

The Orissa Motor Vehicles (Producer of Gas) Rules, 1993

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Rule

THE-ORISSA-MOTOR-VEHICLES-PRODUCER-OF-GAS-RULES-1993 of 1993

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The Orissa Motor Vehicles (Producer of Gas) Rules, 1993Published vide Notification Orissa Gazette Extraordinary No. 1558/1.12.1993-Notification SRO No. 1076/ 93/22.11.1993S.R.O. No. 1076/93. - Whereas the draft of the Orissa Motor Vehicles (Producer of Gas) Rules, 1991, was published as required by Sub-section (1) of Section 212 of the Motor Vehicles Act, 1988 (59 of 1988), in the extraordinary issue of the Orissa Gazette No. 137, dated the 7th February, 1991, under the notification of the Government of Orissa in the Commerce and Transport (Transport) Department No. 1597-LC-1-A-31/90-T.; dated the 29th January, 1991, inviting objections or suggestions from persons likely to be affected thereby before expiry of the period of thirty days from the date of publication of the said notification in the Official Gazette;And whereas no objections or suggestions have been received from any person;Now, therefore, in exercise of the powers conferred by Section 111 of the Motor Vehicles Act, 1988 (59 of 1988), the State Government do hereby make the following rules, namely :

1. Short title, commencement and application.

(1)These rules may be called the Orissa Motor Vehicles (Producer of Gas) Rules, 1993.(2)They shall come into force on the date of their publication in the Official Gazette.(3)They shall apply to all motor vehicles operating in the State of Orissa.

2. Definitions.

(1)In these rules, unless the context otherwise requires-(i)"Act" means the Motor Vehicles Act, 1988 (Act 59 of 1988);(ii)"Authority" means the State Transport Authority, Orissa;(iii)"Government" means the Government of Orissa;(iv)"producer" means whole of the generator, pipes, coolers, filters

and accessories necessary for the generation of gas. and its supply to the engine;(v)"Schedule" means Schedule appended to these rules;(vi)"section" means a section of the Act.(2)All other words and expressions which are used but not defined in these rules shall have the same meaning as assigned to them in the Act and in the Orissa Motor Vehicles Rules, 1993.

3. Exception in certain cases.

- In regard to vehicles already in operation on the road which have been fitted with a producer approved by a competent authority prior to the date of commencement of these rules, the provisions of these rules, save as regards any subsequent modification under Sub-rule (3) of Rule 6 shall not apply, so long as the producer, its method of attachment and its maintenance conform with the rules in force at the time when it was fitted.

4. Type of producer to be fitted in a motor vehicle.

(1)No producer shall be fitted to a motor vehicle unless the producer-(i)has been made by a manufacturer approved in this behalf by the authority;(ii)is a type or model approved by and in accordance with specifications approved by that authority used on the type of vehicle concerned;(iii)has affixed to the generator in such a manner as to be clearly visible a metal plate having legibly displayed upon it the name of the manufacturer, the description, name, mark or number assigned to it by the authority under Sub - rule (1) of Rule 6 and the manufacturer's serial number.(2)Any producer approved by a competent authority elsewhere in India and any modification thereof approved by the original authority shall be deemed to have been approved for the purposes of Sub-rule (1) of this rule provided the gas filtering certificate has also been granted In respect of the plant either within the original State or elsewhere.

5. Application for approval of producers.

- Any person seeking the approval of the authority under Rule 4, shall make application in writing to the said authority accompanied by duplicate copies of the specifications, of clear drawings or prints of the producer and of the instructions for working it and shall state the type or model of motor vehicle and the horse power of the engine for which the producer is intended.(2)The instructions for the working and maintenance of the producer shall be subject to the approval of the authority, which shall cause to be endorsed thereon a statement of the materials and parts declared by the applicant to be calculated to withstand two years' fair wear and tear. A copy of the above instructions so approved and endorsed and bearing upon it the particulars specified in Clause (iii) of Sub-rule (1) of Rule 4 shall be attached to or tendered with, every producer offered for sale.Note. - The Instructions referred to in Sub-rules (1) and (2) shall include the manufacturer's recommendations as to lubrication generally and in particular upper cylinder lubrication.(3)If so required by the said authority, a person who has made an application under Sub-rule (1) of this rule shall-(i)submit the producer to such test and in such laboratory or workshop and by such person as the authority may specify; and(ii)furnish at his own expense a vehicle fitted with the producer for test on a reasonably level road including a road journey solely on producer gas of not less than eighty kilometres continuous.

6. Approval of the producer.

(1)When the authority approves any type or model of producer it shall inform the applicant in writing accordingly and shall intimate the description, name, mark or number under which it may be offered for sale.(2)No person shall sell or offer for sale any producer which does not conform in every material respect to the specification approved by the authority-in relation to the name, mark or number displayed on the generator in accordance with Clause (iii) of Sub-rule (1) of Rule 4.(3)A manufacturer who proposes to modify or alter in any way the design or specification of an approved type or model of producer shall, before offering the modified type or model for sale, make application to the authority with particulars of the modification or changes proposed and shall obtain the approval of the authority thereto.(4)Upon receipt of an application under Sub-rule (3) the authority may, if it thinks fit, require the modified type or model of producer to undergo the tests specified in Sub-rule (3) of Rule 5.

7. Enquiry before approval.

(1)Before according approval to any type or design of producer, the authority shall satisfy that the design and construction proposed are in accordance with the provisions of these rules and the general specification set forth in the Schedule.(2)If any person wishes to manufacture a producer the design of which contemplates departure from ordinary practice the employment of any new or unusual methods of construction or the use of methods of construction and processes not in conformity with these rules and specification, he shall apply to the authority stating in what respects the design departs from ordinary practice and the modification or relaxation of the rules and specification which desires to be made with the reasons therefor.

8. Maintenance of the producer.

(1)Every producer shall be installed and maintained in accordance with the specification and with all reasonable care necessary to prevent danger from fire, gas poisoning and burns and in particular, all pipes, valve and all covers to hoppers, generators, coolers, filters and any other accessories shall be free from gas or air leaks and all exposed hot surfaces shall be effectively screened from accidental contact.(2)Every part of the producer shall be firmly and securely fixed in place and all pipes, valves, joints and hopper lids of covers shall at all times be maintained in a gastight condition.(3)If an escape funnel be fitted to any generator for use during the blowing of air through the generator the mouth of the funnel shall be above the root level of the vehicle measured externally. A suitable valve or flame trap shall be fitted to the air inlet of all types of generator to prevent danger from blowback.

9. Information to the authority regarding alteration producer.

(1)The fitting or removal of producer plant to any motor vehicle shall be reported to the registering authority as an alteration as required under Section 52 and the vehicle shall thereupon be produced for inspection by such authority and at such time and place as the authority may specify.(2)A

transport vehicle fitted with a producer gas plant shall be inspected by an Inspector of Motor Vehicles or such authority as the registering authority may specify, on every occasion on which a certificate of fitness is granted or renewed. If the Inspector of Motor Vehicles or such authority as the registering authority may specify reports that any unauthorised alteration has been made in the plant or that the plant is in such a condition that its continued use will cause serious damage to the engine, the authority may, after such enquiry as it may consider necessary and after giving the owner of the vehicle an opportunity to make representations, withdraw the approval previously accorded under Sub-rule (1) of Rule 6.

10. Manner of fitting the producer.

(1) No part of any producer shall be placed so as to reduce the field of vision of the driver by means of the mirror prescribed in Rule 98 of the Orissa Motor Vehicles Rules, 1993 or otherwise or so as to impede the driver in the control of his vehicle. (2) In a public service vehicle- (i) no part of the producer shall be placed within the passengers' compartment; (ii) the generator shall be placed in rear of the passenger's compartment either completely outside or recessed into the rear panel and shall be insulated and have the clearance as specified in Rule 11; and (iii) in the case of any generator fitted in the rear of a vehicle and to one side of the vehicle suitable means shall be taken to compensate for the additional weight by inserting one more leaves in the rear springs of the vehicle at that side : Provided that the generator and a reserve of fuel not exceeding sixty-eight kilograms in weight may be carried on a trailer attached to a public service vehicle. (3) No public service vehicle towing a producer shall have any opening or door in the rear end of and facing the rear, of the vehicle. (4) In a transport vehicle, other than public service vehicle, the generator shall not be placed forward of the rear of the driver's cab and shall be insulated and have the clearance as specified in Rule 11 : Provided that in the case of any special purpose vehicle, the authority may subject to the provision of adequate means of egress for the driver (such a hinged canvas tilt or overhead flap opening (specify that the generator may be placed level with the driver's seat.

11. Fitting of generator.

(1) On any motor vehicle if any part of the generator is so placed as to be within a distance of fifteen centimetres in a horizontal plane from any part of the vehicle, the vehicle shall be insulated from the generator by a sheet of asbestos six millimetre thick, or by such insulating material of such thickness as the authority may by general or special order in writing specify in this behalf, not less in height than the height of the generator including the hopper and of such width as- (i) where the generator is recessed, completely to line the recess; (ii) where the generator is not recessed, to project for a distance not less than fifteen centimetres on either side of the generator. (2) No part of a generator shall have a clearance between it and the insulating material prescribed in Sub-rule (1) of less than five centimetres. (3) The joints in any insulating material as aforesaid shall be either- (i) overlapped by not less than eight centimetres; or (ii) butted with a covering butt-strap of the same material and thickness not less than thirteen centimetres wide and overlapping the butt-joint equally by not less than six centimeters. (4) The clearance between the ground and lowest part of any producer plant shall not be less than thirty centimetres.

12. Installation of pipe and gas filter.

(1) No generator and no pipe between the generator and the gas filters shall be so placed that any part of the generator or of such pipe is within a distance of less than—(i) sixty centimetres from any part of the petrol tank; (ii) one metre and twenty centimetres from the filling point or office of the petrol tank; Provided that in the case of a transport vehicle other than a public service vehicle the generator may be at a distance of less than sixty centimetres from any part of the petrol tank, but shall be as far removed therefrom as possible, and in no case shall there be a distance of less than twenty centimetres between any part of a generator or of any pipe connecting the generator or the gas filters and any part of the petrol tank; Provided further that when any part of generator or pipe as aforesaid is at a distance of less than sixty centimetres from any part of the petrol tank, that part of the generator and pipe shall be insulated from that part of the petrol tank by the interposition of the insulating material and the clearance as specified in Rule 11. (2) The filter cap and any other opening in the main petrol tank shall, where the generator is mounted on the shed of the vehicle, be located on the opposite side of the vehicle to the generator and shall be not less than one metre and twenty centimetres away from the generator and from any pipe leading from the generator to the gas filters. (3) Any auxiliary petrol tank with gravity feed shall be located in front as far from the generator as practicable.

13. Installation of filters and gas coolers in the transport vehicles.

- On any transport vehicle the filters and gas coolers shall be so placed as to be readily accessible for clearing at any time.

14. Duty of the driver of the vehicle to which producer is fitted.

- No driver or no other person in charge of motor vehicle to which a producer is fitted shall—(i) at any time when there is fire in the generator, cause or allow the vehicle to stop or remain stationary at a distance of less than eighteen metres from any petrol pump or place where petrol is supplied in time; (ii) at any time when there is fire in the generator, pour, petrol or cause or allow petrol to be poured into the petrol tank; (iii) carry, or cause or allow to be carried in the vehicle (save in the regular petrol tank thereof) any petrol or other inflammable or explosive substance; (iv) at any time when there is fire in the generator, clean or take out the generator, at any appointed bus stand or stopping place or within a distance of less than eighteen metres from any other motor vehicle or on any road surface, or cause or allow the same to be done by any person; (v) where a part, bus stand or halting place or a part of a part, bus stand or halting place is set apart for vehicles fitted with producers, allow the vehicles to stop or remain stationary in any other part, bus stand, or halting place or other part thereof, as the case may be; (vi) place the vehicle or cause or allow it to be placed in any garage or shed unless the garage or shed is provided with a permanent opening or openings, for sufficient ventilation other than doors or windows that may be closed.

15. Special provisional.

- The projection of any part of a producer beyond the rear of the vehicle shall not be deemed to be a part of the vehicle for the purposes of Sub-rules (2) and (6) of Rule 93 of the Central Motor Vehicles Rules, 1989.(2)No producer shall be fitted to any motor vehicle in such a way that the vehicle thereby contravenes the provisions of Sub-rules (1) and (4) of Rule 93 of the Central Motor Vehicles Rules, 1989.

16. Exemption.

- The Government may by notification exempt, to such extent as may be specified therein, any vehicle or class of motor vehicle from all or any of provisions of these rules.

17. Interpretation.

- If any question arises relating to the interpretation of any of the provisions of these rules, it shall be referred to the Government for decision.

Schedule

[See Rule 7 (1)]Producer gas plants for mechanically propelled vehicles

1. Design - The general design shall be reasonably simple and suitable to the type of the vehicle for which it is intended. It shall be such that it can be fitted to the vehicle in such a way that the driver's vision and control of his vehicle are not impeded; that the convenience and safety of the passengers is not endangered and that the coolers, filters, pipes and any other parts requiring frequent cleaning and attention can be installed in readily accessible places.

2. Performance - The producer shall be capable of providing gas sufficient to propel the vehicle under or along a level road within its full lawful loading at a sustained speed of not less than-

(a)32 kilometres per hour, in the case of goods vehicle not being a heavy transport vehicle;(b)24 kilometres per hour, in the case of a goods vehicle being a heavy transport vehicle; and(c)40 kilometres per hour, in any other cases.

3. Fuel capacity - The effective fuel capacity of the generator and hopper shall be sufficient to provide fuel to propel the vehicle under the producer gas for a distance of not less than 80 kilometres along a level road, without recharging.

4. Filtering system capacity - This shall be such as to ensure that in normal circumstances, the system shall not require cleaning at interval of less than 80 kilometre.

5. Construction - The plant shall be constructed, put together and installed, in a sound and workman-like manner. The materials and method of construction specified by the manufacturer applicant shall, save as otherwise declared by him, be calculated to withstand fair wear and tear for a period of not less than two years under the normal conditions of working and maintenance of the type of vehicle for which the plant is intended. The plant shall not form an inflexible or rigid unit, but shall be connected with flexible coupling at appropriate points to relieve any stresses within itself or due to travel on the road. No rubber hose shall ordinarily be used as a flexible connection between the generator and the cooler.

6. Generators - Generators are divided into three main types, namely, up draft, down draft and cross draft. The materials for the construction of the generators including the hoppers and other shells, if any, shall be of mild steel sheet, not less than the following gauge thickness :

All outer shells where fitted not thinner than No. 16 Standard wire gauge (1.7 millimetres thick). Up draft generators-The lower end of shell from the bottom to a point 30 centimetres above the grate or to the top of the gas outlet, whichever is the less, not thinner than No. 11 Standard wire gauge (3 millimetres thick) remainder of shell not thinner than No. 16 Standard wire gauge (1.7 millimetres thick). Down draft generators-The lower end of shell from the bottom to a point 30 centimetres above the figure grate, not thinner than No. 14 Standard wire gauge (2.1 millimetres thick) remainder of shell not thinner than No. 16 Standard wire gauge (1.7 millimetres thick). Cross draft generators-The lower end of shell from the bottom to a point 30 centimetres above the central line of twyers, not thinner than No. 14 Standard wire gauge (2.1 millimetres thick) remainder of shell not thinner than No. 16 Standard wire gauge (1.7 millimetres thick). All generator cover and generator flange joints shall be made of heat resisting material. If one escape funnel be fitted to any generator, for use during the blowing of air through such generator, the mouth of the funnel shall be above the roof level of the vehicle measured externally. A suitable valve or suitable flame trade shall be fitted to the air inlet of all types of generators to prevent danger from blow back.

7. Coolers - The materials from which Coolers are made shall be mild steel, cooper or brass sheet not less than No. 18 Standard wire gauge (1.2 millimetres thick). All coolers must be made so that they can be readily cleaned.

8. Filtering - The gases filtering system shall be not less than three stages of which the last stage shall be felt or other approved fabric

Provided that the State Government may by notification approve any filtering system. The test mentioned at Clause (i) of Sub-rule (3) of Rule 5 may include a gas filtering test with the object of determining the purity of the gas in this respect. The materials from which filter casing and all gas piping up to the mixing chamber or carburettor are made shall not be less than No. 8 Standard wire gauge (1.2 millimetres thick).

9. Flangers and flange joints - Flangers fitted to piping shall be made of material not less than 3 millimetres thick.

10. Use of wafer - When water is used either for injection or for cooling twyeres it shall be provided from a source other than the engine cooling system and shall not be in circuit therewith.

11. Water tanks - These shall be made of mild sheet or copper sheet material of thickness not thinner than No. 20 Standard wire gauge (0.9 millimetres thick) and shall be provided with strainer for inlets and outlets and a suitable arrangement for determining the water level.