**MINISTRY OF TRANSPORT, INFORMATION TECHNOLOGY AND COMMUNICATIONS   
 EXECUTIVE AGENCY “MARITIME ADMINISTRATION”**

**ORDER № 93**

Sofia, 02.12.2015

Pursuant to the recommendations of the International Maritime Organization set out in the Resolution. 1050 (27) and in order to protect the life and health of persons, on the basis of Article 362 of the Merchant Shipping Code,

**ORDER:**

**I prohibit the entry into enclosed spaces of ships covered by this Order without fulfilling these requirements or without a document issued by an authority/authority authorized to assess the atmosphere in enclosed spaces.**

This sets out the order, obligations, responsibilities and documentation of the implementation of procedures for entry into enclosed spaces of maritime merchant ships.

**I. General provisions**

**1. Area of application**

This Order applies to:

* 1. all ships flying the Bulgarian flag, their crews and their shipowners;
  2. persons carrying out repair activities (without ship repairs or­shipyards), inspections, inspections and loading and unloading activities of Bulgarian ships,
  3. foreign ships when in the ports of the Republic of Bulgaria.

*Meaning of terms and abbreviations used:*

* ‘enclosed spaces’ means spaces having any of the following: — limited openings for entry and exit, insufficient ventilation and are not intended for continuous occupation by workers and include, without being an exhaustive list, cargo spaces, double bottom, fuel and ballast tanks, cargo pump spaces, cargo compressor spaces, empty spaces, boilers, engine crankcases, sewage tanks and adjacent spaces.
* ‘adjacent connected space ’ means such a space that is not normally ventilated, is not used for loading, but could have the same atmosphere as the adjacent enclosed space, as approaches to cargo spaces, etc.
* ‘competent person’ means a person with the necessary theoretical knowledge and practical experience who is able to make an informed assessment of the likelihood of the presence of a dangerous atmosphere or subsequently nascent conditions in the enclosed space.
* ‘responsible person’ means a person authorised to issue a permit to enter a confined area and having sufficient knowledge of established procedures to ensure safe entry.
* ‘on-call’ means a person who is properly prepared within the safety management and pollution prevention system and carries a stand-by duty to the entrance of a confined space, over the persons who enter it, maintains communication with them and activates the fallback procedure in the event of an incident.
* ‘contractor’ means a person trained in accordance with the safety and pollution prevention system for entering and working in enclosed spaces, means of communication, safety measures.
* ‘Threshold Limit Values (TLV)’ means limit values for the concentration of a substance in the air measured in parts per million per volume of air,
* LFL (Lower flammable limit) — lower flaming limit (level),
* PEL (Pre-entry level) — gas concentration level prior to entry into space.

1. **Responsibilities**
   1. *Shippers>holders/operators are obliged to*

* adopt a strategy to prevent incidents when entering enclosed spaces of their ships,
* carry out a risk assessment and each vessel to determine the enclosed spaces and periodically famine for its compliance,
* on the basis of the order, ensure on board their ships, as part of the safety and pollution prevention management system, procedures for entry into enclosed spaces,
* provide the necessary equipment and supplies necessary for safe entry into enclosed spaces,
* rules for the preparation and training for the use of instruments for checking the atmosphere in enclosed spaces,
* ensure that competent and responsible persons and crew members are trained to carry out this activity,

the safety management and pollution prevention system regulates the preparation of crew on board the ship and training. Training schedules shall be provided for no less than once every 2 months with crew members entering enclosed spaces and persons ensuring the safety of those entering. The elements to be worked out during training shall not be less than those provided for in paragraph 3.6.2 of Regulation 19, Chapter III of SOLAS. Ensure documentation of drills as provided for in the safety management and pollution prevention system

* 1. *The masters of the Bulgarian ships* are obliged to comply with the rules of this Order, as well as to prevent the entry of persons of the crew or persons external to the ship without complying with the requirements of the company’s order/procedures or without having a document from a coastal organisation authorised to carry out an inspection and issue an atmosphere safety document in the enclosed spaces.
  2. *The chief assistant master or other person authorised* by the master shall maintain the documentation of ventilation, preparation, organisation and allow entry into enclosed spaces. The period for keeping the documentation on board the ship shall be laid down in the Ship Safety and Pollution Prevention System, but shall not be less than 3 years.
  3. *The officers of EA “Maritime Administration” and all persons authorised* to carry out surveys for certification or inspection of Bulgarian and foreign ships shall enter enclosed spaces after completion of the procedure for entry into enclosed spaces of the ship’s safety management system, which complies at least with Resolution A.1050 (27) of the International Maritime Organisation.

When carrying out surveys of the company and of a ship, the employees of the Executive Agency Maritime Administration shall check at least for the presence in the management system of the company and of the ship for the existence of procedures governing; — carrying out the risk assessment, determining the responsibilities of crew members, crew training and training, rules for entering enclosed spaces, maintaining the means of measuring the quality of the atmosphere, documenting and process.

**II. Procedure for preparation, entry into enclosed spaces and documentation**

The process of permitting access to/entry into enclosed spaces goes through the following stages: 1. planning the entry; 2. risk assessment; 3. Instructions of the incoming persons; 4. carrying out checks on a checklist; 5. issuance of a written permit according to a form; 6. actions during the stay in the enclosed space; 7. storage of documents and control.

1. **Planning for safe entry into enclosed spaces**

*3.1.General provisions*

* + 1. The company must have an approved strategy to prevent accidents when entering enclosed spaces.
    2. The company must ensure that the procedures for entry into enclosed spaces with regard to the safety of personnel (crew) and ship are in accordance with Part “A” paragraphs 7 and 8 of the “International Management Code for the Safe Operation of Ships and for Pollution Prevention”.
    3. The company shall develop drill procedures, in accordance with Part “A” paragraph 8 of the “International Management Code for the Safe Operation of Ships and for Pollution Prevention”, using indoor atmosphere meters, duly tested and calibrated, as well as a timetable for periodic training of crew on board the ship.
    4. Competent and responsible persons shall be properly trained to identify hazards when entering enclosed spaces, to develop, measure, manage and eliminate hazards, in accordance with the standards set out in Resolution A. 1050 (27).
    5. The crew must also be properly trained in accordance with on-board procedures.
    6. The relevant internal and external audits of the Ship Safety and Pollution Prevention System shall establish that the procedures comply with the company’s established safety strategy (according to point.3.1.1).

*3.2. Stages of planning*

* + 1. The master of the vessel shall inform the master and chief engineer officer of the imminent entry into an enclosed space and the need to ventilate enclosed spaces of the ship, personally coordinating the operation.
    2. On the basis of the instructions given by the master, the master shall prepare a plan for venting the spaces, which the master shall review for compliance.
    3. When preparing the plan, the space volumes, the ventilation method, the performance of the selected ventilation system, the gas concentration, the shape of the spaces, etc., as described in the ship’s safety management and pollution prevention system, shall be taken into account.
    4. The plan also describes the selected method of degassing and ventilation, examination and verification of the control equipment (measuring oxygen content and concentration of incendiary and poisonous gases and vapours, etc.), protective equipment and communication equipment (respiratory apparatus, anti-chemical clothing, life belts and ropes, portable means of communication).
    5. When it is necessary to enter enclosed spaces in order to ensure safety, a preliminary assessment of the potential hazards in the room to be entered shall be carried out in accordance with paragraph 6 of this Order.
    6. The type and means of ventilation shall comply with the requirements of fire and explosion safety, depending on the type of enclosed space and the gas environment in it.

1. *Risk assessment*
   1. The company must have carried out a risk assessment when entering all enclosed spaces and have an up-to-date document on board the ship in accordance with Part A, paragraph 1.2.2.2 of the International Management Code for the Safe Operation of Ships and for Pollution Prevention.
   2. The competent person must always carry out a preliminary assessment of the potential hazard in the space to be entered, taking into account previous or present load, ventilation and other factors. This preliminary assessment shall identify the potential for a lower or higher oxygen, flammable or toxic atmosphere. It should be borne in mind that ventilation procedures for adjacent connected and enclosed spaces may be different.
   3. The procedures for testing the atmosphere on the basis of the preliminary assessment should be applied where:

* there is even minimal risk to the health and life of staff; or
* there is no immediate risk to health and life, but there could be a risk during work in the enclosed space; or
* there is a certain risk to health and life.
  1. Where the preliminary assessment reveals even a minimal risk to health and life, or that such risk may occur in the course of work, the precautions provided for in any of points 6, 7, 8, 9 or 10 must be applied.
  2. During the assessment, the room is considered dangerous until it is established that it is safe to enter.

1. *Instructing the Incoming*
   1. Senior Assistant Master or Chief Engineer shall be responsible for carrying out the necessary briefing of persons who will enter the confined space, as well as duty and rescue crew.
   2. The briefing must contain the purpose of entry, precautions, protective equipment (clothing and equipment), communication issues and, last but not least, emergency response.
   3. The briefing of the persons referred to in item 5.2 shall be documented and the persons instructed shall be signed for the instruction.

*6. Pre-entry checks*

* 1. *General Provisions*
     1. The checks shall be carried out in accordance with a checklist — Annex No 1.
     2. In order to ensure safety, the master shall appoint a competent person (principal engineer/master) who must carry out a preliminary assessment of the potential hazards in the room to be entered.
     3. This preliminary assessment shall be carried out in accordance with the following conditions:
* the competent person must wear an insulating apparatus and, where dangerous substances are likely to be present, wear chemical clothing;
* the insulating apparatus of the competent person shall be pre-checked according to the requirements set out in the checklist;
* compliance with all requirements of the relevant procedure by the safety management system.
  + 1. When carrying out the preliminary assessment, the competent person shall take into account the previous cargo carried, ventilation of the room, surface covering of the room and other relevant factors. The preliminary assessment of the competent assessor shall determine the possibility of an oxygen deficiency, flammable or toxic in the atmosphere of the specific enclosed facility.
    2. If it is found that there is a minimal risk to health or life, or there is a possibility of creating a risk at work, the precautions described below must be followed, if possible.
    3. Where, according to the preliminary assessment, there is a risk to life or health, and if entry is necessary, additional measures described below must be taken.
  1. *General precautions*
     1. All approaches (doors, hatches, shutters) to the enclosed space shall at all times be protected against unauthorised entry,
     2. Doors, hatches, shutters, open for ventilation of the room must be marked and protected by a mechanical barrier to prevent accidents.
     3. The master or the responsible person shall establish whether it is safe to enter the enclosed area, making sure that:
* all potential hazards have been assessed and eliminated as far as possible;
* the space is ventilated (naturally or mechanically) to remove toxic and flammable gases and vapours and the oxygen level is satisfactory throughout the room volume;
* the atmosphere has been verified by a duly calibrated instrument, and oxygen and other gas levels are within acceptable limits (within safety standards).
* the space is provided for entry and secured, sufficiently well lit;
* the pre-entry communication system has been tested;
* the provider is instructed to stay at the entrance of the room while there are people in it;
* is placed beside the entrance, ready for use, — pre-determined rescue equipment, including medical for the restoration of vital functions;
* incoming personnel are properly dressed and equipped for entry and work;
* a written authorisation and authorisation to enter has been issued in the form of Annex No 1.
  + 1. Only trained personnel can be assigned to enter enclosed spaces, as well as to be engaged in insurance and rescue obligations. The ship crew with first aid and rescue duties must train periodically, and training must include:
* identification of the potential danger when entering enclosed spaces;
* knowledge of the symptoms and the health-harming effect of exposure to the hazardous effects of the environment during entry;
* knowledge of personal protective equipment and equipment.
  + 1. Equipment used for entry into enclosed spaces shall be kept at all times in standby and in good condition. The same shall be duly inspected before entry.
  1. *Checks of the atmosphere in an enclosed space*
     1. An appropriate atmospheric test should be carried out by a qualified person with a duly calibrated instrument following the instruction of the instrument manufacturer. The test should be done immediately before a person enters the confinement and then at regular intervals until work is completed. Where possible, it should be carried out at different levels in the room. In cases where a test is not possible without entering the room, an assessment of the risk of such entry shall be carried out and, where possible, the use of flexible hoses or fixed sampling devices installed.
     2. For the purpose of entry, the following constant values shall be achieved: 21 % oxygen content by volume — measured by an apparatus for measuring the oxygen content;
* not more than 1 % of the LFL measured with an appropriate, sensitive indicator of the concentration of flammable gases, where the preliminary risk assessment has shown that flammable gases or vapours may be present;
* not more than 50 % of the lowest limit for toxic vapour and gas content according to their type (safety measures and their qualities).

If the above values are not achieved, additional ventilation should be carried out, with subsequent measurements at appropriate intervals.

* + 1. Any test of the atmosphere should be performed after the ventilation and stabilization of the atmosphere in the room has stopped.
    2. Where the preliminary assessment indicates a potential danger of toxic gases or vapours, stationary or portable instruments should be used to test the lower limits. It should be borne in mind that a self-ignition test and the presence of oxygen does not give any indication of the presence of toxic gases and vapors, or vice versa.
    3. It should be noted that in some cases lack of sufficient oxygen can be derived from the specifics of the interior structure of the room, as well as the coating of tanks, the presence of cargo residues and other factors, as well as where it is not possible (due to the specifics of the structure) to supply external ventilation.

1. *Issuing an Entry Permit*
   1. Permission to enter (completed parts 1, 2 and 3 of Annex 1 to this Order) shall be issued by the master or his designated responsible person on board. A copy of the authorization shall be transmitted to the intruders.
   2. Parts 2 and 3 of the ‘checklist and permit to enter an enclosed space’ (Annex No 1) shall be completed by those entering the confinement.
   3. Upon completion of the work, the responsible person shall complete Parts 4 and 5 of Annex 1.
   4. The authorisation to enter shall be retained on board by the master or the responsible person designated by the master for a period of 3 years.
2. *Precautions during stay in a confined space*
   1. The atmosphere in the enclosed space should be checked frequently while people are in it. People should be instructed to leave the enclosed space if the conditions in it deteriorate.
   2. Those entering shall be equipped with properly calibrated and tested multi-gas detectors to monitor the levels of oxygen, carbon monoxide, and other gases, if appropriate, and may be expected to be present.
   3. The ventilation of the room should be continuous during stay and work in the room. If ventilation is interrupted, everyone must leave the room immediately. In case of interruption and subsequent restoration of work in the room, new measures are carried out before re-entry.
   4. Special attention should be paid when working with trampolines and cranes in enclosed spaces. If the conditions in the atmosphere change or the temperature rises, it is necessary to increase the frequency of atmospheric testing.
   5. In emergencies or incidents, under no circumstances shall the person on duty enter the confined space before assistance arrives. The start of a rescue operation takes place only after assessing the situation and ensuring the safety of the rescue team. Only trained crew members perform rescue operations in enclosed spaces.
3. *Additional measures to enter a space in which the atmosphere is expected or known to be dangerous*
   1. An area whose atmosphere has not been checked should be considered as hazardous to entry. When the atmosphere is known or expected to be dangerous, it should only be entered in the atmosphere in the absence of another alternative. Entry is only permitted to test the atmosphere or work related to the safety of life or the ship. The incoming staff must be the minimum necessary, with experience to carry out the specified work.
   2. Appropriate breathing apparatus or air line should always be used, only by trained personnel. Air filtration/cleaning breathing apparatus should not be used because they do not provide supply of fresh air outside the room.
   3. Personnel entering shall be equipped with a calibrated and tested multi-gas detector, monitoring levels of oxygen, carbon monoxide and other gases as necessary.
   4. A life-belt and a lifeline should be worn, except where the latter does not need to be used.
   5. Appropriate protective equipment (clothing, etc.) should be worn if there is a risk of contact with toxic or chemical substances when entering such spaces.
4. *Specific measures for the transport of dangerous goods*
   1. *Dangerous goods in packaged form*
      1. The atmosphere of any space containing dangerous goods may put at risk the health or life of any person entering it. Information on the hazard of a specific substance is contained in the IMDG Code, the Emergency Procedures for Ships Carrying Dangerous Goods and the Material Safety Data Document. If there is evidence or suspicion that a leak/dissipation of a dangerous substance has occurred, the precautions described in paragraph 6.3.4 of this Order must be followed.
      2. Personnel required to process scattered substances or remove defective or damaged packages shall be suitably trained and wear a breathing apparatus and the necessary protective clothing.
   2. *Liquid bulk cargo*

For tankers, due to the nature of the cargo carried — oil, petroleum products, chemicals and liquefied gases — in addition to the rules contained in this disposition, the increased requirements contained in International Safety Guide for Oil Tankers and Terminals (ISGOTT) apply before entering enclosed spaces. The information contained therein should be used as a basis for the preparation of the entry plan.

* 1. *Solid bulk loads*

On ships carrying solid bulk cargo, a dangerous atmosphere can be formed in both cargo and adjacent spaces. Hazards may include flammability, oxygen depletion or self-heating, which must be indicated in the loader’s declaration. For further information, the IMSBC Code shall be consulted.

* 1. *Use of nitrogen as an inert gas*

Nitrogen is a colourless and odourless gas which, when used as an inert gas, causes oxygen deficiency in enclosed spaces and deck outlets when ventilated tanks and empty spaces and cargo holds. It should be noted that a deep inhalation of 100 % nitrogen leads to a fatal outcome.

* 1. *Oxygen-absorbing loads and materials*

A constant risk of transporting such cargo is the removal of oxygen due to the specific qualities of the load, such as self-heating, oxidation of metals and ores, or degradation of vegetable oils, animal fat, grain and other organic materials or their residues/sludges. Known as oxygen-causing materials are the following materials:

* + 1. grains, cereals and grain processing residues (bran, crushed/grown grain, ground malt or flour), hops, malt flakes and malt used,
    2. oilseeds, as well as products and waste of oilseeds (such as cereal residues, pomace, oil pomace and flour),
    3. Copra,
    4. wood in packaged form, timber, trunks, coniferous logs, pulpwood, supports (mining and other supports), shavings, sawdust, wood pulp and sawdust,
    5. Utah, hemp, capok (filament of silk-cotton wood), cotton and other fibre plants (such as esparto grass/Spanish grass, hay, straw, bhusa, empty sacks, cotton waste, animal fur, animal or vegetable fabrics, wool waste and rags,
    6. fishmeal and fish waste,
    7. Guano,
    8. sulphide ores and ore concentrates,
    9. charcoal and coal products,
    10. direct-derived iron (DRI) (seabed concretes),
    11. dry ice,
    12. metal waste and scrap, steel turnings from machining, old iron, etc.

The list is not final and exhaustive.

Oxygen removal may be caused by other materials of plant or animal origin, combustible self-flammable materials or materials with a high metal content.

*10.5. Fumged cargo*

When the vessel is fumigated, the instructions and recommendations given in the “Recommendations for the safe use of pesticides on ships” (MSC) should be used. 1/Circ.l358. Adjacent to the fumigated premises should be considered as fumigated.

1. **Enforcement**
2. The Directors of the Maritime Administration Directorates Burgas and Varna to bring this order to the attention of all shipowners, operating ships flying the Bulgarian flag and all local operators in their responsible area for implementation.
3. Shipowners shall prepare and send copies of this order to their ships for familiarisation and enforcement by the masters.
4. Port operators to include in the Technology Maps the requirements of this Order regarding the handling of dangerous and risky goods specified in item 10.
5. The Directors of the Maritime Administration Directorates in Varna and Burgas to organise the familiarization and implementation of the order by the employees of the Departments “Survey, Certification and Registration of Ships and Shipowners” and “Operational Fitness of the Ports”.
6. The order to be published on the website of EA “Maritime Administration”, together with the annex thereto.
7. **Entry into force**

This Order shall enter into force on 07.12.2015 and repeal Order No 93 of 21 October 2005.

1. **Control**

I entrust Mr. Peter Kirov, Secretary General of the Executive Agency Maritime Administration with the supervision of the implementation of this order.

**KDP ZHIVKO PETROV,**

*Executive Director*

*Executive Agency “Maritime Administration”*

*Annex No 1*

**CHECKLIST AND ENTRY PERMIT  
IN A ENCLOSED SPACE**

*To be filled in by the master, the designated officer (senior deck/machine officer) and the person entering  
the enclosed space or the authorised driver of the incoming team in triplicate, one for each and   
shall be returned to the master for storage in a folder after the authorisation has been revoked.*

**General data**

Location/Name of the closed room

Reason for Entry

This authorisation is valid From the hour The date

We're going to the hour The date

*(See note/)*

|  |  |  |
| --- | --- | --- |
| **Part 1 — Preliminary Entry Preparation** | | |
| *(The inspection is carried out by the master or designated responsible person)* | YES | No |
| Is the room fully ventilated? |  |  |
| Is the room separated by jamming or isolation? |  |
| of all connecting piping or eyelids, as |  |  |
| and power supply/facilities? |  |  |
| Is the room cleaned where it is needed? |  |  |
| Is the room checked and is it safe to enter? *(See note 2)* |  |  |
| Have the oxygen, toxic and flammable gases been measured? |  |  |
| *(See note 3)* |  |  |

Oxygen % % vol (21 %)\* From:

hydrocarbon % LFL (less than 1 %)

toxic gases ppm (less than 50 % OEL of the specific gas) Hour:

|  |  |  |  |
| --- | --- | --- | --- |
|  | Is there a frequent measurement of the atmosphere during the stay of people in the room, as well as after a break in work? |  |  |
|  | Is it arranged to fully ventilate the space for the period of stay of people in the room, as well as after a break in work? |  |  |
|  | Is Entrance and Lighting Enough? |  |  |
|  | Is there any rescue and revitalising equipment available at the entrance to the room, ready for immediate use? |  |  |
|  | Is the person in charge who has to constantly take up his post at the entrance to the room? |  |  |
|  | Has the officer in charge (bridge, engine room, cargo control room) been warned about the intended entry? |  |  |
|  | Has the system of contact between all parties been tested and has the emergency alerts been specified? |  |  |
|  | Have emergency and evacuation procedures been established and understood by all staff involved in entering the confined space? |  |  |
|  | Is all the equipment used in good working condition and has it been inspected before entry? |  |  |
|  | Is the staff properly dressed and equipped to come in? |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
| **Part 2 — Checks before entry**  *(Checking is carried out by the person entering the confined space* | | | |
| *or by the authorised leader of the incoming team)* | | Yes | No |
|  | I have received instructions or permission from the captain or appointed officer to enter the confined space. |  |  |
|  | Part 1 of this permit was satisfactorily completed and |  |  |
|  | completed by the master or designated officer |  |  |
|  | I agree and understand the contact procedures |  |  |
|  | I agree with the intervals for each Minutes |  |  |
|  | Emergency and evacuation procedures are coordinated and understood |  |  |
|  | I am aware that space should be emptied immediately in the event of ventilation failure or if the samples of the atmosphere indicate a change from the approved safe criteria |  |  |

**Part 3 — Breathing apparatus and other equipment**

*(To be carried out jointly by the master or*

*the designated officer and the person, you enter the closed room)*

Those who will enter the enclosed space well know the breathing apparatus that will be used

The breathing apparatus was tested as follows:

* pressure gauge and the amount of air filling
* sound alarm for low air level
* face mask — at positive pressure and non-release

The means of communication were tested and emergency alerts were coordinated

All those who entered the space were provided with

rescue belts and, where possible, rescue ropes

**Signed after completion and completion of Parts 1, 2 and 3 of:**

*I have checked the above conditions and find entry safely for the specified period and subject to the agreed conditions.*

Responsible for overseeing the entry: The date

The time

*(senior deck/machine officer)*

*I understand the precautions to be taken and will return this authorisation in accordance with Part 5.*

Entering the space or the authorised head of the team: The date

The time

*An entry permit shall be issued in accordance with the conditions set out above.*

The Captain: The date The time

**Part *4* incoming staff**

*(To be completed by the attending officer)*

Time of Entry Time of exit

The Names

|  |  |  |
| --- | --- | --- |
| **Part 5 Completion of work** *(To be filled in by the gatekeeper)* | | |
| The work has been completed in | The date | The time |
| Space secured against entry | The date | The time |
| The officer has been duly informed. | The date | The time |

**Cancellation after completion and completion of Parts 4 and 5**

.1 Entry is no longer required and *(delete excess)*

1. the area has been restored to working condition **OR**
2. The work was discontinued and the area was left in a safe condition.

*Copies No 1 p 2 of this authorisation have been returned to the master (entry authorising officer) for cancellation.*

Responsible for overseeing the entry The date The time

*(Machine Officer)*

.2 this authorisation shall be revoked

The Captain: The date The time

**THIS PERMISSION SHALL BECOME INVALID IF THE VENTILATION OF THE  
SPACE CEASES OR IF ANY OF THE CONDITIONS NOTED IN   
AND IN CHECKLISTS, CHANGED**

*Comments on:*

1. *The authorisation must contain a clear definition of its maximum period of validity.*
2. *In order to achieve a representative sample of the atmosphere along the cross-section of the room, samples must be taken from several levels and through as many verification holes as possible. The ventilation must be stopped for about 10 minutes before the sampling of the atmosphere of the poignancy to be taken before entering it.*
3. *Samples for specific toxic contaminants, such as petrol, hydrogen or sulphur, must be taken depending on the previous space content.*