The Hydrogen Cyanide (Fumigation of Ships) Regulations, 1951

1951 No. 1760

Made - - - -	1*st October*, 1951
Laid before Parliament	4*th October*, 1951
Coming into Operation	1*st February*, 1952

In pursuance of the power conferred upon me by section one of the Hydrogen Cyanide (Fumigation) Act, 1937(a), I hereby make the following Regulations :—

1.—(1) These Regulations may be cited as the Hydrogen Cyanide (Fumigation of Ships) Regulations, 1951, and shall come into operation on the first day of February, 1952.

(2) In these Regulations—

" absorbent liquids " means liquids, not being foodstuffs, of such a kind and so stored as to be liable to absorb the fumigant ;

" authorised person " means any person directly engaged in the supervision or carrying out of the fumigation or who is in possession of a certificate of authority in Form A of the forms set out in the First Schedule to these Regulations permitting him, on behalf of a government department or of a medical officer of health, to attend fumigations ;

" exposed foodstuffs " means foodstuffs, whether liquid or not, which are so stored as to be exposed to the fumigant ;

" first aid " means resuscitation of persons suffering from poisoning by the fumigant and self-protection from the fumigant, and includes the use of the apparatus provided in pursuance of Regulation 9 for the administration of oxygen and carbon-dioxide ;

" fumigant " means hydrogen cyanide from whatever source evolved ;

" fumigation " means the fumigation with hydrogen cyanide of a ship or part of a ship, or anything contained in a ship ;

" harbour authority " means any person or body of persons in whom are vested by or under any Act of Parliament powers and duties of improving, maintaining or managing a harbour or, where as respects any dock within a harbour such powers and duties are separately vested by or under any Act of Parliament in any person or body of persons, that person or body of persons ;

" local authority " means, in England and Wales, the Common Council of The City of London, the council of a metropolitan borough, the council of a county borough and the council of a county district, and, in Scotland, has the same meaning as in the Public Health (Scotland) Act, 1945(b) ;

" medical officer of health ", except in Regulation 4, means the medical officer of health of the port health authority within whose area the ship is lying or, if the ship is not lying within the area of a port

(a) 1 Edw. 8. & 1 Geo. 6. c. 45. (b) 9 & 10 Geo. 6. c. 15.

health authority, the medical officer of health of the local authority within whose area the ship is lying or, if the ship is not lying within the area of a port health authority or of a local authority, the medical officer of health of the local authority whose area most nearly adjoins the place where the ship is lying;

"operator" means the person designated in writing by the undertaker to be in charge of the fumigation;

"owner" means the owner of the ship or, where the ship is demised to a charterer, that charterer, and includes the master and any other duly authorised agent of the owner or charterer;

"port health authority" means, in England and Wales, the port health authority of the Port of London and a port health authority for the purpose of the Public Health Act, 1936(**a**), and, in Scotland, a port local authority as constituted in terms of section one hundred and seventy-two of the Public Health (Scotland) Act, 1897(**b**), or a local authority whose area includes or abuts on such part (if any) of a customs port (that is to say any port for the time being appointed by warrant of the Treasury under and for the purpose of section eleven of the Customs Consolidation Act, 1876(**c**), and as delimited under that section) as is not within the area of such a port local authority;

"risk area" means the ship and any space or structure in the immediate vicinity from which, in the opinion of the operator, persons other than authorised persons should, having regard to the danger to be apprehended from the penetration of the fumigant from the ship, be excluded;

"ship" includes any boat or other description of navigable vessel, but does not include aircraft;

"undertaker" means any person who, under contract or otherwise, by himself or by his agent, undertakes the fumigation.

(3) Nothing in these Regulations shall apply to the fumigation of grain by the admixture therewith of calcium cyanide.

(4) The Interpretation Act, 1889(**d**), shall apply to the interpretation of these Regulations as it applies to the interpretation of an Act of Parliament.

2. In connection with any fumigation the requirements of Regulations 3 to 12 of these Regulations shall be observed.

3.—(1) Before commencing the fumigation the undertaker shall complete and sign three copies of a notice of the fumigation in Form B of the forms set out in the First Schedule to these Regulations and shall send one copy—

(*a*) except where the fumigation is to be carried out within the area of a harbour authority, to the officer in charge of the police station for the police district in which the fumigation is to be carried out, or,

(*b*) if the fumigation is to be carried out within the area of a harbour authority, to that authority,

and shall send one copy to the medical officer of health.

(2) Any document required by paragraph (1) of this Regulation to be sent to a person therein specified shall be despatched so as to reach that person not less than twenty-four hours before the commencement of the fumigation unless in any case of special urgency the undertaker has otherwise arranged with that person.

(a) 26 Geo. 5. & 1 Edw. 8. c. 49. (b) 60 & 61 Vict. c. 38.
(c) 39 & 40 Vict. c. 36. (d) 52 & 53 Vict. c. 63.

(3) The undertaker shall supply to the medical officer of health any further particulars with regard to the fumigation that he may require.

4.—(1) Where the purpose of the fumigation is or includes the fumigation of foodstuffs, or where it is otherwise intended to leave exposed foodstuffs in the ship, the undertaker shall, before undertaking the fumigation, apply for a certificate (hereinafter called a foodstuffs fumigation certificate) authorising the fumigation or the retention in the ship of such foodstuffs as are specified therein, and the application shall be made—

(*a*) in any case where the fumigation is to be carried out solely for the purpose of compliance with any regulations made, or having effect, under section one hundred and forty-three of the Public Health Act, 1936 (which empowers the Minister of Health to make regulations as respects the whole or any part of England and Wales with a view to the treatment of certain diseases and for preventing the spread of such diseases), or under section one of the Public Health (Scotland) Act, 1945 (which empowers the Secretary of State to make such regulations as aforesaid as respects the whole or any part of Scotland), to the medical officer of health appropriate to the case ;

(*b*) in any case where the fumigation is to be carried out solely for the purpose of compliance with a notice served under section four of the Prevention of Damage by Pests Act, 1949(**a**) (which empowers certain authorities to serve a notice requiring the taking of steps to destroy rats and mice), as applied by an Order in Council made under section twenty-three of the said Act, to the medical officer of health appropriate to the case ;

(*c*) in any other case, to a person designated for that purpose, in England and Wales, by the Minister of Agriculture and Fisheries or, in Scotland, by the Secretary of State.

(2) On any such application as aforesaid the person to whom the application was made may, subject as provided in paragraph (3) of this Regulation, grant a foodstuffs fumigation certificate authorising the fumigation or the retention in the ship of such foodstuffs as are specified therein on such conditions stated in the certificate as he may think necessary to prevent danger from the contamination of those foodstuffs by exposure to the fumigant, and the undertaker shall take all steps necessary to ensure that the operator shall comply with any conditions stated in the certificate.

(3) Where such an application as aforesaid is made to a person designated for the purpose by the Minister of Agriculture and Fisheries or the Secretary of State, and the purposes for which the fumigation is to be carried out include the purpose mentioned in sub-paragraph (*a*) of paragraph (1) of this Regulation, or the purpose mentioned in sub-paragraph (*b*) of the said paragraph, or both such purposes, the person to whom the application is made shall, before granting a foodstuffs fumigation certificate, consult the medical officer of health appropriate to the case or, if there are two such medical officers, both of them.

(4) In this Regulation a reference to the medical officer of health appropriate to the case is—

(*a*) in relation to the purpose referred to in sub-paragraph (*a*) of paragraph (1) of this Regulation, a reference to the medical officer of health of the authority by whom the regulations referred to in the said sub-paragraph are enforced and executed in the place where the ship is lying ;

(**a**) 12, 13 & 14 Geo. 6. c. 55.

(*b*) in relation to the purpose specified in sub-paragraph (*b*) of the said paragraph, a reference to the medical officer of health of the authority by whom the notice referred to in the said sub-paragraph was served.

5.—(1) The fumigation shall not be carried out except by an adequate fumigating staff, which shall consist of at least two persons.

(2) One member of the fumigating staff shall be designated in writing by the undertaker to be the operator in charge of the fumigation.

(3) The operator shall during the two years immediately preceding the fumigation have been engaged in fumigating with the fumigant on not less than twenty occasions, of which not less than six shall have been concerned with fumigating ships, and shall be otherwise competent for the purpose.

(4) One member of the fumigating staff, other than the operator, shall during the six months immediately preceding the fumigation have been engaged in fumigating with the fumigant on not less than six occasions, of which not less than two shall have been concerned with fumigating ships, and shall be otherwise competent for the purpose.

(5) Each member of the fumigating staff shall be adequately trained in the use of the respirator or other apparatus which, in pursuance of sub-paragraph (*a*) of paragraph (1) of Regulation 9 of these Regulations, he is wearing or carrying.

(6) Each member of the fumigating staff shall be adequately trained in first aid and be fully conversant with the contents of the two notices (being notices setting out respectively the symptoms of hydrogen cyanide poisoning with preliminary action to be taken and appropriate first-aid treatment for that poisoning) which, under Regulation 9 of these Regulations and paragraphs 2 and 4 of the Second Schedule thereto, are required to be displayed.

6.—(1) In any case where the fumigant is in liquid form the undertaker shall take all reasonable steps to secure that the fumigant is contained in containers constructed either in accordance with the British Standard Specification Number 401 or in accordance with a specification approved by the Secretary of State for the purpose of this Regulation, and that the fumigant shall, before liberation thereof commences, be not less than ninety-five per cent. by weight of the total contents of the container.

(2) In any case where the fumigant is in absorbed form the undertaker shall take all reasonable steps to secure that the fumigant is contained in containers impervious to the fumigant, clearly marked with the weight of fumigant contained therein, and that the total water content, excluding water of crystallisation, of the absorbed fumigant and the absorbent in each container, before the liberation of the fumigant commences, shall not exceed five per cent. by weight of the absorbed fumigant present in the container.

(3) In any case—

(*a*) the undertaker shall take all reasonable steps to secure that any fumigant to be used in the fumigation shall be suitably stabilised;

(*b*) the fumigant shall not be brought to the ship except in such a container as is referred to in paragraph (1) or paragraph (2) of this Regulation and shall, except so far as is necessary for the purpose of liberation, be contained therein throughout the fumigation; and

(*c*) every container when not in use shall be kept securely closed to avoid risk of leakage.

7.—(1) Before the fumigant is liberated the owner shall ensure that—

(*a*) all persons other than authorised persons have left the ship;

(*b*) all absorbent liquids and all exposed foodstuffs, except foodstuffs in respect of which the undertaker has obtained a foodstuffs fumigation certificate in accordance with Regulation 4 of these Regulations, have been removed from the ship;

(*c*) all boiler fires in the part of the ship which is to be fumigated have been drawn and extinguished, all other boiler fires in the ship have been banked down, and all other fires and naked lights in the ship have been extinguished;

(*d*) all electric generators in the ship have been shut down and all electrical supply to the ship has been discontinued and arrangements have been made to secure that it shall not be resumed, except on the instructions of the operator, until the certificate of clearance has been delivered to the owner as required by Regulation 11 of these Regulations;

(*e*) arrangements have been made for securing that such persons are made available to the operator for the purpose of his duties under sub-paragraphs (*d*) and (*e*) of paragraph (1) of Regulation 10 of these Regulations as he may require in order to secure that all gangways and other means of boarding the ship which in either case afford access to the risk area are under effective supervision until the certificate of clearance has been delivered to the owner as aforesaid;

(*f*) notices containing in block letters not less than four inches in height the words "DANGER, POISON GAS: KEEP AWAY" have been placed on each side of the ship, and on the boundary of the risk area where they may be readily seen by any person approaching the risk area, and arrangements have been made to secure that such notices are illuminated during the hours of darkness;

(*g*) all accommodation ladders and jacobs ladders in or on the ship have been hauled up; and

(*h*) all spaces in the ship to which the operator may require access before the certificate of clearance is delivered to the owner as aforesaid are open.

(2) When the owner has carried out an exhaustive search of the ship and has satisfied himself that the requirements set out in sub-paragraphs (*a*), (*b*), (*c*), (*d*), (*e*), (*f*), (*g*) and (*h*) of paragraph (1) of this Regulation have been complied with he shall, in two copies of a document in Form C of the forms set out in the First Schedule to these Regulations, complete and sign the safety statement (that is to say, Part I of the said document) and shall deliver both copies, or cause them to be delivered, to the operator.

(3) The fumigant shall not be liberated until the operator has satisfied himself by all necessary search of the risk area that all persons other than authorised persons have left the risk area and that the requirements set out in sub-paragraphs (*b*), (*c*), (*d*), (*e*), (*f*), (*g*) and (*h*) of paragraph (1) of this Regulation have been complied with.

(4) When the operator is satisfied as aforesaid, and before the fumigant is liberated, he shall sign the declaration contained in Part II of each copy of the document delivered to him in pursuance of paragraph (2) of this Regulation and append the date on which and the time at which he signs and shall return one copy, or cause it to be returned, to the owner.

8.—(1) If as part of the process of applying the fumigant it is necessary to transfer it in liquid form from one container to another, this operation shall be carried out only within the risk area and after all persons other than authorised persons have left that area and the requirements set out in sub-paragraphs (*b*), (*c*), (*d*), (*e*), (*f*), (*g*) and (*h*) of paragraph (1) of Regulation 7 of these Regulations have been complied with, and the transference shall not be effected except through suitable piping connecting the two containers.

(2) The fumigant shall not be applied in such a manner as to be absorbed in liquid form by any cargo, dunnage or other material in the holds, engine rooms, store-rooms or other parts of the ship, or by any furniture, fittings or effects.

9.—(1) During the whole of the period commencing immediately before the fumigant is liberated and terminating when the certificate of clearance has been delivered to the owner as required by Regulation 11 of these Regulations—

(*a*) each authorised person while in any part of the risk area shall wear or carry ready for immediate use a respirator or other apparatus for affording protection to the wearer against the fumigant and shall carry or have in his possession ready for immediate use an efficient electric torch;

(*b*) the operator shall secure that there shall be immediately to hand and ready for use oxygen and carbon-dioxide with an efficient apparatus for their administration, two life lines and a box or case, which box or case shall conform with the requirements of the Second Schedule to these Regulations as to construction, marking, contents and the display of notices; and

(*c*) each authorised person who in pursuance of this paragraph has with him a respirator shall keep immediately to hand and ready for use a spare respirator canister which has not previously been used in a fumigation.

(2) In order to comply with paragraph (1) of this Regulation a respirator or other apparatus shall be efficient for the purpose of affording protection to the wearer against the fumigant and shall be a respirator or other apparatus which is constantly maintained in good condition.

10.—(1) The operator shall take steps to ensure that during the period commencing immediately before the fumigant is liberated and terminating when the certificate of clearance has been delivered to the owner as required by Regulation 11 of these Regulations—

(*a*) at least one member of the fumigating staff shall remain in attendance in the risk area;

(*b*) a member so remaining shall, so far as in the circumstances is reasonably practicable, at all times be able easily and rapidly to communicate with the operator;

(*c*) the risk area and any enclosed space in the adjoining area are kept under observation and all necessary steps are taken to safeguard any persons in the adjoining area from the fumigant;

(*d*) no person other than an authorised person shall, except so far as is necessary for the purpose of compliance with paragraph (3) of Regulation 11 of these Regulations, be permitted to enter the risk area;

(*e*) all means of access to the risk area are under effective supervision:

Provided that if a fire breaks out in the risk area, or it is necessary to move the ship away from a fire which threatens to spread thereto, or if a collision occurs or other emergency arises which renders it essential that other persons should be permitted to enter the risk area, such other persons as it may be expedient to permit to enter the risk area for the purpose of, as the case may be, extinguishing the fire, moving the ship or dealing with the collision or other emergency may, if they are equipped with respirators or other apparatus for affording protection to the wearer against the fumigant, be permitted to enter the risk area and, if it is essential, go on board the ship for the said purpose.

Before any such person as is referred to in the proviso to this paragraph is permitted to enter the risk area he shall be warned that a ship in that area is being fumigated with hydrogen cyanide.

(2) If a fire breaks out in the risk area during the period referred to in paragraph (1) of this Regulation, any member of the fumigating staff who calls for the assistance of a fire brigade shall, at the time of calling, state that the fire is in, or, as the case may be, in close proximity to, a ship which is being fumigated with hydrogen cyanide.

(3) All members of the fumigating staff shall comply with all instructions given by the operator for the purpose of compliance with paragraph (1) of this Regulation, and all persons made available to the operator by the owner in accordance with sub-paragraph (*e*) of paragraph (1) of Regulation 7 of these Regulations shall comply with all instructions given by the operator in connection with the duties for which they were made available.

(4) Notwithstanding anything contained in paragraph (1) of this Regulation, the operator, if he considers that adequate ventilation cannot otherwise be secured and that no risk is thereby involved, may permit to accompany him on board, before the entry permit or, as the case may be, the certificate of clearance is delivered to the owner as required by Regulation 11 of these Regulations, such members of the crew of the ship as are necessary for the purpose of operating the ventilating fans and as have been provided with, and are carrying, respirators, and those members of the crew, whilst on board—

(*a*) shall be accompanied by a member of the fumigating staff and shall carry the respirators with which they have been provided; and

(*b*) shall not be allowed access to any part of the ship until it has been established to the satisfaction of the operator by tests including the test set out in the Third Schedule to these Regulations that the concentration of the fumigant does not exceed one part by volume in one hundred thousand parts of air and that in all respects that part of the ship is free from danger for the period the members of the crew remain on board.

11.—(1) After the fumigation has been completed the operator shall satisfy himself that the following requirements have been complied with, that is to say:—

(*a*) all apparatus, containers and such residues of the materials used for generating the fumigant as may constitute a danger have been removed from the ship and safely disposed of;

(*b*) all liquids, foodstuffs and articles, except articles to which paragraph (3) of this Regulation applies, which, notwithstanding any steps taken to comply with sub-paragraph (*b*) of paragraph (1) of Regulation 7 and

paragraph (2) of Regulation 8 of these Regulations, may constitute a danger through having become contaminated by the fumigant, have been removed from the ship and safely disposed of;

(*c*) the ship has been ventilated in such manner and for such period as shall be effective to secure dispersal of the fumigant; and

(*d*) it has been established by tests including the test set out in the Third Schedule to these Regulations (which in any case where ventilating fans have been used shall be made over a period of at least one hour after the stopping of the fans) that in no part of the risk area does the concentration of the fumigant exceed one part by volume in one hundred thousand parts of air.

(2) (*a*) Where there are in the ship bedding, blankets, pillows, clothing, cushions or upholstered articles likely to have absorbed the fumigant the operator shall, upon being satisfied as aforesaid, complete and sign two copies of an entry permit in Form D of the forms set out in the First Schedule to these Regulations and deliver them, or cause them to be delivered, to the owner, who shall at the foot of each write the date and time when it was delivered to him and append his signature and keep one copy.

(*b*) Where there is in the ship no bedding, blankets, pillows, clothing, cushions or upholstered articles likely to have absorbed the fumigant the operator shall, upon being satisfied as aforesaid, and that in all respects the risk area is free from danger arising from the use of the fumigant, complete and sign three copies of a certificate of clearance in Form E of the forms set out in the First Schedule to these Regulations and deliver them, or cause them to be delivered, to the owner, who shall at the foot of each write the date and time when it was delivered to him and append his signature and keep one copy, and the operator shall then deliver one copy, or cause it to be delivered, to the person or authority to whom the notice of the fumigation was delivered in accordance with sub-paragraph (*a*) or sub-paragraph (*b*) of paragraph (1) of Regulation 3 of these Regulations.

(3) In any case where in accordance with the provisions of this Regulation the owner receives an entry permit he shall thereupon in accordance with such directions as may be given by the operator cause any bedding, blankets, pillows, clothing, cushions and upholstered articles likely to have absorbed the fumigant to be removed from the enclosed parts of the ship and kept out of those parts until the operator is satisfied that the said materials and articles are free from residues which may subsequently produce dangerous concentrations of the fumigant, or, where it is not practicable so to remove any such material or article, cause it to be otherwise aired until the operator is satisfied as aforesaid.

(4) When in accordance with the provisions of paragraph (3) of this Regulation the operator is satisfied as therein required, and that in all respects the risk area, and the materials and articles described in the said paragraph, are free from danger arising from the use of the fumigant, he shall complete and sign three copies of a certificate of clearance in Form E of the forms set out in the First Schedule to these Regulations, and the provisions of sub-paragraph (*b*) of paragraph (2) of this Regulation shall apply thereto.

(5) Until the provisions of paragraphs (3) and (4) of this Regulation have been complied with the owner shall ensure that none of the materials or articles referred to in paragraph (3) of this Regulation shall be used.

12.—(1) Every undertaker shall keep in his office a register in which reports in Form F of the forms set out in the First Schedule to these Regulations may be entered in accordance with paragraph (2) of this Regulation.

(2) After the fumigation—

(*a*) the operator shall enter and sign two copies of a report thereof in Form F of the forms set out in the First Schedule to these Regulations in the register kept by the undertaker in accordance with this Regulation ;

(*b*) the undertaker shall countersign each copy of the report and shall, within thirty-one days of the delivery of the certificate of clearance to the owner under Regulation 11 of these Regulations, send one copy to the Secretary of State.

(3) Every register kept under this Regulation shall be preserved in good condition in the office of the undertaker until one year has elapsed since the date of the last report entered therein.

(4) One copy of the notice of the fumigation, of the safety statement, of any entry permit and of the certificate of clearance, and any foodstuffs fumigation certificate, given under these Regulations shall be preserved in good condition by the undertaker until one year has elapsed from the date of the fumigation.

(5) Any register kept under this Regulation and any document preserved under paragraph (4) thereof shall at all reasonable times be open to inspection by any person authorised in that behalf by the Secretary of State.

13. Where a station used for the purpose of fumigation is established with the consent of the Secretary of State and is operated in a manner approved by him, any fumigation carried out at that station shall be exempted from such provisions of these Regulations as the Secretary of State may from time to time determine or, if the Secretary of State so determines, from all the provisions of these Regulations.

J. Chuter Ede,
One of His Majesty's Principal Secretaries of State.

Home Office,
Whitehall.

1st October, 1951.

FIRST SCHEDULE

FORM A

Regulation 1 (2)

HYDROGEN CYANIDE (FUMIGATION OF SHIPS) REGULATIONS, 1951

Certificate of Authority

(Name).....
is hereby authorised and appointed to attend the fumigation of ships under the above-named Regulations.

Signature .....

Description.....

Date.....

Regulation 3 (1)

FORM B

HYDROGEN CYANIDE (FUMIGATION OF SHIPS) REGULATIONS, 1951

*To the harbour authority (address).....

.....

*To the officer in charge of police station at.....

.....

*To the medical officer of health (address).....

.....

*Copy for record

Notice of Fumigation

We hereby give notice in accordance with Regulation 3 (1) of the Hydrogen Cyanide (Fumigation of Ships) Regulations, 1951, that we have been:

instructed by (owner or authority).....

to fumigate (name of ship) .....

lying in or at (location of ship) .....

against (nature of infestation) .....

and that we propose to begin the fumigation at (time) .....

on (date) .....

We have instructed (name of operator).....
being an operator qualified under Regulation 5 (3) to be in charge of the fumigation.

Signature of undertaker.....

Address of place of business.....

.....

Telephone number.....

Date..... Time.....

* Delete where inapplicable.

NOTE: " Owner " means the owner of the ship or, where the ship is demised to a charterer, that charterer, and includes the master and any other duly authorised agent of the owner or charterer.

FORM C

Regulation 7 (2) and (4)

HYDROGEN CYANIDE (FUMIGATION OF SHIPS) REGULATIONS, 1951

Fumigation of (name of ship).....

Lying in or at (location of ship).....

PART I

Safety Statement

To be completed and signed in duplicate by the owner and delivered to the operator for completion of Part II before the liberation of the fumigant.

(If the answer is in the affirmative, write " Yes ")

1. Have all persons other than authorised persons left the ship? ...	
2. (*a*) If a foodstuffs fumigation certificate has been obtained state the nature of the foodstuffs specified therein. (*b*) Have all other exposed foodstuffs been removed from the ship? ... ... (*c*) Have all absorbent liquids been removed from the ship? ...	
3. Have all boiler fires in the part or parts to be fumigated been drawn and extinguished, all other boiler fires in the ship banked down, and all other fires and naked lights in the ship extinguished? ...	
4. Have all electric generators in the ship been shut down and arrangements made for all electrical supply to the ship to be discontinued during the fumigation as required by Regulation 7 (1) (*d*)?	
5. Have such persons as the operator may require for the purpose of keeping under effective supervision all gangways and other means of boarding the ship which in either case afford access to the risk area been made available to him?	
6. Have warning notices as required by Regulation 7 (1) (*f*) been placed in position?	
7. Have all accommodation ladders and jacobs ladders in or on the ship been hauled up?	
8. Are all places in the ship to which the operator may require access before the certificate of clearance is delivered open?	
9. Has exhaustive search been carried out to ensure that the above particulars are correct?	

I hereby declare that I have carried out an exhaustive search of the ship and certify to the best of my knowledge and belief that the requirements set out in sub-paragraphs (*a*) to (*h*) of paragraph (1) of Regulation 7 have been complied with.

Signature of owner.....

Date..... Time.....

PART II

Declaration

To be signed by the operator before the liberation of the fumigant.

I hereby declare that I have satisfied myself by all necessary search of the risk area that the requirements set out in sub-paragraphs (*b*) to (*h*) of paragraph (1) of Regulation 7 have been complied with. I further declare that all unauthorised persons have left the risk area.

Signature of operator.....

Date..... Time.....

NOTE: " Owner " means the owner of the ship or, where the ship is demised to a charterer, that charterer, and includes the master and any other duly authorised agent of the owner or charterer.

" Exposed foodstuffs " means foodstuffs, whether liquid or not, which are so stored as to be exposed to the fumigant.

" Absorbent liquids " means liquids, not being foodstuffs, of such a kind and so stored as to be liable to absorb the fumigant.

*To the owner

*Copy for record

* Delete where inapplicable.

Regulation 11 (2) (*a*)

FORM D

HYDROGEN CYANIDE (FUMIGATION OF SHIPS) REGULATIONS, 1951

*To the owner

*Copy for record

Entry Permit

I (name).....
being the operator in charge of the fumigation of (name of ship).....
lying in or at (location of ship).....
hereby declare that I am satisfied that the requirements specified in Regulation 11 (1) have been complied with and that persons may be admitted on board for the purpose of complying with the provisions of Regulation 11 (3).

Signature of operator.....

Date..... Time.....

* Delete where inapplicable.

The above entry permit was handed to me at (time).....on (date).....

Signature of owner.....

NOTE: " Owner " means the owner of the ship or, where the ship is demised to a charterer, that charterer, and includes the master and any other duly authorised agent of the owner or charterer.

Regulation 11 (2) (*b*) and (4)

FORM E

HYDROGEN CYANIDE (FUMIGATION OF SHIPS) REGULATIONS, 1951

*To the owner

*To the harbour authority (address).....

.....

*To the officer in charge of police station at.....

.....

*Copy for record

Certificate of Clearance

I (name).....
being the operator in charge of the fumigation of (name of ship).....
lying in or at (location of ship).....
hereby declare that I am satisfied that the requirements specified in paragraph (1) [and paragraph (3)]* of Regulation 11 have been complied with and that the risk area and any such materials and articles as are described in Regulation 11 (3) are free from danger arising from the use of the fumigant.

Signature of operator.....

Date..... Time.....

* Delete where inapplicable.

The above certificate of clearance was handed to me at (time).....on (date).....

Signature of owner.....

NOTE: " Owner " means the owner of the ship or, where the ship is demised to a charterer, that charterer, and includes the master and any other duly authorised agent of the owner or charterer.

FORM F Regulation 12 (1) and (2)

HYDROGEN CYANIDE (FUMIGATION OF SHIPS) REGULATIONS, 1951

Report of Fumigation†

One copy to be sent within 31 days of the delivery of the relevant certificate of clearance.

*To the Under Secretary of State, Home Office, Whitehall, London, S.W.1.

*Copy for record

1. Name of ship fumigated	
2. Location when fumigated	
3. Reasons for fumigation	
4. (*a*) Date and time of the liberation of the fumigant	
(*b*) Period (or periods) of exposure to the fumigant	
(*c*) Period of ventilation of the ship ...	
(*d*) Date and time of delivery of entry permit (if any) to the owner ...	
(*e*) Date and time of delivery of certificate of clearance to the owner	
5. Names of members of fumigating staff	
operator	
other members	

	Nature of space fumigated—e.g. Holds	Cubic capacity of space (cu. ft.)	Rate of dosage at oz. per 1,000 cu. ft.
6. Particulars of spaces fumigated and dosage§			
7. Type of fumigant, whether (*a*) liquid (*b*) absorbed (Giving the trade name in either case)			
8. Method of application—e.g. spraying			
9. Weather conditions during fumigation —e.g. temperature, moisture, wind, etc.			
10. (*a*) Were artificial means of ventilation used?			
(*b*) If so, what were they?			
(*c*) Were any persons admitted to the ship for the purpose of starting the fans? If so, how many? ...			
11. If any untoward incident occurred, give details§			

I declare to the best of my knowledge and belief that the above is a true report.

Signature of operator.....

Date.....

Signature of undertaker.....

Date.....

Address of place of business .....

.....

† It should be understood that this Report is additional to the notice which must be sent to the Secretary of State under section 2 of the Hydrogen Cyanide (Fumigation) Act, 1937. This section provides as follows:—

(1) Whenever any accident which occasions loss of human life or personal injury occurs as the result of the fumigation of any premises, or article, the person by whom, or by whose agent, the fumigation was carried out shall forthwith send or cause to be sent to the Secretary of State notice of the accident and of the loss of human life or personal injury.

(2) Every such person as aforesaid who fails to comply with the provisions of this section shall be liable on summary conviction to a fine not exceeding five pounds.

* Delete where inapplicable.

§ Where all information cannot be contained within the space provided, it should be continued on a separate sheet.

SECOND SCHEDULE

FIRST AID AND MEDICAL TREATMENT Regulation 9 (1) (*b*)

1. The box or case shall be provided with a lid and shall contain two compartments or containers, each with a lid capable of being raised independently without removal from the box or case.

2. The lid of the box or case shall be plainly marked on the outside with a red cross on a white ground and there shall be displayed on the inside of the lid in such a manner as to be clearly legible when the lid is raised a notice in the following form, that is to say:—

HYDROGEN CYANIDE POISONING

Hydrogen Cyanide is extremely poisonous, and poisoning may result from breathing the gas or from absorption through the skin.

Warning signs. (1) Irritation of throat
(2) Dizziness, nausea, general weakness and headache
(3) Palpitation
(4) Feeling of suffocation
(5) Pallor, deep breathing, sudden unconsciousness, followed by stoppage of breathing.

A person showing symptoms of poisoning must be IMMEDIATELY REMOVED to a pure atmosphere; he must be laid down, with his head to windward, and first aid must be given without delay.

SPEED IS ESSENTIAL. A DOCTOR MUST BE SUMMONED AT ONCE.

3. The words "FIRST AID" and the words "MEDICAL TREATMENT (for doctor's use only)" shall be plainly visible on the outside of the lid of, respectively, the first and the second inner compartment or container.

4. The compartment or container marked "FIRST AID" shall contain at least 12 capsules of amyl nitrite each containing 3 minims., and there shall be displayed on the inside of the lid of that compartment or container in such a manner as to be clearly legible when the lid is raised a notice in the following form, that is to say:—

FIRST AID

SPEED IS ESSENTIAL. A DOCTOR MUST BE SUMMONED AT ONCE.

If the patient is conscious

(1) Break a capsule of amyl nitrite (if possible in a handkerchief or small piece of thin cloth) and allow the patient to inhale the vapour,

(2) Remove or cut away any splashed clothing.

If the patient is unconscious

(1) Break a capsule of amyl nitrite (if possible in a handkerchief or small piece of thin cloth) and allow the patient to inhale the vapour,

(2) Start artificial respiration (Schafer's method),

(3) Remove or cut away any splashed clothing.

KEEP THE PATIENT WARM. NEVER WALK HIM ABOUT.

5. The compartment or container marked "MEDICAL TREATMENT (for doctor's use only)" shall contain not less than:—

6 ampoules of Nikethamide B.P.,

6 ampoules of sodium nitrite each containing 0·3 gramme and 6 ampoules 10 millilitres sterile distilled water,

6 ampoules of sodium thiosulphate each containing 25 grammes in 50 millilitres sterile distilled water.

2 record syringes in good condition of 10 millilitres capacity

2 record syringes in good condition of 50 millilitres capacity or, if record syringes of that capacity are not available, of at least 20 but not more than 50 millilitres capacity,

2 intravenous needles in good condition,

and there shall be displayed on the inside of the lid of that compartment or container in such a manner as to be clearly legible when the lid is raised a notice in the following form, that is to say:—

MEDICAL TREATMENT

(To be carried out only by a doctor)

(1) Continue inhalations of amyl nitrite for 15–30 seconds at a time, at short intervals, over a period of 3–5 minutes.

(2) Inject intravenously sodium nitrite 0·3 gramme in 10 millilitres sterile water at the rate of 2·5 to 5 millilitres per minute. THIS RATE MUST NOT BE EXCEEDED.

(3) Immediately following this, and through the same needle, inject intravenously sodium thiosulphate 25 grammes in 50 millilitres sterile water at the SAME RATE. TAKE CARE TO AVOID EXTRAVASATION.

(4) An intramuscular or intravenous injection of 2 to 5 millilitres Nikethamide may be given.

(5) Keep the patient under observation for 24–48 hours.

(6) If there is any return of symptoms the above treatment should be repeated immediately.

THIRD SCHEDULE

Regulations 10 (4) (*b*) and 11 (1) (*d*) TEST

1. *Stock solutions required for use in the test*

(*a*) The stock solutions shall be prepared as follows, that is to say:—

(i) solution A shall be prepared by dissolving 0·3 gramme of cupric acetate in one hundred millilitres of distilled water;

(ii) solution B shall be prepared by mixing together in a small glass or porcelain mortar 0·6 millilitre of glacial acetic acid and 0·45 gramme of benzidine; the resultant plastic mass shall be ground with successive small quantities of distilled water, the aqueous suspension resulting from each grinding being poured off and filtered, and the process continued until the volume of the clear filtrate just exceeds fifty millilitres; fifty millilitres of the clear filtrate shall be diluted to one hundred millilitres with distilled water.

(*b*) In regard to the stock solutions the following requirements shall be observed, that is to say:—

(i) the solutions shall be prepared from chemicals of a high degree of purity as supplied for analytical work;

(ii) the solutions shall be kept in glass-stoppered glass bottles and stored in the dark;

(iii) each bottle shall be labelled with a label showing the date on which the solution was prepared;

(iv) no solution shall be used more than thirty-one days after preparation.

2. *Materials required for use in the test*

(*a*) Test solution. The test solution shall be prepared by mixing together equal portions of stock solution A and stock solution B, and the following requirements shall be observed, that is to say:—

(i) the test solution shall be kept in a glass-stoppered glass bottle, the stopper being well fitting;

(ii) the bottle shall be kept closed except when a test strip is being dipped therein during a test;

(iii) no test solution shall be used more than twenty-four hours after preparation.

(*b*) Test strips.

(i) a test strip shall be made of Whatman No. 1 filter paper or exactly similar white absorbent paper in strips approximately 6 in. by ¾ in. in size;

(ii) there shall be printed on one half of one side of each test strip a blue colour of approximately the same colour and density as that produced on the plain part of a test strip in a test, performed with the materials and in the manner described by this Schedule, in air in which there is a concentration of one part by volume of hydrogen cyanide in one hundred thousand parts of air.*

(*c*) A means for timing accurately a period of ten seconds.

3. *The test*

(a) In making the test the following requirements shall be complied with, that is to say:—

(i) the plain part of a test strip complying with the requirements of sub-paragraph (*b*) of paragraph 2 of this Schedule shall be dipped into a test solution complying with the requirements of sub-paragraph (*a*) of that paragraph and withdrawn from the solution in the air to be tested;

(ii) the excess solution shall be shaken off the test strip;

(iii) the test strip shall be waved gently in the air which is being tested;

(iv) exactly ten seconds after the test strip has been withdrawn from the test solution the density of the colour produced on the plain part of the test strip shall be compared with that on the printed part.

(*b*) If the colour produced on the plain part of the test strip in the test described in sub-paragraph (i) of this paragraph is more dense than that on the printed part of that strip, the concentration of hydrogen cyanide in the air tested exceeds one part in one hundred thousand.

*NOTE:—Test strips complying with the requirements of this Schedule can be obtained from chemical suppliers.

EXPLANATORY NOTE

(*This Note is not part of the Regulations, but is intended to indicate their general purport.*)

These Regulations make detailed provision as to the precautions to be taken in carrying out the fumigation of ships. Notice of a forthcoming fumigation must be given to certain persons, including the medical officer of health (Regulation 3), the members of a fumigation staff are required to be adequately trained (Regulation 5), and equipped with protective apparatus (Regulation 9). No unauthorised person may enter the area of risk until it has been established by tests that no danger remains (Regulation 10 (1)), but provision is made, with the necessary safeguards, for the entry of members of the crew for starting ventilating fans where necessary (Regulation 10 (4)), and for the entry of persons authorised by the owner or charterer to remove certain articles which may have absorbed the fumigant (Regulation 11 (3)). Special provision is make with regard to the fumigation of foodstuffs (Regulation 4). A person undertaking fumigations is required to keep a register in which reports containing certain particulars of each fumigation must be entered (Regulation 12).