

# The Terminals (Gas Stations) for Carburant Distribution in SEVESO 3 Conception

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## Abstract

*The terminals (Gas Stations) for carburant distribution are work points organized for en detail sales of carburant and oils. These oils are designated to vehicles running and maintenance: gasoline, diesel, motor and transmission oils, and greases.*

*The gas stations have shops with auto spare parts and accessories, food as well as other pre-wrapped goods. Depending on the market requirements, the gas stations also sell LPG auto. Some gas stations have car wash locations.*

*The gas stations are located inside or outside the cities or towns, on roads with intensive traffic and important selling.*

*The safety conditions for users will be realized by arranging the objects taking into account the protection measures against fire or explosion, according to the regulations into force.*

**Key words:** *performance, risk, security, protection, management system*

## Preamble

For designing, execution and running of the terminals (gas stations) oil distributions, the measures, conditions and performance levels will be established according to the following normative provisions: “Normative for designing, execution, operation, decommission and post-using of the gas stations” (revision and joining with NP 004/1-99) and other specific regulations, to ensure implementation of the compulsory quality requirements provided by Law no. 10/1995, regarding:

- a) resistance and stability;
- b) safety running;
- c) fire safety;
- d) hygiene, people health, environment protection and reconstruction;
- e) thermal, waterproof isolation and economy saving;
- f) protection against noise. [1]

## **Classification of the Terminals (Gas Stations) for Carburant Distributions**

Despite the storage type, a *fixed gas station* has the following components:

- the carburant storage, with one or more tanks, having the discharge openings mounted directly on the tanks or grouped, in pits;
- the pumps platform for carburant distribution and the respective ceiling;
- the gas station cabin;
- hydrocarbons separator;
- access ways and parking, if the case;
- utilities systems.

*The movable gas station* has one or more containers and the access ways and parking, if the case. The container has three distinctive locations:

- a location for carburant tank (for gasoline and/or diesel);
- a location for pumps from the oil car to the;
- a location for the gas station personnel (the cabin or the operational personnel);
- the container has also an external bay where the distribution pump is located.

Optionally, within a gas station, could be:

- a shop for auto spare parts, oils, and/or food or other goods;
- car wash;
- car maintenance (air-water);
- motor service workshop;
- LPG refueling systems;
- oil changes locations i;
- locations for gas cylinders selling;
- public alimentation, bar, fast food or restaurant;
- accommodation, motel, hotel, with or without location for public alimentation;
- parking for large vehicles.

The terminals (gas stations) must have technological installations, equipment and minimal endowments necessary for:

- safety storing and delivering of the carburant;
- maintaining of physical-chemical features for the stored carburant, checking the parameters regarding their quality;
- running of the installations in safety conditions for the personnel, users and environment;
- a low level of the environment pollution;
- fire fighting.

The equipments and systems within the gas stations must be adequate for the distributed carburant, must be homologated, certified and, if the case, recognized according to the regulations into force. [1]

## Implementation of the Security Management System in SEVESO Conception

The policy for preventing the major accidents (Article 7) from Directive 96/82/CE with changes and additions by Directive 2003/105/CE, stipulates:

*“The Member States will ask the operator to elaborate a document in order to establish its policy for preventing the major accidents and to guarantee the correct implementation. The preventing policy for a major accident established by an operator will be designated to ensure a high level of personnel, people and environment protection using appropriate management means, structures and systems”.* [2]

The Security Management System must be implemented in order to ensure the fulfillment of the intervention objectives and principles defined by the policy of preventing the major accidents. This:

- a) defines and founds the policy, the objectives and the commitments;
- b) guarantees that the policy is understood, implemented and sustained at all levels;
- c) checks the objectives and establishes the corrective actions.

The Security Management System has to include the part from the general management system referring to the organizational structure, tests, procedures and resources and has to be implemented according to the international standard regarding the management system (ISO 14001).

The Management Security System could include some general objectives regarding quality, safety and hygiene at the workplace, environment protection but it will also explicitly include all the elements regarding elaboration and implementation of the policy for prevention of accidents. This system will include:

- the policy;
- the organization and the personnel;
- the identification and the assessment of the major dangers;
- the operational control;
- the management for changes/modernization;
- the planning for emergencies;
- the performance monitoring;
- the audit and revision.

The technical elements of the security management system and the organization complexity will be designed according to the employees' number and the complexity of the installation. [2]

## References

1. *“Normative for designing, execution, operation, decommission and post-using of the gas stations”* (revision and joining with NP 004/1-99).
2. *GUIDE for implementation of the security management system according the SEVESO directives.*

## Terminalele (stațiile) pentru distribuția de carburanți în viziunea SEVESO 3

### Rezumat

*Terminalele (Stațiile) de distribuție carburanți sunt puncte de lucru organizate pentru desfacerea cu amănuntul a carburanților și lubrifianților, destinați funcționării și întreținerii autovehiculelor: benzine, motorine, uleiuri de motor și de transmisie, unsori.*

*Stațiile dispun de magazine, în incinta cărora se comercializează piese și accesorii auto, produse alimentare, precum și alte bunuri de larg consum preambalate. De asemenea, în funcție de cerințele pieței locale, stațiile de distribuție carburanți comercializează la pompă GPL Auto. Unele stații sunt dotate și cu spălătorie auto.*

*Stațiile de distribuție carburanți sunt amplasate în interiorul sau în afara municipiilor și orașelor, pe artere cu circulație auto intense ca vad comercial important.*

*Condițiile de siguranță ale utilizatorilor se vor realiza prin dispunerea obiectelor din incintă cu asigurarea măsurilor de protecție corespunzătoare pericolului de incendiu sau de explozie, potrivit reglementărilor în vigoare.*