

INTERNATIONAL LABOUR OFFICE GENEVA

REPORT FORM

FOR THE

BENZENE CONVENTION, 1971 (No. 136)

The present report form is for the use of countries which have ratified the Convention. It has been approved by the Governing Body of the International Labour Office, in accordance with article 22 of the ILO Constitution, which reads as follows: "Each of the Members agrees to make an annual report to the International Labour Office on the measures which it has taken to give effect to the provisions of the Conventions to which it is a party. These reports shall be made in such form and shall contain such particulars as the Governing Body may request."

The Government may deem it useful to consult the appended text of the Benzene Recommendation, 1971 (No. 144), the provisions of which supplement the present Convention and can contribute to a better understanding of its requirements and facilitate its application.

PRACTICAL GUIDANCE FOR DRAWING UP REPORTS

First reports

If this is your Government's first report following the entry into force of the Convention in your country, full information should be given on each of the provisions of the Convention and on each of the questions set out in the report form.

Subsequent reports

In subsequent reports, information need normally be given only:

- (a) on any new legislative or other measures affecting the application of the Convention;

- (b) in reply to the questions in the report form on the practical application of the Convention (for example, statistics, results of inspections, judicial or administrative decisions) and on the communication of copies of the report to the representative organizations of employers and workers and on any observations received from these organizations;

- (c) **in reply to comments by the supervisory bodies:** the report must contain replies to any comments regarding the application of the Convention in your country which have been made by the Committee of Experts on the Application of Conventions and Recommendations or by the Conference Committee on the Application of Standards.
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Article 22 of the Constitution of the ILO

Report for the period _____ to _____

made by the Government of _____

on the

BENZENE CONVENTION, 1971 (No. 136)

(ratification registered on _____)

- I. Please give a list of the legislation and administrative regulations, etc., which apply the provisions of the Convention. Where this has not already been done, please forward copies of the said legislation, etc., to the International Labour Office with this report.**

Please give any available information concerning the extent to which these laws and regulations have been enacted or modified to permit, or as a result of, ratification.

- II. Please indicate in detail for each of the following Articles of the Convention the provisions of the abovementioned legislation and administrative regulations, etc., or other measures, under which each Article is applied.**

If in your country ratification of the Convention gives the force of national law to its terms, please indicate by virtue of what constitutional provisions the ratification has this effect. Please also specify what action has been taken to make effective those provisions of the Convention which require a national authority to take certain specific steps for its implementation, such as measures to define its exact scope, measures to draw the attention of the parties concerned to its provisions, and arrangements for adequate inspection and penalties.

If the Committee of Experts or the Conference Committee on the Application of Standards has requested additional information or has made an observation on the measures adopted to apply the Convention, please supply the information asked for or indicate the action taken by your Government to settle the points in question.

Article 1

This Convention applies to all activities involving exposure of workers to:

- (a) the aromatic hydrocarbon benzene C_6H_6 , hereinafter referred to as “benzene”;
- (b) products the benzene content of which exceeds 1 per cent by volume, hereinafter referred to as “products containing benzene”.

Please indicate what are the provisions ensuring that the protective measures provided for in the Convention apply to all activities as defined in Article 1.

Article 2

1. Whenever harmless or less harmful substitute products are available, they shall be used instead of benzene or products containing benzene.

2. Paragraph 1 of this Article does not apply to:

- (a) the production of benzene;
- (b) the use of benzene for chemical synthesis;
- (c) the use of benzene in motor fuel;
- (d) analytical or research work carried out in laboratories.

Please indicate what measures have been taken, subject to the exceptions listed in paragraph 2, to ensure that substitute products of a harmless or less harmful nature are used, when available, instead of benzene or products containing benzene.

Article 3

1. The competent authority in a country may permit temporary derogations from the percentage laid down in Article 1, subparagraph (b), and from the provisions of Article 2, paragraph 1, of this Convention under conditions and within limits of time to be determined after consultation with the most representative organisations of employers and workers concerned, where such exist.

2. In such case the Member in question shall indicate in its reports on the application of this Convention submitted under article 22 of the Constitution of the International Labour Organisation the position of its law and practice as regards the derogations and any progress made towards complete application of the terms of the Convention.

3. At the expiration of three years from the date on which this Convention first entered into force, the Governing Body of the International Labour Office shall submit to the Conference a special report concerning the application of paragraphs 1 and 2 of this Article and containing such proposals as it may think appropriate for further action in regard to the matter.

Please indicate whether any temporary derogations of the type permitted in paragraph 1 have been made.

If so, please supply information on:

- (a) the nature of consultation with organizations of employers and workers*
- (b) the position of national law and practice in respect of the derogations made (including in particular the conditions and time limits determined in regard to these derogations); and*
- (c) any progress achieved towards the abrogation of such temporary derogations.*

Article 4

1. The use of benzene and of products containing benzene shall be prohibited in certain work processes to be specified by national laws or regulations.

2. This prohibition shall at least include the use of benzene and of products containing benzene as a solvent or diluent, except where the process is carried out in an enclosed system or where there are other equally safe methods of work.

Please indicate the national laws and regulations which specify the work processes in which the use of benzene and of products containing benzene is prohibited, in accordance with paragraphs 1 and 2 of this Article.

Article 5

Occupational hygiene and technical measures shall be taken to ensure effective protection of workers exposed to benzene or to products containing benzene.

Please supply particulars of the measures taken to give effect to this Article.

Article 6

1. In premises where benzene or products containing benzene are manufactured, handled or used, all necessary measures shall be taken to prevent the escape of benzene vapour into the air of places of employment.

2. Where workers are exposed to benzene or to products containing benzene, the employer shall ensure that the concentration of benzene in the air of the places of employment does not exceed a maximum which shall be fixed by the competent authority at a level not exceeding a ceiling value of 25 parts per million (80 mg/m³).

3. The competent authority shall issue directions on carrying out the measurement of the concentration of benzene in the air of places of employment.

Please indicate how effect is given to paragraph 1.

Please indicate the maximum concentration of benzene permitted in the air of places where workers are exposed to the substance (paragraph 2).

Please supply information on directions issued by the competent authority for measuring benzene in the air (paragraph 3).

Article 7

1. Work processes involving the use of benzene or of products containing benzene shall as far as practicable be carried out in an enclosed system.

2. Where it is not practicable for the work processes to be carried out in an enclosed system, places of work in which benzene or products containing benzene are used shall be equipped with effective means to ensure the removal of benzene vapour to the extent necessary for the protection of the health of the workers.

Please indicate how effect is given to this Article.

Article 8

1. Workers who may have skin contact with liquid benzene or liquid products containing benzene shall be provided with adequate means of personal protection against the risk of absorbing benzene through the skin.

2. Workers who for special reasons may be exposed to concentrations of benzene in the air of places of employment which exceed the maximum referred to in Article 6, paragraph 2, of this Convention shall be provided with adequate means of personal protection against the risk of inhaling benzene vapour. The duration of exposure shall be limited as far as possible.

Please indicate how effect is given to this Article.

Article 9

1. Workers who are to be employed in work processes involving exposure to benzene or to products containing benzene shall undergo:

- (a) a thorough pre-employment medical examination for fitness for employment which shall include a blood test;
- (b) periodic re-examinations, which shall include biological tests including a blood test, at intervals fixed by national laws or regulations.

2. The competent authority in a country may, after consultation with the most representative organisations of employers and workers concerned, where such exist, permit exceptions from the obligations of paragraph 1 of this Article in respect of specified categories of workers.

Please indicate how provision is made for pre-employment medical examinations and for the frequency of the re-examinations and biological tests in question (paragraph 1).

If exceptions have been made to the obligations of paragraph 1, please specify:

- (a) which categories of workers have been affected; and
- (b) the nature of consultation with organizations of employers and workers (paragraph 2).

Article 10

1. The medical examinations provided for in Article 9, paragraph 1, of this Convention shall be:

- (a) carried out under the responsibility of a qualified physician, approved by the competent authority, and with the assistance, as appropriate, of a competent laboratory;
- (b) certified in an appropriate manner.

2. These medical examinations shall not involve the workers in any expense.

Please indicate how effect is given to this Article.

Article 11

1. Women medically certified as pregnant, and nursing mothers, shall not be employed in work processes involving exposure to benzene or products containing benzene.

2. Young persons under 18 years of age shall not be employed in work processes involving exposure to benzene or products containing benzene: Provided that this prohibition need not apply to young persons undergoing education or training who are under adequate technical and medical supervision.

Please indicate how effect is given to this Article.

Article 12

The word “Benzene” and the necessary danger symbols shall be clearly visible on any container holding benzene or products containing benzene.

Please indicate how effect is given to this Article.

Article 13

Each Member shall take appropriate steps to provide that any worker exposed to benzene or products containing benzene receives appropriate instructions on measures to safeguard health and prevent accidents, as well as on the appropriate action if there is any evidence of poisoning.

Please indicate how effect is given to this Article, including in particular information on the nature of the instruction required.

Article 14

Each Member which ratifies this Convention:

- (a) shall, by laws or regulations or any other method consistent with national practice and conditions, take such steps as may be necessary to give effect to the provisions of this Convention;
- (b) shall, in accordance with national practice, specify the person or persons on whom the obligation of compliance with the provisions of this Convention rests;
- (c) undertakes to provide appropriate inspection services for the purpose of supervising the application of the provisions of this Convention, or to satisfy itself that appropriate inspection is carried out.

Please specify the person or persons responsible for compliance with the provisions of this Convention.

Please indicate in what manner effect is given to paragraph (c) of this Article. Please supply in particular information on the duties and powers of the inspectors responsible for supervision of the application of provisions of this Convention.

III. Please state whether courts of law or other tribunals have given decisions involving questions of principle relating to the application of the Convention. If so, please supply the text of these decisions.

IV. Please give a general appreciation of the manner in which the Convention is applied in your country, including, for instance, extracts from the reports of inspection services, and, if such statistics are available, information on the number of employed persons covered by the relevant legislation and other measures, the number and nature of contraventions reported, etc.

V. Please indicate the representative organizations of employers and workers to which copies of the present report have been communicated in accordance with article 23, paragraph 2, of the Constitution of the International Labour Organization.¹ If copies of the report have not been communicated to representative organizations of employers and/or workers, or if they have been communicated to bodies other than such organizations, please supply information on any particular circumstances existing in your country which explain the procedure followed.

Please indicate whether you have received from the organizations of employers or workers concerned any observations, either of a general kind or in connection with the present or the previous report, regarding the practical application of the provisions of the Convention or the application of the legislation or other measures implementing the Convention. If so, please communicate a copy of the observations received, together with any comments that you consider useful.

¹ Article 23, paragraph 2, of the Constitution reads as follows: “Each Member shall communicate to the representative organisations recognised for the purpose of article 3 copies of the information and reports communicated to the Director-General in pursuance of articles 19 and 22.”

APPENDIX

BENZENE RECOMMENDATION, 1971 (No. 144)

The General Conference of the International Labour Organisation,

Having been convened at Geneva by the Governing Body of the International Labour Office, and having met in its Fifty-sixth Session on 2 June 1971, and

Having adopted the Benzene Convention, 1971, and

Having decided upon the adoption of certain proposals with regard to protection against hazards arising from benzene, which is the sixth item on the agenda of the session, and

Having determined that these proposals shall take the form of a Recommendation,

adopts this twenty-third day of June of the year one thousand nine hundred and seventy-one the following Recommendation, which may be cited as the Benzene Recommendation, 1971:

I. SCOPE

1. This Recommendation applies to all activities involving exposure of workers to:

- (a) the aromatic hydrocarbon benzene C_6H_6 , hereinafter referred to as “benzene”;
- (b) products the benzene content of which exceeds 1 per cent by volume, hereinafter referred to as “products containing benzene”; the benzene content should be determined by analytical methods recommended by the competent international organisations.

2. Notwithstanding the provisions of Paragraph 1 of this Recommendation, the benzene content of products not covered by clause (b) of that Paragraph should be progressively reduced to as low a level as practicable where this is necessary for the protection of the health of workers.

II. RESTRICTIONS ON THE USE OF BENZENE

3. (1) Whenever harmless or less harmful substitute products are available they should be used instead of benzene or products containing benzene.

(2) Subparagraph (1) of this Paragraph does not apply to:

- (a) the production of benzene;
- (b) the use of benzene for chemical synthesis;
- (c) the use of benzene in motor fuel;
- (d) analytical or research work carried out in laboratories.

4. (1) The use of benzene and of products containing benzene should be prohibited in certain work processes to be specified by national laws or regulations.

(2) This prohibition should at least include the use of benzene and of products containing benzene as a solvent or diluent, except where the process is carried out in an enclosed system or where there are other equally safe methods of work.

5. The sale of certain industrial products containing benzene (such as paints, varnishes, mastics, glues, adhesives, inks and various solutions), to be specified by national laws or regulations, should be prohibited in cases to be determined by the competent authority.

III. TECHNICAL MEASURES FOR THE PREVENTION OF HAZARDS; OCCUPATIONAL HYGIENE

6. (1) Occupational hygiene and technical measures should be taken to ensure effective protection of workers exposed to benzene or to products containing benzene.

(2) Notwithstanding the provisions of Paragraph 1 of this Recommendation, such measures should also be taken where workers are exposed to products the benzene content of which is below 1 per cent by volume, if this is necessary to ensure that the concentration of benzene in the air remains below the maximum fixed by the competent authority.

7. (1) In premises where benzene or products containing benzene are manufactured, handled or used, all necessary measures should be taken to prevent the escape of benzene vapour into the air of places of employment.

(2) Where workers are exposed to benzene or to products containing benzene, the employer should ensure that the concentration of benzene in the air of the places of employment does not exceed a maximum which should be fixed by the competent authority at a level not exceeding a ceiling value of 25 parts per million (80 mg/m³).

(3) The maximum concentration referred to in subparagraph (2) of this Paragraph should be lowered as soon as possible if medical evidence shows this to be desirable.

(4) The competent authority should issue directions on carrying out the measurement of the concentration of benzene in the air of places of employment.

8. (1) Work processes involving the use of benzene or of products containing benzene should as far as practicable be carried out in an enclosed system.

(2) Where it is not practicable for the work processes to be carried out in an enclosed system, places of work in which benzene or products containing benzene are used should be equipped with effective means to ensure the removal of benzene vapour to the extent necessary for the protection of the health of the workers.

(3) Care should be taken to ensure that wastes containing liquid benzene or benzene vapour do not endanger the health of workers.

9. (1) Workers who may have skin contact with liquid benzene or liquid products containing benzene should be provided with adequate means of personal protection against the risk of absorbing benzene through the skin.

(2) Workers who for special reasons may be exposed to concentrations of benzene in the air of places of employment which exceed the maximum referred to in Paragraph 7, subparagraph (2), of this Recommendation should be provided with adequate means of personal protection against the risk of

inhaling benzene vapour. The duration of exposure should be limited as far as possible.

10. Every worker exposed to benzene or to products containing benzene should wear appropriate work clothes.

11. The use of benzene or of products containing benzene by workers for cleaning their hands or their work clothes should be prohibited.

12. Food should not be introduced into or consumed in areas in which benzene or products containing benzene are manufactured, handled or used. Smoking should be prohibited in such areas.

13. In undertakings in which benzene or products containing benzene are manufactured, handled or used, all appropriate measures should be taken by the employer to have available for workers:

- (a) sufficient and suitable washing facilities, in suitable places and properly maintained;
- (b) suitable accommodation for taking meals, unless appropriate arrangements exist for the workers to take their meals elsewhere;
- (c) changing rooms or other suitable facilities, where work clothing can be stored separately from the ordinary clothes of the workers.

14. (1) The means of personal protection referred to in Paragraph 9 of this Recommendation and the work clothes referred to in Paragraph 10 thereof should be supplied, cleaned and regularly maintained by the employer.

(2) The workers concerned should be required to use these means of personal protection and these work clothes, and to take care of them.

IV. MEDICAL MEASURES

15. (1) Workers who are to be employed in work processes involving exposure to benzene or to products containing benzene should undergo:

- (a) a thorough pre-employment medical examination for fitness for employment which shall include a blood test;
- (b) periodic re-examinations, which shall include biological tests including a blood test, at intervals, of not more than one year, fixed by national laws or regulations.

(2) The competent authority in a country may, after consultation with the most representative organisations of employers and workers concerned, where such exist, permit exceptions from the provisions of subparagraph (1) of this Paragraph in respect of specified categories of workers.

16. On the occasion of the medical examinations the workers concerned should be given written instructions on protective measures against the health hazards of benzene.

17. The medical examinations provided for in Paragraph 15, subparagraph (1), of this Recommendation should be:

- (a) carried out under the responsibility of a qualified physician, approved by the competent authority, and with the assistance, as appropriate, of a competent laboratory;
- (b) certified in an appropriate manner.

18. These medical examinations should be carried out during working hours, and should not involve the workers in any expense.

19. Women medically certified as pregnant, and nursing mothers, should not be employed in work

processes involving exposure to benzene or products containing benzene.

20. Young persons under 18 years of age should not be employed in work processes involving exposure to benzene or products containing benzene, except where they are undergoing education or training and are under adequate technical and medical supervision.

V. CONTAINERS

21. (1) The word “Benzene” and the necessary danger symbols should be clearly visible on any container holding benzene or products containing benzene.

(2) An indication of the percentage of benzene contained in the product in question should also be given.

(3) The danger symbols referred to in subparagraph (1) of this Paragraph should be internationally recognised.

22. Benzene and products containing benzene should not be brought into any place of employment except in containers which are of suitable material, adequate strength, and so designed and constructed as to prevent any leakage, or inadvertent escape of vapours.

VI. MEASURES OF EDUCATION

23. Each Member should take appropriate steps to provide that any worker exposed to benzene or products containing benzene receives appropriate training and instructions at the employer's expense on measures to safeguard health and prevent accidents, as well as on the appropriate action if there is any evidence of poisoning.

24. In appropriate positions in premises in which benzene or products containing benzene are used, notices should be displayed which indicate:

- (a) the hazards;
- (b) the preventive measures to be taken;
- (c) the protective equipment to be used;
- (d) first-aid measures to be taken in cases of acute benzene poisoning.

VII. GENERAL PROVISIONS

25. Each Member should:

- (a) by laws or regulations or any other method consistent with national practice and conditions, take such steps as may be necessary to give effect to the provisions of this Recommendation;
- (b) in accordance with national practice, specify the person or persons on whom the obligation of compliance with the provisions of this Recommendation rests;
- (c) provide appropriate inspection services for the purpose of supervising the application of the provisions of this Recommendation, or satisfy itself that appropriate inspection is carried out.

26. The competent authority in each country should actively promote research into harmless or less harmful products which could replace benzene.

27. The competent authority should establish a statistical system for reporting data concerning medically observed cases of benzene poisoning and these should be published annually.