[L. & S.]

Local & Munl. (189) Department.

MISCELLANEOUS.

G.O., No. 1157 M

DATED 14-8-99

INDEXED.

[Despatch Abstract.]

Carbide of Calcium.

Recording Govt. of I.D., requesting certain officers to form themselves into a Committee with the Collector of Sea Customs, Madras, as President, and to submit to Govt, at a very early date, a draft of the rules which should be made to regulate the importation, transport and possession of ——.

BACK PAPERS.

G.O.	No.	Department.	Date.	G.O.	No.	Department.	Date.

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G.O.	No.	Department.	Date.	G.O.	No.	Department.	Date.

Government (1899) of Madras.

JUDICIAL.

LOCAL & MUNICIPAL DEPT.
CURRENT No. 2277/99

Recd. 31st July
Regd. 1st August } 1899.

Enclosures 1
Spare copies 5

G.O., No. 1108, 12th July 1899.

Read order No. 1157 Local 14/8/99
Recorded.

JULY.

8/8/99 abe 10/8/99

Carbide of Calcium.

Requesting certain officers to form themselves into a committee with the Collector of Sea Customs, Madras, as President, and to submit to Government, at a very early date, a draft of the rules which should be made to regulate the importation, transport and possession of —.

GOVERNMENT OF MADRAS.

JUDICIAL DEPARTMENT.

READ—again the following paper :—

G.O., No. 922, Judicial, dated 14th June 1899.

READ—also the following paper :—

From the Government of India, Home Department, dated 16th June 1899, No. 875.

ORDER—No. 1108, Judicial, dated 12th July 1899.

The Government of India having notified that the provisions of the Petroleum Act, 1899, will be applied to carbide of calcium, His Excellency the Governor in Council considers it desirable that a committee should be formed to consider what steps should be taken to regulate the trade in that substance in the Madras Presidency. He therefore resolves to request the officers noted in the margin to form themselves into a committee, with the Collector of Sea Customs, Madras, as President, and to submit to Government, at a very early date, a draft of the rules which should be made to regulate the importation, transport and possession of carbide of calcium. The railway administrations concerned and the local firms interested in the matter should be consulted, and the question whether the importation of this substance should not for the present be restricted to the port of Madras should receive special attention.

The Collector of Sea Customs.
The President of the Municipal Commission, Madras.
The Commissioner of Police.
The Chemical Examiner.
An officer of the Public Works Department (to be appointed by the Chief Engineer).

2. A copy of a memorandum containing instructions issued by Her Majesty's Inspector of Explosives for dealing with applications for licenses to keep carbide of calcium, together with a copy of a paper regarding the regulations for the trade in that substance in New York, will be furnished for the information of the committee.

(True Extract.)

for *Chief Secretary.*

To the Collector of Sea Customs.
" Revenue Department.
" Public Works Department.
" Public Department.
" Local and Municipal Department.
" Chemical Examiner.
" President, Municipal Commission, Madras.
" Commissioner of Police, Madras.

Exd. W. D'Moss.

CARBIDE OF CALCIUM.

MEMORANDUM.

With a view to assisting local authorities in dealing with applications for licenses to keep carbide of calcium, the following observations as to the character and prevention of the risks attaching to such keeping have been drawn up :—

(1) Carbide of calcium is a solid substance, which, while not itself inflammable, evolves, when brought into contact with moisture, a gas (acetylene) which is of a highly inflammable character.

(2) This gas when mixed with air or when under even slight compression becomes powerfully explosive.

(3) Carbide of calcium, unless carefully manufactured from suitable materials, is liable to contain impurities which, when the carbide is acted on by water, evolve phosphoretted or siliciuretted hydrogen, gases which, when evolved in appreciable quantities, would render the acetylene produced liable to spontaneous ignition.

(4) In addition to the risks indicated above, acetylene gas is capable of forming an explosive compound when brought into contact with copper.

(5) The character of the apparatus to be used in connection with the production of acetylene gas from carbide of calcium is intimately connected with the question of safety ; for example, grave risk may arise from the heat developed by a too rapid conversion of the carbide into acetylene gas ; or from the apparatus permitting escape or leakage of gas which is being formed, or not allowing a free passage of the gas from the generator into the holder and so causing excess of pressure in the generator or other part of the apparatus.

(6) Risk might also arise if proper provision were not made for dealing with the residue of the carbide of calcium which has been used for making acetylene gas (viz., lime), as such residue might contain carbide of calcium which has escaped decomposition.

It will therefore be obvious that local authorities, in granting licenses for carbide of calcium, should have regard to the foregoing risks, and with that view should make provision for :—

(*a*) the exclusive use of hermetically-closed packages for the keeping and conveying of carbide of calcium ;*

(*b*) the adequate ventilation of the place where the carbide of calcium is present ;

(*c*) the prohibition of any powerful compression of the gas produced in the apparatus or receptacles employed ;

(*d*) the keeping and use of commercially pure carbide of calcium only and the establishment of efficient arrangements for the sampling and testing of the carbide ;

(*e*) the exclusion of copper from all vessels or apparatus used with or for carbide of calcium and the gas produced therefrom ;

(*f*) the use only of an apparatus which the local authorities have satisfied themselves, under competent advice, is of a safe and suitable character, and the prohibition of the employment for the manipulation of such apparatus of any person other than a properly instructed and capable operator ;

* The 9th section of the Petroleum Act specifies among the conditions, which may be included in a license under that Act, the mode of carrying within the district of the licensing authority.

(*g*) the safe disposal of the residue and the prohibition of its introduction into sewers, cess-pools, etc., unless mixed with at least ten times its bulk of water.

It will, in all cases, be for the local authority very carefully to determine whether the premises proposed to be licensed are themselves suitable for the purpose, regard being had to the formidable consequences (from fire or explosion) which might result from the careless or imperfect observance of any of the imposed conditions, especially in dwellings or in places or premises where large numbers of persons are liable to assemble.

HOME OFFICE, *The 1st March* 1897. (Signed) VIVIAN DERING MAJENDIE, Col., *Her Majesty's Inspector of Explosives.*

Regulations for the Trade in Calcium Carbide in New York.

A despatch, dated 16th December 1898, has been received at the Foreign Office from Her Majesty's Consul-General at New York, transmitting a newspaper extract showing the steps which have been taken to regulate the trade in calcium carbide in that city. This substance, from which acetylene gas is made, has only recently been introduced, but now is stored in many sporting-goods and bicycle stores and also in some large dry-goods houses, since the coming of the gas bicycle-lamp. The acetylene gas is generated by the contact of water with the carbide. In case of a fire in a store containing a quantity of the carbide, the water thrown by the firemen would quickly generate gas and cause an explosion.

According to the new rules, all calcium carbide in transit through the city and on storage must be enclosed in hermetically-sealed iron receptacles, and plainly marked "calcium carbide, dangerous if not kept dry." No single package must exceed 100 pounds. As to the sale of the carbide, not more than twenty pounds, either in bulk or in cartridges, can be stored or kept in any building used for dwelling or mercantile purposes, and this amount can only be kept on a permit obtained from the Fire Department. This permit will provide that all quantities in excess of two pounds shall be in tight, metal packages, and kept elevated at least six inches from the floor, in a fire-proof safe located above the street grade. The manufacture, transportation, storage, sale or use of liquefied acetylene is absolutely prohibited within the limits of greater New York. Provisions are made for the storage of calcium carbide in sealed receptacles in quantities not exceeding 100 pounds in isolated buildings of fire-proof construction, and the storage must be with a permit from the Fire Department, and the entire quantity stored not exceed 500 pounds in the aggregate.

Government {1899} of Madras.

JUDICIAL.

Recd. / *Regd.* } 1899. *Enclosures* / *Spare copies*

G.O., No. 922, 14th June 1899.

JUNE.

Petroleum Act, 1899.

Directing the republication in three consecutive issues of the *Fort St. George Gazette* in English and in the several vernaculars of certain draft notification proposed to be issued by the Government of India in exercise of the powers conferred by sections 22 and 8 of the —.

GOVERNMENT OF MADRAS.

JUDICIAL DEPARTMENT.

Read—the following paper :—

Notification of the Government of India, Home Department (Judicial), dated Simla, the 2nd June 1899, No. 809.

The following draft of a notification, which it is proposed to issue in exercise of the powers conferred by sections 22 and 8 of the Petroleum Act, 1899 (VIII of 1899), is published for the information of all persons likely to be affected thereby, and notice is hereby given that the said draft will be taken into consideration by the Governor-General in Council on or after the 1st July 1899.

2. Any objection or suggestion which may be received from any person with respect to the draft before the date aforesaid will be considered by the Governor-General in Council.

DRAFT NOTIFICATION.

In exercise of the powers conferred by section 22 of the Indian Petroleum Act, 1899 (VIII of 1899), the Governor-General in Council is pleased to apply to carbide of calcium the provisions of sections 5, 6, 8 to 10, 12 to 18, 23 and 24 of the said Act and to fix 5 lb. as the limit of the quantity of carbide of calcium which, under section 5 of the said Act, as applied by this notification, may not be imported, transported, or kept without a license, and to fix 5 lb. as the limit of the quantity of carbide of calcium which, under section 6 of the said Act, may be transported, or kept by any one person, or on the same premises, without a license.

In exercise of the powers conferred by section 8 of the said Act the Governor-General in Council is further pleased to make the following rules :—

1. Carbide of calcium kept or transported without a license, under section 6 of the said Act, as applied by this notification, shall be kept in separate substantial hermetically closed metal vessels containing not more than 1 lb. each.

2. Carbide of calcium (*a*) which is imported or is kept at any place after seven days from the date of its importation, or (*b*) which is transported, or (*c*) which is sold or exposed for sale, shall be contained in hermetically closed metal vessels, having attached thereto lables in conspicuous characters stating the description of the carbide of calcium with the addition of the words "Dangerous if not kept dry and liable, if brought into contact with moisture, to give off a highly inflammable gas" and with the addition, (*d*) in the case of a vessel kept, of the name and address of the consignee or owner; (*e*) in the case of a vessel transported, of the name and address of the sender; and (*f*) in the case of a vessel sold or exposed for sale, of the name and address of the vendor.

(Signed) A. H. L. FRASER,
Offg. Secretary to the Govt. of India.

No. 810.

Copy forwarded to Local Governments and Administrations for information, with a request that the notification may be published in three consecutive issues of the Local Official Gazette.

No.

Copy forwarded to the Chemical Examiner to Government, Calcutta, and the Chief Inspector of Explosives with the Government of India, for information.

(By Order.)

(Signed) H. LUSON,
Deputy Secretary to the Govt. of India.

Order—No. 922, Judicial, dated 14th June 1899.

The notification will be republished in three consecutive issues of the *Fort St. George Gazette* in English and in the several vernaculars.

(True Extract.)

G. STOKES,
Chief Secretary.

Gazette.
To the Translators to Government.

Exd P. Seetharam.