlined in LAC 43:XIII.2107.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:751 and 752.

HISTORICAL NOTE: Promulgated by the Department of Natural Resources, Office of Conservation, Pipeline Division, LR 18:64 (January 1992).

§2541. Leak Survey

- A. Each operator of a CNG facility having underground piping shall conduct a leak survey each calendar year.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:751 and 752.

HISTORICAL NOTE: Promulgated by the Department of Natural Resources, Office of Conservation, Pipeline Division, LR 18:64 (January 1992).

§2543. Report of CNG Incident/Accident

- A. In case of an incident involving a single release of compressed natural gas (CNG) during or following CNG transfer or during container transportation, or an accident at any location where CNG is the cause or is suspected to be the cause, the person(s) owning, operating, or servicing the equipment or the installation shall notify the commissioner. This notification shall be by telephone as soon as possible after knowledge of the incident or accident. Any loss of CNG which is less than 1.0 percent need not be reported. However any loss occurring as a result of a pullaway must be reported. The telephone number to be used to report accidents is (225) 342-5505.

- B. Information which must be reported to the commissioner shall include:

1. date and time of the incident or accident;
2. type of structure or equipment involved;
3. resident's or operator's name;
4. physical location;
5. number of injuries and/or fatalities;
6. whether fire, explosion, or gas leak has occurred;
7. whether gas is leaking; and
8. whether immediate assistance from the commissioner is requested.

- C. Any person reporting must leave his/her name, and telephone number where he/she can be reached for further information.

- D. Any CNG powered motor vehicle used for school transportation or mass transit including any state-owned vehicle which is involved in an accident resulting in a substantial release of CNG or damage to the CNG conversion equipment must be reported to the commissioner in accordance with this Section regardless of accident location.

- E. Following the initial telephone report, a CNG Form 200, Report of CNG Incident/Accident, must be submitted to the commissioner. The report must be postmarked within 14 calendar days of the date of initial notification to the commissioner.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:751 and 752.

HISTORICAL NOTE: Promulgated by the Department of Natural Resources, Office of Conservation, Pipeline Division, LR 18:64 (January 1992).

**Revenue Ruling
No. 02-019
November 8, 2002**

Fiduciary Income Tax, Individual Income Tax, and Corporation Income Tax

Credit for Converting Vehicles to Alternative Fuel Usage

Purpose: The purpose of this Revenue Ruling is to clarify whether hybrid motor vehicles qualify for the credit for converting vehicles to alternative fuel usage.

Analysis/Discussion: A hybrid vehicle is one that combines a conventional fuel powered engine with an alternate fuel motor. A combining of the two creates greater fuel efficiency and produces fewer emissions than vehicles powered solely by a conventional fuel powered engine. The conventional fuel used in hybrids in the context of this ruling is either gasoline or diesel fuel.

In 1991, La. Rev. Stat. Ann. §§ 47:38 and 47:287.757 were enacted to provide an incentive to individuals and corporations who invest in qualified clean-burning motor vehicle fuel property. There are three categories of cost that are eligible for the credit:

- Cost related to the converting of certain vehicles to hybrid vehicles,
- Cost related to the manufacture of a hybrid vehicle, and
- Cost of the property that is directly and exclusively related to the delivery of an alternative fuel into the fuel tank of a vehicle.

This revenue ruling is only relevant in computing the credit using the cost in the first two categories.

In the first category, the cost of equipment installed in converting a motor vehicle that uses gasoline into a hybrid vehicle is eligible for the credit. The credit does not apply to the cost to convert vehicles that were diesel fuel powered.

In the second category, the cost of qualifying equipment installed by a manufacturer of hybrid vehicles is allowed in computing the credit. The cost used here is not limited in the statute to only hybrids that use gasoline powered engines. This allows the credit to be available on those hybrids that also use diesel fuel powered engines.

Conclusion: The cost of the equipment involved in converting to a hybrid vehicle or installed by a manufacturer of hybrid vehicles can be used to compute this credit. In the area of conversion of vehicles into hybrids, the cost of the equipment to convert those that were gasoline powered qualifies for the credit, but not the costs to convert those that were diesel powered. For vehicles built as hybrids by a manufacturer, it makes no difference as to the conventional fuel (gasoline or diesel) used. The credit is on the cost of the qualifying equipment originally installed on the hybrid vehicle.

**Revenue Ruling
No. 03-004
August 22, 2003**

Fiduciary Income Tax, Individual Income Tax, and Corporation Income Tax

Alternative Fuel Usage Credit for Low-Speed Vehicles

Purpose: This Revenue Ruling addresses the credit allowed a purchaser of a low-speed vehicle that is originally equipped to be propelled by an alternative fuel.

Facts: A taxpayer purchases a low-speed vehicle. It is a four-wheeled, electric-powered vehicle with a maximum speed of not less than twenty miles per hour but not more than twenty-five miles per hour and is equipped with the minimum motor vehicle equipment appropriate for vehicle safety. It can be operated on roadways where the posted speed limit is thirty-five miles per hour. It may cross roadways with a posted speed limit in excess of thirty miles per hour at an intersection.

Analysis/Discussion: Louisiana Revised Statutes sections 47:38 and 47:287.757 provide a credit against income tax for investing in qualified clean-burning motor vehicle fuel property. These statutes define alternative fuels to include any fuel that meets or exceeds federal clean air standards. In order to qualify for the credit, the motor vehicle must be registered with the Louisiana Department of Public Safety and Corrections. Act 986 of the 2003 Regular Session of the Louisiana Legislature amended and reenacted La. Rev. Stat. Ann. §§ 32:1(40), 408(C), 1301, and 1304(A)(1) and (2), and enacted La. Rev. Stat. Ann. § 32:300.1 relative to motor vehicles. With the passage of Act 986 a “low-speed vehicle” is included in the definition of “motor vehicle” and is required to be registered with the Louisiana Department of Public Safety and Corrections.

Because a “low-speed” vehicle is now included in the definition of a “motor vehicle” and is required to be registered with the Louisiana Department of Public Safety and Corrections, it may be eligible for the credit for converting vehicles to alternative fuel usage.

The credit is equal to twenty percent of one of the following four categories of cost that are eligible:

1. Cost related to the converting of a motor vehicle propelled by gasoline to be propelled by an alternative fuel, provided that such vehicle is registered with the Louisiana Department of Public Safety and Corrections,
2. Certain costs related to the purchase of a motor vehicle originally equipped to be propelled by an alternative fuel, provided such vehicle is registered with the Louisiana Department of Public Safety and Corrections,
3. Cost of property that is directly and exclusively related to the delivery of an alternative fuel into the fuel tank of a vehicle, and

4. 10% of the cost of a motor vehicle that is originally equipped with qualified clean-burning motor vehicle fuel property, provided that such vehicle is registered with the Louisiana Department of Public Safety and Corrections.

Because this revenue ruling only addresses the purchase of a vehicle that is originally equipped to be propelled by an alternative fuel, computing the credit using the cost in categories two and four are addressed.

Category two allows a credit of 20% of the cost of certain portions of a motor vehicle originally equipped to be propelled by an alternative fuel. Only the costs that are attributable to the storage of such fuel, the delivery to the engine of such fuel, and the exhaust of gases from combustion of such fuel are available for the credit.

In category four, if the taxpayer purchases a motor vehicle originally equipped to be propelled by an alternative fuel, and is unable or elects not to determine the cost necessary to use category two, the taxpayer may claim a credit in an amount not exceeding the lesser of 20% of 10% (in other words 2%) of the cost of the motor vehicle or \$1500.

Conclusion: Because a “low-speed” vehicle is now included in the definition of a “motor vehicle” and is required to be registered with the Louisiana Department of Public Safety and Corrections, it may be eligible for the credit for converting vehicles to alternative fuel usage. The amount eligible for the credit for vehicles originally equipped to be propelled by an alternative fuel is the cost of the equipment associated with storing the fuel, delivering the fuel to the motor, and removing exhaust from combustion of the fuel. The credit will be 20% of this amount.

If this information is not provided or the taxpayer elects not to determine the exact basis of such equipment, the credit is 2% of the cost of the vehicle, not to exceed \$1500.

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APPENDIX C. References

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