### Resolution Nr. 2768

PURSUANT TO File Nr. 7549 of ENTE NACIONAL REGULADOR DEL GAS (ENARGAS) Records, Law 24.076, Resolution ENARGAS Nr. 139/95, Resolution ENARGAS Nr. 2603/02 and Resolution ENARGAS Nr. 2629/02, and

#### WHEREAS:

On August 8, 1984 through Resolution Nr. 273/84, the SECRETARÍA DE ENERGÍA DE LA NACIÓN (*Argentine Energy Secretariat*) approved the safety regulations for the use and commercialization of compressed natural gas (CNG) in transport, set forth in Annex I (GE-N1-115/116/117/118/119).

Item 1.2.6.2.4 of standard GE-N1-115 Regulations; Definitions and Terminology; Specifications and Procedures) states "To affix the sticker in converted motor vehicles with the legend: "GAS Propelled".

Item 1.3.2, Part I, standard GE-N1-119 (Parking and Garages; Difficulties and Accidents; Instructions for CNG filling) states "In closed public places for parking vehicles using different fuels in their propulsion system, the area for CNG vehicles shall be identified with signs bearing the following text: "Gas fuelled vehicles".

Furthermore, item 1.1.3, Part II of said standard states "...parking areas of vehicles using different fuels in their propulsion systems must include a special parking area for CNG vehicles".

Part IV of said standard sets forth the guidelines for CNG filling at Stations and item 1 a) states "... check the approval sticker to identify the vehicle to be filled ...", and item 4 states "... bi-fuel vehicles, either converted or designed for using CNG must bear in their rear part, a sticker with the wording: "CNG propelled", indelibly and readily visible ..."

In 1992 and by virtue of the power granted by the so-called "Gas Law" (24.076), ENARGAS begins to control CNG as regards safety, quality and odorization.

Resolution ENARGAS Nr. 139/95 dated March 17, 1995 sets forth the mandatory use of the CNG fuel system identification sticker (hereinafter, sticker) with the number of its expiration date punched, and affixed at the top right end of the vehicle rear window.

Such sticker enables CNG filling to any duly qualified vehicle, indicating at the same that such CNG propelled vehicle be treated in compliance with the requirements of the pertinent technical regulations.

On May 23, 2002, the Regulatory Authority approved Resolution ENARGAS Nr. 2603, which among other things, sets forth the "Procedure for

conversion, annual inspection, modification, dismounting, withdrawal or reinstallation of Compressed Natural Gas (CNG) Fuel System in motor vehicles".

Furthermore, a site at ENARGAS webpage allowing disaggregated access to the CNG Centralized IT System (SICGNC) to Users, Installation Workshops (TdM), CNG Fuel System Suppliers (PEC) and Centers for CNG Cylinders Periodic Inspection (CRPC) and also to other Official Entities interested in the activity issues is enabled by means of a password.

On June 14, 2002, ENARGAS approved Resolution ENARGAS Nr. 2629 which in its Annex I, section B - SPECIAL REGULATIONS FOR CNG REFUELING STATIONS stated the following: "1) Persons responsible for Compressed Natural Gas dispensing shall verify, before refueling, that vehicles using said fuel in their propulsion system show the mandatory CNG Fuel System Identification Sticker affixed at the top right side of their windshields, issued according to the parameters set forth by Resolution ENARGAS 139/95", and "2) Non compliance with the obligation of showing the mandatory sticker stated hereinabove shall prevent dispensing fuel to the user".

In Memorandum GD Nr. 96/02 addressed to the Directors, different alternatives to identify a duly qualified CNG propelled vehicle and the inconveniences of not identifying it from the outside were assessed.

In Memoranda GD Nr. 104/02 and 110/02, the technical specifications for the design and supply of the mandatory stickers and identification labels and yellow cards, respectively, were provided to the Directors.

File ENARGAS Nr. 362 includes the Terms of Reference for the contract of stickers, labels and system's identification cards (yellow card) which were modified according to the supplier's recommendations and available technology.

Since the national currency devaluation of January 2002, the cost of an on-board CNG fuel system has drastically gone up, especially due to the sensitive increase in the natural gas cylinder price which resulted, in turn, in a greater amount of CNG cylinder related unlawful acts.

Furthermore, several sources have reported to ENARGAS that CNG users object to affixing the sticker on the windshield since it easily identifies CNG propelled vehicles and leaves them more vulnerable to thefts, tempting criminals to sell the cylinder and regulator independently from the vehicle for their reinstallation in another vehicle at a lower price.

It is worth mentioning that these practices jeopardize people's integrity during the unlawful act and in the subsequent use of the so-called "clandestine installations", i.e. CNG vehicle installations performed at

Installation Workshops not qualified by PEC. This poses a potential risk on public safety and, especially on users.

To discourage said unlawful acts, through Resolution ENARGAS Nr. 2603, ENARGAS has implemented the access to SICGNC that, among other things, made the CNG fuel system a registered, easily traceable element and accessible to different safety organizations.

In this way, a user who purchases used equipment shall be able to access the SICGNC through the Internet (www.enargas.gov.ar) so as to verify there are no inconsistencies in data supplied by the vendor and that the equipment has no thefts reported.

The conversion of the CNG equipment into a registered asset and the availability of theft records to the public at large prevent the reinsertion of stolen equipments in the system.

Resolution ENARGAS Nr. 2603/02 highlights the need to guarantee the supply of stickers as they relate the installation with the records of CNG propelled vehicles through their identification number.

It must be mentioned that the sticker is a Public Instrument provided by ENARGAS serving two main purposes:

➤ It identifies the CNG propelled vehicle to enable a more efficient action of firemen in case of accident and of people in charge of closed public

garages so as to determine an adequate location, also restricting the civil liabilities arising in case of incidents.

➤ It states the qualification validity necessary for CNG fueling and also allows easy identification - during procedures carried out by the security forces - of whether the vehicle installation is duly qualified.

It must be mentioned that the sticker enabling CNG equipment filling is characterized in that it tears apart upon removal, thus making its use in non-authorized vehicles impossible.

On the other hand, allowing refueling upon "showing the non-affixed sticker as if it were a card" would make it difficult to control its authenticity, in addition to the fact that sticker forgery phenomenon – method used to conceal stolen elements – calls for the reinforcement of safety measures in the system to protect the public at large and especially, the user.

Therefore, making the affixing of the sticker a non-mandatory issue would not deter criminals from easily finding an alternative way to identify vehicles fitted with CNG fuel system and thus commit their unlawful acts.

Since the present social situation is highly sensitive, the current thefts could turn into more violent ones in case criminals should have to select their victims in another way for stealing the CNG fuel system (for

example: approaching the vehicle drivers at the exit of a CNG Filling Station with firearms, forcing the trunks of different vehicle types "randomly", etc.).

Furthermore, it must be considered that original CNG propelled vehicles would not pass unnoticed either, since they are fitted with an external fueling valve that identifies them. There are approximately 40,000 vehicles with an external fueling system and this figure tends to increase.

Furthermore, we could mention other easily identifiable types of vehicles, regardless the fact that they have an external identification such as pickup trucks, vehicles with under chassis cylinders, vehicles which require a high gasoline consumption (as several old models) or light vehicles dedicated to certain types of work for which the only economic alternative is using CNG as fuel (taxis, chauffeur-driven cars, etc.). These types of vehicles plus the ones mentioned in the previous paragraph amount to 400,000 units.

It can be inferred from the previous considerations that the percentage of CNG propelled vehicles easily detected by criminals is very high.

Notwithstanding the above and besides the mandatory sticker identified from the outside, 100% of CNG propelled vehicles may be identified only by bending down and looking at the connections used for venting and piping.

It must be stated that inconveniences associated to theft of CNG propelled motor vehicles cannot be attributed to system failures or deficiencies but related to an economic and social reality that goes beyond CNG issues.

It must be stated that the sticker identification number is used, among other things, to query the SICGNC in order to obtain information about:

- ➤ the on-board CNG fuel system and its components;
- > the vehicle;
- > the owner;
- > the TdM and PEC involved.

Furthermore, its background color provides easy identification of the qualification due date, identifying at first sight, thanks to the addition of safety elements, whether the sticker is authentic or not.

On the other hand, and as indicated before, the sticker functions as an element for the identification of CNG propelled vehicles and thus contributes to the improvement of public safety.

Among other things, it provides easy identification in case of accidents requiring the intervention of firemen brigades or other public safety agencies as well as easy identification in closed public parking areas.

Furthermore, Resolution ENARGAS Nr. 2629/02 grants natural gas supply Distributors as primary comptrollers of CNG Filling Stations, the power to apply sanctions to them in case they do not verify, among others, that the sticker affixed on the vehicle windscreen is valid or authentic, before refueling.

The implementation of the SICGNC through said Resolution ENARGAS Nr. 2603/02 highlights the need of moving towards an intelligent system enabling controls of CNG propelled vehicles.

Through the fitting of electronic devices in the motor vehicle, this system would enable CNG fuelling from the dispenser without requiring any type of human intervention.

In case of adopting an intelligent system, the sticker affixed on the windshield, as evidence of the installation validity and adequacy, would not be necessary; however, the need of identifying the vehicle from the outside could not be avoided by virtue of the international and national technical standards. To specify the previous considerations, it must be stated that not only our national standards (GE-N1-115 and 119) state the obligation of identifying the type of fuel used in the vehicle by means of a weather resistant external label, for prevention at public closed parking lots or in case of an accident, but also other consulted regulations such as: NFPA 52 Compressed Natural Gas Vehicular Fuel Systems Code (USA), CAN/CGA-B149.4-M91 Natural Gas for Vehicles Installation Code (Canada), NBR 11353-1 Veículos rodoviários, Instlaco de gás metano veicular (GMV) of Brazil, Chilean Standard NCh 2109.of98; Specific Components of Motor Vehicles Using Compressed Natural Gas (CNG) in their Propulsion System E/ECE/324-2001 (European Commission) state the same requirements.

To maximize the efficacy of external identification, its location should be reconsidered, as experience has shown that in case of collision the destruction of the windshield renders the sticker useless for CNG propelled vehicle identification purposes.

As stated before, said consideration would facilitate the transition towards the adoption of an intelligent system, since upon implementation, the proposed label would continue being useful as external identification and the internal sticker would be replaced by an electronic device adopted in a near future.

As disclosed at the beginning of the clauses, Gas del Estado S.E. set forth that CNG propelled vehicles should have in a visible location a wording identifying them by means of a label affixed on the rear window, supplementing the CNG fuel system identification card usually referred to as "yellow card" required for fueling.

Both functions stated in the previous paragraph were combined into one single function implemented by means of the sticker defined in Document Nr. 6, Annex IV, Resolution ENARGAS Nr. 139/95.

Item 11, Annex I of said Resolution stated that the installer shall place the numbered sticker with the number of its expiration month punched, at the top right end of the vehicle windshield.

Briefly, as the current sticker contains the necessary requirements for identifying the vehicle and the ones required for its fueling, the new system to be implemented on the next year is intended to be the intermediate stage in the implementation of an intelligent system.

This system would record all vehicle and on-board CNG fuel system data, enabling identification of all their components and disqualifying fueling in case of specific conditions which may jeopardize public safety.

In this way, a more efficient control would be facilitated in respect to: TdM, PEC, Manufacturers, Importers, Filling Stations, CRPC and

Certification Organizations; generating compliance by users of safety inspections required by the regulations in force, also avoiding the inclusion of suspicious elements in the system and the use of "forged" stickers.

The current CNG market conditions anticipate a high increase of CNG propelled motor vehicle fleet due to the remarkable price difference between CNG and liquid fuels and the government's decision of encouraging its use so as to obtain liquid fuels exports balances.

In that respect, it is necessary to enhance the CNG Centralized IT System (SICGNC) implemented through Resolution ENARGAS Nr. 139/95 so as to facilitate its transition to an intelligent system enabling improved activity controls through the exchange of information provided by each person or legal entity involved in the system regarding each vehicle installation. Through this purpose set forth in Resolution ENARGAS Nr. 2603, CNG equipment becomes a registered asset.

The availability of registries of stolen elements in ENARGAS website aims at preventing their qualification, making the information available to users and Official Entities which can use it to carry out the corresponding administrative steps.

Encouragement of CNG use for freight and passengers' public transport, and the use of liquefied petroleum gas (LPG) as propulsion system

of motor vehicles currently promoted by the National Government through the respective areas must be highlighted.

If LPG use in motor vehicles is implemented, there would thus be two alternative fuels for motor vehicle use requiring external identification, besides traditional liquid fuels.

Same as in other countries which already use different alternative fuels, each fuel should have its own identification since it exhibits different properties that should be considered in case of an accident and/or as regards parking requirements.

To that effect and as previously stated, ENARGAS duly assessed different alternatives which, without neglecting the achieved safety standard, would allow them to assess the possibility of eliminating the windscreen affixed sticker and adopt the criteria implemented by countries using alternative fuel systems around the world.

Regarding refueling requirements, the mandatory sticker that should be affixed somewhere inside the vehicle at all times should include safety characteristics and functions similar to those of current stickers.

Therefore, it would be convenient to divide the sticker functions, one internal sticker enabling CNG filling and one external sticker identifying the alternative fuel used.

On the other side, the enforcement of Resolution ENARGAS Nr. 2603/02 favored the increasing involvement of security public forces in control operations of CNG system related to documentation which identifies the installations on motor vehicles propelled with said fuel.

This is illustrated by the permanent request of information to ENARGAS by the Argentine Federal Police, provincial Police departments, National Security Forces (National Border Guard and Argentine Coast Guard), Judicial Entities and Public Ministry Agencies, among other issues, related to the documentation authenticity (sticker and yellow card).

Therefore, it must be mentioned that at present each PEC develops its own CNG equipment identification card (Yellow card) which makes authenticity verification difficult due to design heterogeneity.

Therefore, considering the existence of forged documentation (by virtue of those information requests), it is necessary to adopt supplementary measures to favor control actions.

Therefore, ENARGAS believes it is the right time to provide a standardized format for the new yellow cards which shall include safety and inviolability systems to enable their identification and distinction from forged ones.

Based on the previous considerations, this Control Entity considers that there are two alternatives for defining location of the sticker which indicate validity and suitability of the on-board CNG fuel system:

- on the inner side of the hood (preferably) when the fueling valve is inside the engine compartment, or
- on the vehicle's left central strut (driver's side) when it cannot be placed on the inner side of the hood or when the fueling valve is installed outside the engine compartment.

In the abovementioned cases, the sticker must be located so that it is easily seen by the fueling operator and on a smooth and flat surface.

On the other hand, the adequate location for the external identification label must be the vertical or near vertical surface of the vehicle's rear part right end or if not possible, it will be placed on the inner side of the rear window right lower angle.

The external identification label characteristics are specified in Annex I, Document Nr. 2 of this Resolution.

As previously stated, the aim of splitting the functions of fueling and identification requirements, specially the last one, will facilitate the intervention of the security forces (police, firemen, civil defense, etc.) in case of accidents in the street or in closed public garages.

Furthermore, it will enable identification of CNG propelled vehicles so as to adopt the pertinent preventive measures and to differentiate them from future LPG propelled vehicles which would also have a similar identification.

The TdM must place a new external identification label at every annual inspection or in case of any other type of operation requiring the installation of a new mandatory sticker and also when the external label is deteriorated.

In those cases, it shall keep the pertinent notice to the user about the user's civil and/or criminal liabilities in case he removes said label.

ENTE NACIONAL REGULADOR DEL GAS is empowered to sign this Resolution by virtue of the stipulations contained in section 42 of the National Constitution and section 52 subsections a), b) and x) of law 24.076

Therefore;

# THE ENTE NACIONAL REGULADOR DEL GAS BOARD OF DIRECTORS RESOLVES:

Section 1 – To repeal provisions of Section 11, Resolution ENARGAS Nr. 139/95.

Section 2 – CNG Fuel System Suppliers, through their qualified Installation Workshops, shall place the mandatory Sticker enabling CNG fueling according to the regulations in force upon qualification, in vehicles propelled by: bi-fuels (gasoline-natural gas); dual-fuel (gas oil-natural gas) or natural gas dedicated vehicles:

- a) on the inner side of the hood (preferably) when the fueling valve is inside the engine compartment, or
- b) on the vehicle's left central strut (driver's side) when it cannot be placed on the inner side of the hood or when the fueling valve is installed outside the engine compartment.

In both cases, it shall be affixed on a smooth and flat surface, away from heat sources and, in the first case, near the fueling valve, and it will be positioned so as to be easily viewed by the fueling operator.

Likewise, according to national and foreign regulations, an external identification label to differentiate the natural gas propelled vehicle shall be affixed on the vertical or near vertical surface of the vehicle's rear part right end above its bumper or, if not possible, it shall be placed on the right lower angle of the rear window, in its interior.

CNG fuel system users whose vehicles have complied with the controls required by the regulations in force shall also have a CNG Fuel System Identification Card (yellow card).

ENARGAS shall deliver the stickers, labels and yellow cards to PECs and this Control Authority shall determine the sale price on a yearly basis.

Section 3 – To substitute the sticker model of Annex IV, Resolution ENARGAS Nr. 139/95 by the one included in Annex I, Document Nr. 1 of this Resolution.

Section 4 – To substitute the CNG fuel system identification card (yellow card) model of Annex II, Documents Nr. 1 and 2, Resolution ENARGAS Nr. 2603/02 by the one included in Annex I, Document Nr. 3 of this Resolution.

Section 5 – To substitute in Item A. 11 Annex I, Resolution ENARGAS Nr. 2603/02, quote "... the Installation Workshop shall place the Sticker on the top right side of the motor vehicle windshield ...", by "... the Installation Workshop shall place the sticker on the inner side of the hood (preferably) when the fueling valve is inside the engine compartment, or on the vehicle's left central strut (driver's side) when it cannot be placed on the inner side of the hood or when the fueling valve is installed outside the engine compartment. In both cases it shall be affixed on a smooth and flat surface,

away from heat sources and, in the first case, near the fueling valve. The sticker will be positioned so as to be easily viewed by the fueling operator.

Likewise, according to national and foreign regulations, an external identification label to differentiate the natural gas propelled vehicle shall be affixed. It shall be affixed on the vertical or near vertical surface of the vehicle's rear part right end above its bumper or, if not possible, it shall be placed on the right lower angle of the rear window, in its interior".

Section 6 – To substitute in Annex I, Item C.1.1 of Resolution ENARGAS Nr. 2603/02, quote: "The sticker is affixed to the windshield" by "The sticker is affixed on the inner side of the hood or on the left central strut (driver's side)", and in Annex I, Item C.2.2 of said Resolution, quote: "The sticker is not affixed to the windshield" by "The sticker is not affixed on the inner side of the hood or on the left central strut (driver's side)".

Section 7 – Text substituted in Section 6 shall be valid until the sticker is affixed according to the stipulations of Section 2 of this Resolution.

Section 8 – To substitute the provisions contained in item 1), item B - SPECIAL REGULATIONS FOR CNG REFUELING STATIONS, Resolution ENARGAS Nr. 2629/02 by "1) Persons responsible for compressed natural gas dispensing shall verify, before refueling, that vehicles using said fuel in

their propulsion system show the mandatory sticker affixed on the inner side of the hood or on the vehicle's left central strut (driver's side)."

Section 9 – Texts substituted in Section 8 shall be valid until the sticker is affixed according to the stipulations of Section 2 of this Resolution.

Section 10 – To substitute item 1.2.6.2.4. of standard GE-N1-115 by "To affix the sticker on the inner side of the hood (preferably) when the fueling valve is inside the engine compartment, or on the vehicle's left central strut (driver's side) when it cannot be placed on the inner side of the hood or when the fueling valve is installed outside the engine compartment. In both cases it shall be affixed on a smooth and flat surface, away from heat sources and, in the first case, near the fueling valve. The sticker will be positioned so as to be easily viewed by the fueling operator.

Likewise, according to national and foreign regulations, an external identification label to differentiate the natural gas propelled vehicle shall be affixed. It shall be affixed on the vertical or near vertical surface of the vehicle's rear part right end above its bumper or, if not possible, it shall be placed on the right lower angle of the rear window, in its interior".

Section 11 – To substitute item 1 a) Part IV of standard GE-N1-119 by "Vehicles using natural gas in their propulsion system shall prove their

qualification for fueling by a mandatory Sticker placed according to the stipulations of Section 2 of this Resolution".

Section 12 – To substitute item 4, Part IV of standard GE-N1-119 by "Vehicles propelled by: two fuels (gasoline-natural gas); bi-fuel (gas oil-natural gas) or natural gas dedicated motor vehicles must be identified by an external label enabling to differentiate the natural gas propelled vehicle. It shall be affixed on the vertical or near vertical surface of the vehicle's rear part right end above its bumper or, if not possible, it shall be placed on the right lower angle of the rear window, in its interior".

Section 13 – CNG Fuel System Suppliers shall implement the necessary means so that they only use the yellow card supplied by ENARGAS as of the enforcement of this Resolution.

Section 14 – To communicate the conclusions of this Resolution to the Natural Gas Distributors Service so that they duly notify each Filling Station in their corresponding area.

Section 15 – To communicate the stipulations hereof to the Secretariat of Internal Security and through it, to the Argentine Federal Police, National Border Guard and Argentine Coast Guard; to the Government of the Autonomous City of Buenos Aires; Provincial Governments and through them,

to their Town Councils and Police Departments; and also to the Federal Administration of Public Revenue and the National Insurance Superintendency.

Section 16 – This Resolution shall be in force as of January 1, 2003.

Section 17 – Communicate, publish, deliver to the NATIONAL BUREAU OF OFFICIAL REGISTRY and file.

RESOLUTION ENARGAS Nr. 2768

#### ANNEX I

### Document Nr. 1

## **CNG FUEL SYSTEM QUALIFYING STICKER**

- ◆ Colors: Background will vary according to the year of expiration.
- ◆ Sticker Nr.: The number shall be made up of seven digits plus a slash and two additional digits corresponding to the year of issue.
- Expiration: It shall indicate the year and be printed on the sticker's center.
- Month: It shall comprise twelve boxes numbered from one to twelve and the one coinciding to the month in which the operation is carried out will be punched.
- Safety: It must be rendered useless in case of removal.



## ANNEX I

## Document Nr. 2

# IDENTIFICATION LABELS FOR CNG PROPELLED VEHICLES

Background color will be blue; the stripe and letters will be silver or white. It shall be highly weather-resistant.



#### ANNEX I

#### Document Nr. 3

# ON-BOARD CNG FUEL SYSTEM IDENTIFICATION CARD (YELLOW CARD)

- ◆ Data at the front:
- Vehicle's license plate.
- Sticker Nr.
- Vehicle's make and model.
- Document type and number.
- Pressure Regulator homologation code.
- Regulator Serial Nr., specifying if it is new (N) or used (U).
- Cylinders homologation code.
- Cylinder Serial Nr., specifying if it is new (N) or used (U) and its expiration date (month/year).
- Type of operation (conversion, annual inspection or modification).
- Qualification expiration date.
- TdM identification code.

- At the right lower part it shall bear ENARGAS Isologotype which shall be made up of: National Coat-of-Arms Isotype, and logotype and Logotype legend ENARGAS - Ente Nacional Regulador del Gas.
- ♦ Captions at the back:
- MAXIMUM FILLING PRESSURE 200 BAR
- Driver: for refueling you must:
- Stop the engine.
- ♦ Turn off the lights.
- ♦ Instruct vehicles passengers to get.
- ♦ Not smoke.
- "I do hereby certify data authenticity and that the on-board conversion equipment complies with standards GE-N1-115/116/117".
- It shall have a free space for the signature of the Technical Representative and for stating the place and date of approval.
- It shall have a free space to include Fuel System Supplier data (Name, address, telephone number and ENARGAS License Nr.)

- It shall have a free space (rectangle) for affixing a stamp, if applicable, according to ENARGAS instructions.
- It shall state "In case of doubts, complaints or loss of this document, contact the Technical Representative of the corresponding company".
- It shall bear a consecutive and correlative number of eight digits at the left lower angle.
- Colors: Background color shall be yellow; black letters; and the free space for "Expiration date" and the background of "MAXIMUM FILLING PRESSURE 200 BAR" will be highlighted in red.
- The card shall have safety elements to avoid frauds or improper use.
- ◆ The PEC shall fill-in each field information and no crossing outs or erasures shall be allowed.
- For a later use of the field bordered with dotted lines, the PEC shall protect the cards completed during the year 2003 inside a transparent plastic envelope to avoid their wear and as of the year 2004 they will be provided laminated.

• This is the model of the cards to be supplied by ENARGAS to PECs.

