Judicial (1895) Department.

ORDINARY MS.

G.O., No. 1179

Dated 31st May 1895.

INDEXED.

[Despatch Abstract.]

INDIAN EXPLOSIVES ACT.

Communicating to the Lieutenant-General Commanding the Forces, the Commissioner of Police, Madras, the District Magistrate of Malabar, the Chemical Examiner, Madras, and to certain firms, letter from the Government of India forwarding copies of the memorandum with enclosures by Colonel V.D.Majendie, Her Majesty's Chief Inspector of Explosives, on the subject of the rules made under the ----,1884.

BACK PAPERS.

G.O.	No.	Department.	Date.	G.O.	No	Department.	Date.
	1813		14/5/95				

FURTHER PAPERS.

G.O.	No.	Department.	Date.	G.O.	No.	Department.	Date.
	3297		95				

300—28-5-94.

Judicial DEPARTMENT.

No.

From

A/E

Dated 189 .

~~FOR ORDERS~~ (dep?)

Telegram dep? 8/5

To

The Govt. of India,
Home dept.

270r
Your No. 4 Public/520, 28th March. Please forward if ~~no objection exists~~ unobjectionable Eight spare Copies of Colonel Majendie's Memorandum on Explosives Rules forwarded by Secretary of State with Military Despatch No. 3, 11th January 1894.

D
8.5.95

L&
8/5/95

Mk
8.V.95

[G/9]
2,000—23-1-95.

Current No. 2393

Judicial DEPARTMENT.

Telegram

From The Govt of India
Home dept

No. 764 Public

Dated 10th } May 1895
Received 11th }

Enclosures "

SUBJECT.

Stating that no spare copies of colonel Mejendies memorandum are available

JM
US 3 11/5

= H.M.

Submitted to H.S.M.

D
11.5.95

11/5/95.

JM
11.5.95

Ask if they can't send Even one, which we will return if required

JM
12/5/95

C 19/5
R (3)

Code Class. 5

INDIAN TELEGRAPHS.

Monthly Number. 57

To (Office) Ootacamund

From (Office) Simla

Words.	Day.	Hour.	Minute.	Official Instructions.
23/9	10	16	40	Nil

To (Person) Madras

From (Person) Secretary of State

CHIEF SECRETARY GOVERNMENT OF MADRAS 11 MAY 1895

Number 464 Public
your telegram 270
of 8th instant
repeat no 8 are
copies of Colonel
Ingendles memorandum
available

Recd. from LN.

At Hrs. Mts. by

Sent to OOTACAMUND LN.

11-5 5

Telegraph Master.

32 Word Form.

F.C.1.

[G/24.]
200—6-8-94.

Tel. No. 3644/95

Judicial DEPARTMENT.

Papers to be read in Proceedings:—

Again G. O., dated 189 , No.

Again G. O., dated 189 , No.

Current No. of 189 , dated from

Current No. of 189 , dated from

Judl Referee
Please Rept.
13/

N/

ORDER.

Telegram (deferd)

Despd 13/5

To

The Govt. of India,
Home Dept.

283x Your telegram 764 Public. ~~Can~~ ~~even~~ one copy of Colonel Majendie's Memorandum be sent ~~which will be returned if~~ required. for perusal & return if necessary

(Form orders)

D
13/5/95

MR
13.5.95

MEMORANDUM by Colonel V. D. Majendie, Her Majesty's Chief Inspector of Explosives, dated 16th December 1893.

A.—Rules to regulate the Transport and Importation of Explosives.

1. The definition of explosives and their classification follow the English orders upon the subject, except that the definition of fireworks has been recently modified by Order in Council, No. 1 (*a*) of 12th December 1891. A copy of this Order will be found at pages 248 and 249, 7th edition, Guide Book, of which a copy is enclosed.

2. In the rules as to packing, I observe that it is laid down that each class of explosive shall be separately packed. This seems to me to be superfluous, in view of the fact that paragraph V, sub-paragraph (*b*), deals with the same point somewhat more elaborately.

3. The Rule IV (*b*) is very inelastic. Under the rule, as it stands, all explosives of the first division of the third (nitro-compound) class and of the chlorate mixture class would have to be packed in waterproof wrappers; but waterproof wrappers are not necessarily required in the case of those explosives which do not contain nitro-glycerine, *e.g.*, the whole of the second division of the chlorate mixture class, or of those explosives which do not yield up their nitro-glycerine on contact with water, *e. g.*, blasting gelatine and that description of explosive; and, accordingly, Order of Secretary of State, No. 3 (*a*) of 1st April 1889 (*see* Guide Book, pages 319 and 320), gives power to a Government Inspector to exempt certain explosives from the operation of this restriction, and this power has been largely used. Also, waterproof wrappers are, under the English law, not required for the second division of the chlorate mixture class (*see* Guide Book, page 314).

4. I think the regulations as to the packing of explosive of the fifth (fulminate) class might be improved by enjoining that it shall in all cases be packed wet and in water (*see* Order of Secretary of State, No. 3).

5. Rule IV (*d*) appears to me to be wrong. Practically, all dynamite, or, speaking more broadly, all blasting explosive, except gunpowder, is issued not in bulk, but made up into cartridges, which would fall within the second division of the sixth (ammunition) class, and I can see no reason why the explosive in this form should be treated more leniently than the explosive in bulk. As I read the Rule, it will allow the dynamite, when made up into cartridges, to be packed 100 lbs. in a package instead of 50, and no waterproof wrapper would be enjoined in that case at all. Also, I do not understand the reason for allowing it, when so made up, to be in a single package. I think it would be far better to substitute for this regulation a regulation contained in the English law under E 2 (*b*) of the Order of Secretary of State, No. 3 (Guide Book, page 316).

6. Rule V (*b*) is extremely inelastic, and would prevent dynamite primers from being issued with blasting gelatine. Here, again, I think it is desirable that there should be some power reserved to some responsible officer of exempting from the requirements of the rule, on cause shown. (The English Order of Secretary of State, No. 3, is defective in this respect, and some inconvenience has resulted.)

7. Rule V (*e*). It has been found necessary in this country to enlarge the powers of exemption, as it is not only the amount which requires sometimes to be varied, but other conditions (*see* Order of Secretary of State, No. 3, A. B. C.).

8. The penalty for breach of the rules does not appear to include forfeiture of the explosive. Possibly this is because the Act does not so provide, but if the Act authorises forfeiture it will certainly be a useful penalty, and should be associated with the power of seizure and detention of explosive (*see* the English Explosives Act, section 74). This is a most valuable power which we have found necessary to use very largely in the course of our duty, and in some cases have pushed to the extent of destroying the explosive when dangerous. I may say that this observation as to the absence of the forfeiture penalty applies generally to the Indian regulations.

9. Mode of Conveyance IV. For some reason, which I am quite unable to understand, boots or shoes with exposed iron are allowed to be used when handling gunpowder. I think this is a great mistake.

10. The quantities allowed in Rule 4, section IX, differ from those in use in this country, but I do not know that there is any material objection to such variation of our quantities.

11. Rule 6, section IX. The material is required to be of standard purity, but I really do not know what this means. I suppose some test has been laid down, but, not knowing what that test is, I am unable to say whether it will give an adequate degree of purity. Then the rule goes on to say that the material must have undergone no deterioration since its manufacture. This also is extremely vague, and I do not know how the Inspecting Officer is to obtain the measure of this, as he cannot know what exactly was its condition, or what heat test it gave at the time of its manufacture. Then the rule is absolutely silent as to blasting gelatine, and that class of explosive, being free from all tendency to exudation or liquefaction, and, finally, the certificate would apparently apply only to a very limited number of explosives, *viz.*, gunpowder, dynamite, or blasting gelatine. But it is not less important, that it should apply to all other explosives of the third and fourth classes (*see* fuller observations further on upon the whole question of sampling and testing).

12. The regulations as to sampling imported explosive do not specify what is to be done with the explosive during the period of testing the samples.

I think these are the chief criticisms I have to make on this section of the regulations.

B.—Rules to regulate the Manufacture, Possession, and Sale of Explosive (in the Lower Province of Bengal).

1. The same observations as to the definition of fireworks not being up to date occur here as under A (1).

2. The same observations occur here as regards the absence of forfeiture as under A (8).

3. The quantity of explosive allowed to be on the same premises under (*a*), 4 (*i*) (*see* page 4), for private use and not for sale, is larger than that which we now allow in this country, *viz.*, 15 lbs. instead of 10 lbs. (see Order in Council, No. 12). And, further, no high explosive may be kept without a police certificate, even for private use.

4. The section 3 exempts any explosive possessed by a person licensed to manufacture the explosive, but it would surely be desirable that the exemption should apply only where the explosive is kept in accordance with that license. A person might have a license to manufacture explosive, and might, in virtue of this exemption, keep ten times as much explosive as he was entitled to have.

5. I must confess I do not understand Rule 6, or rather the proviso to Rule 6, particularly when read in conjunction with the rule above governing the possession for private use and not for sale. This proviso appears to authorise the selling of an explosive kept for private use, which I would suggest is a contradiction in terms, and a contradiction also of the language of the Rule 4 above ("private use and not for sale").

6. Rule 27 gives certain powers of entry and inspection of a factory or place where explosive is stored, but I fail to find any powers of sampling and seizure corresponding to those given to Government Inspectors under the English Explosives Act (*see* sections 55 and 74). From my own experience I should say that powers of this sort are essential to the proper discharge of the inspectorial duties.

7. Rule 28 appears to be a conglomerate of sections 46 and 47 of the English Act, and while it assigns a maximum limit of 50 lbs. of gunpowder to a "workshop," it is silent as to the quantity which may be in the "workshop" and "room." The limit in the English Act is fixed at 5 lbs. (*see* section 46, subsection 1). Further, the rule appears to be defective in having no provision against the use of fire or artificial light in the room. I would suggest that this rule should apply to a workshop, and that there be introduced for the purpose of the "room" a section similar to section 46 of the English Act.

8. Rule 34 requires the license to be produced to certain officers on demand, but I see no provision for the production of the license to an Inspector, who may be neither of the officers mentioned in that rule.

9. Schedule Form A appears to me to be wholly inadequate in the case of manufacture. It lays down nothing as regards the buildings in which the manufacture is to be carried on, or their distance from one another, or their construction, or the quantity to be in each, or the number of persons to be employed in them, or the uses to which they are to be employed. And, again, the heading of the 3rd column appears to me to be quite useless for any purpose of control. The quantity "manufactured during the year" is no sort of measure of the risk. There is nothing to prevent the man manufacturing the whole of it in one week; and so again in the fourth column, the quantity possessed and sold during the year is of no practical value, although it may be interesting for statistical purposes.

10. Passing on to condition 4 of this schedule, I would submit that the provision is quite inadequate for safety, and in some respects extremely objectionable. It prescribes that the explosive shall be manufactured in a substantially constructed building, and although this may be reasonable enough in the case of the first division of the sixth (ammunition) class (though something might be said on this point), it is extremely unreasonable and objectionable in the case of fireworks. We are most careful in this country to forbid the manufacture of fireworks in a *substantially constructed* building. Also such a building is by the condition required to be detached from the dwelling-house, but no distance is assigned; it may therefore be a foot away from the dwelling-house and yet conform to this condition. Reverting for a moment to the explosive of the first division of the sixth (ammunition) class, it is well to record the fact that the manufacture of that description of ammunition may involve operations of some danger. Safety cartridges are very safe when manufactured, but their manufacture is attended with considerable risk and needs to be surrounded (as we surround it in this country) with a number of precautions. So with percussion caps which would entail handling of fulminate; and so, indeed, with other articles belonging to this class. The whole of this part appears to me to require entire reconsideration and remodelling.

I may mention, in passing, another criticism. Condition 9 forbids any exposed iron or steel in the interior of the building, so for purposes of manufacture this condition would exclude machinery altogether.

Again, condition 11 requires all explosives to be kept separately and partitioned off from one another. Surely this precaution, which is a very useful one in many cases, ought not to exist without exemption. For example, percussion caps and safety cartridges might very properly be kept together, so might Schultze powder and E. C. powder, so might gunpowder and safety fuzes, and so on. I may, perhaps, in this connection usefully refer to Order in Council, No. 6, Part 2 (*see* Guide Book, page 278).

11. Form B. I think this part of the regulations is also open to considerable criticism. For example, the third column is open to the same criticism which I have applied to the fourth column of Form A, and also I can see nothing in the condition which fixes the amount or the distance at which the magazine or place or storage must be from dwelling-house, etc. In every case that distance should be proportioned to the quantity.

12. Form C. Here again the heading of the column as to the quantity has no value. For purpose of protection the quantity of explosive to be possessed during the year means nothing at all, if it applies to the aggregate, but the introduction of the words "at one time" would perhaps correct this deficiency.

The same observation as I have made under 11 above applies to the absence of any stipulation as to the quantities and distances. So also in connection with condition 6, my observations above as to allowing certain classes of explosive to be kept together.

13. Form D. I would submit that the heading of the third column of the table should state the quantity of explosive as well as the description.

14 Form E. Somewhat similar observations apply here; but in this case condition 11 does set forth proper and reasonable exemptions from the obligation to keep the explosives apart; indeed, it appears to adopt the words of Order in Council, No. 6, Part 2, which I have already suggested should be adopted.

Throughout these regulations I see nothing authorising the sampling of the explosive from time to time. It may be convenient if I enclose copies of the forms used by us in granting factory, magazine, and importation licenses. They will indicate at any rate to some extent what conditions we consider material.

C.—Regulations as to the transport of Explosives within the limits of certain Ports, e.g., Bombay, Karachi, Aden, Calcutta, and some Ports in Burma.

I do not think it is necessary for me to subject these regulations to detailed criticism as they relate mainly to local matters, and, indeed, I have not the necessary information to enable me to express any opinion in detail which would be of practical value, but there is one rule which I think does call for observation. It is Rule F in the Bombay Regulations, and Rule M in the Karachi, and Rule I in the Aden Regulations, under which the Port Officer is authorized to permit ammunition, when properly packed in cases not exceeding 50, to be shipped on board the vessel lying at the ordinary anchorage before the day or on the day when the vessel is intended to sail. As this constitutes an exempting power, I am disposed to think that those who are responsible for framing the rule hardly had in view the fact that "ammunition to which alone the rule applies would "include dynamite or blasting gelatine and gun-cotton;" in fact, all high explosives as well as gunpowder when made up into blasting cartridges, in which case they would fall within the second division of the sixth (ammunition) class. It would follow, therefore, that a quantity of dynamite and other high explosives amounting to 50 cases full, or (at 50 lbs. a case) 2,500 lbs. of dynamite, can be exempted under the operation of this rule. Possibly this is what is intended, and it may be a very proper regulation to make; but, on the other hand, as ammunition is so directly specified, it has occurred to me that possibly this effect may not have been intended.

D.—Sampling and Examination of Explosives.

I have referred to the ~~modification~~ Notification No. 1418, dated 24th June 1887, which the Despatch of 11th October 1893 states lays down the nature of the tests and the manner in which they are to be applied. It appears to me that the regulations set forth on this important point are extremely defective. In the first place, the order relates only to the sampling of imported explosives, and has reference only, so far as I read it, to Rule 14 of the Transport and Importation Regulations. It is absolutely silent as to the sampling and testing of explosives in store. As to the necessity for a somewhat rigorous system of examination of high explosives, I would draw attention to my remarks in my report of the 7th March 1893, out of which the present inquiry has arisen. It is possible that there may be some other regulations which deal with the question of the examination of samples of explosives in store, but no reference is made to these in the Despatch of the Government of India of the 11th October 1893, and I fail to discover any such regulations in the papers which have been sent to me. But apart from this fundamental and serious defect, the order is open to some criticism of detail. For example, it states that certain explosive, and *none others*, are to be tested, and the explosives so indicated are nitro-compounds of Class 3, Division 1; nitro-compounds containing gun-cotton belonging to Class 3, Division 2; and chlorate mixtures containing nitro-glycerine in Class 4, Division 2. In the first place this arrangement absolutely excludes from examination the most inportant class of explosives. That is to say, by the classification of explosives contained in the rules as to transport and importation, and which follow the English Explosives Act. Dynamite, when made up into cartridges for blasting, is no longer a nitro-compound of the 3rd class, but ammunition of the 6th class. But this class, by the terms which I have indicated above, is not to be tested, and yet probably almost the whole of the dynamite which finds its way to India would be in the form of

ammunition, and not in the form of explosive, in bulk. In other words, practically the whole of the dynamite imported into India would be exempt from being tested. The same observation applies to every other explosive of the first division of the nitro-compound class intended for blasting purposes, such as blasting gelatine, gelignite, etc.

Secondly, I really do not understand why only those explosives of Division 2, which contain gun-cotton, are to be tested. All nitro-compounds are liable more or less to deterioration if improperly manufactured, not merely those which contain gun-cotton. For example, Schultze powder contains no gun-cotton properly so called, but nitro-lignin, which does not rank with gun-cotton, and yet Schultze powder in this order could not be tested. But E. C. powder would be tested. So also with regard to picrates and picric powder, all of which call for occasional observation.

Thirdly, the explosives of the fourth chlorate mixture class, which may be tested under this Order, are stated to be those of Division 2, which contain nitro-glycerine. As a matter of fact, no explosives, which do contain nitro-glycerine, could belong to Division 2, as all such explosives are ranked in Division 1, which by the terms of the Order are not to be tested.

I have probably said enough to show that this important question of sampling and testing calls for comprehensive reconsideration and revision.

E. With reference to the request for my opinion as to the position of *picric acid* in regard to risk and explosiveness, I beg to call attention to Order in Council No 14 (*see* Guide Book, pages 303 to 305), which was framed after the explosion at Messrs. Roberts, Dale and Company's Chemical Works, near Manchester, on the 22nd June 1887. It will be observed from the preamble of that Order that, previous to the publication thereof, picric acid, picrates and mixtures of picric acid with other substances, did not fall within the definition of explosive, except in those cases where they were manufactured or used to produce a practical effect by explosion or a pyrotechnic effect. But the explosion at Manchester above referred to was of such a disastrous character, and disclosed such formidable risks in relation to this substance, that I felt it my duty to advise the Secretary of State that, subject to certain exemptions which are specified in the Order in Council, picric acid should be deemed, when in process of manufacture or storage *for whatever purpose*, to be an explosive within the meaning of the Act. The exceptions being when the picric acid was wholly in solution, and, secondly, when it was being manufactured or stored in a place exclusively appropriated to such manufacture or storage, and under conditions which would prevent it from coming in contact with any substances which would be liable to render it more explosive, or to explode it.

The same order makes picrates and mixtures of picric acid with substances capable of creating an explosive mixture or explosive compound to be "explosive" within the meaning of the Act, for all the purposes of the Act (which would include transport, sale, etc., as well as manufacture and storage), the only exception being when such picrates or mixtures of picric acid are wholly in solution they may not be deemed "explosive," the whole question of the characteristics and explosiveness of picric acid are set forth at some length in my report on the explosion at Manchester above referred to. Of this report, No. 81, dated 15th August 1887, I enclose a copy.

I do not pretend that the foregoing observations or criticisms are exhaustive, but they may be useful in assisting towards a more careful re-examination of the regulations which I have, I think, shown call for a very considerable amount of revision.

No.

FORM B.

MAGAZINE LICENSE.

Home Office }
Registry No. }

EXPLOSIVES.

Licensee's Name,

,, Calling,

,, Address,

Situation of the Magazine { Country, Parish, Place,

EXPLOSIVES ACT, 1875 (38 Vict., Cap. 17).

IN PURSUANCE of the power vested in me by the above-mentioned Act, I, the Right Hon.

one of Her Majesty's Principal Secretaries of State, grant and confirm this License, authorising explosive to be kept at the Magazine at the above-named situation, subject to the provisions of the said Act, and of any Orders in Council, Orders of a Secretary of State, bye-laws, regulations, and rules made and to be made thereunder, and in force for the time being, and subject also to the terms hereunto annexed.

Home Office, Whitehall,

day of

FORM B *(3).

Home Office }
Registry No. }

TERMS OF LICENSE.

The following are the terms annexed to the License No. , dated for a Magazine for Explosive.

1. The site of the Magazine shall be that shown on the plan signed by a Government Inspector, hereto attached, lettered A at the place marked.

2. The distances to be maintained between the Magazine and such buildings and works as are specified in the first Schedule hereto shall be those set forth in the said Schedule; and if at any time after the grant of this license, by reason of the approach of any such buildings or works, the Magazine ceases to be beyond the distances therein specified, this license shall cease to authorise the use of the Magazine for the keeping of explosive.

3. The mounds, buildings, and works in or connected with the Magazine shall be those shown on the plan signed by a Government Inspector, hereto attached, lettered B, and their construction shall be as follows:—

The walls of the Magazine shall be well and substantially built of good Portland cement concrete, containing not less than one part of best Portland cement, and five parts of clean, sharp, flinty gravel or ballast, with a proper proportion of sand. The roof shall be either of the same construction as is above directed for the walls, or shall be slated or tiled, and so secured internally by means of stout beams or cross pieces of wood placed at close intervals, or by stout wire netting, iron bands, sheets of galvanised iron, or other suitable material, as in the opinion of a Government Inspector to afford reasonable security against unlawful entry.

The Magazine shall be lined throughout with wood, and be provided with a close-joined wooden floor, and with two good and substantial doors securely affixed to the structure, and having hinges, as far as may be practicable, inaccessible from the exterior. The said doors shall open outwards, and the outermost door shall be of iron, or be faced externally with iron. Each of the said doors shall be fitted with not less than two strong locks, or with one lock throwing three bolts. The locks shall be of such a character as not to be easily picked or forced from the exterior.

The Magazine shall be of the dimensions shown on the said plan B, and the whole of the interior thereof (floor excepted) shall at all times be kept painted or varnished to the satisfaction of a Government Inspector.

If at any time it shall appear to the Secretary of State desirable that a wall or fence shall be erected about the Magazine or any part thereof, there shall forthwith be erected and maintained such wall or fence as may be specified by the Secretary of State in his requisition for the erection of the same, and such wall or fence shall be deemed to be a part of the mounds, buildings, or works in or connected with the Magazine.

4. No explosive shall be kept in the Magazine other than

5. The quantity of explosive in the Magazine shall not at any one time exceed.

FORM B**

SCHEDULE.

Distances to be maintained between the Magazine and other buildings and works:—

From every	NOT LESS THAN
Room used in connection with the Magazine, in pursuance of section 46 of the Act	
Workshop used in connection with the Magazine, in pursuance of section 47 of the Act	
Mineral or private railway, whether worked by steam or otherwise	
Highway or public footpath	
Promenade or open place of resort for the public or for persons carrying on any trade or business	
Canal or navigable water	
Dock	
River wall or sea wall	
Pier or jetty	
Reservoir	
Room or workshop in connection with another Magazine, store, or registered premises	
Any other room or workshop, or any shop	
Magazine for explosive	
Store ditto	
Furnace, kiln, or fire for the use of any boiler, engine, or machine, or for any manufacturing purposes ...	
Public railway	
Dwelling-house, *with* the consent in writing of the occupier	
Dwelling-house, *without* such consent	
Factory not belonging to Government	
Church or chapel	
University, college, or school	
Hospital or public institution	
Town Hall or Court of Justice	
Covered market	
Theatre or building wherein persons are accustomed to assemble	
Public building in charge of the Commissioners of Her Majesty's Works and Public Buildings	
Factory or Magazine occupied by a Secretary of State, the Commissioners of the Admiralty, or other Department of the Government, *with* the consent, in writing, of the Secretary of State, Commissioners, or Department ...	
Ditto *without* such consent	
Palace or house of residence of Her Majesty, Her Heirs and Successors	

Home Office
Registry No.

FORM B** (2).

SCHEDULE.

Distances to be maintained between the Magazine and other buildings and works:—

From every	NOT LESS THAN
Room used in connection with the Magazine, in pursuance of section 46 of the Act	
Workshop used in connection with the Magazine, in pursuance of section 47 of the Act	
Mineral or private railway, whether worked by steam or otherwise	
Highway or public footpath	
Promenade or open place of resort for the public or for persons carrying on any trade or business	
Canal or navigable water	
Dock	
River wall or sea wall	
Pier or jetty	
Reservoir	
Room or workshop in connection with another Magazine, store, or registered premises	
Any other room or workshop, or any shop	
Magazine for explosive	
Store ditto	
Furnace, kiln or fire for the use of any boiler, engine, or machine, or for any manufacturing purposes ...	
Public railway	
Dwelling-house, *with* the consent in writing of the occupier ...	
Dwelling-house, *without* such consent	
Factory not belonging to Government	
Church or chapel	
University, college or school	
Hospital or public institution	
Town Hall or Court of Justice	
Covered market	
Theatre or building wherein persons are accustomed to assemble	
Public building in charge of the Commissioners of Her Majesty's Works and Public Buildings	
Factory or Magazine occupied by a Secretary of State, the Commissioners of the Admiralty, or other Department of the Government, *with* the consent in writing of the Secretary of State, Commissioners, or Department ...	
Ditto *without* such consent	
Palace or house of residence of Her Majesty, Her Heirs and Successors	

Provided that, in the case of any building or work above-mentioned which is so screened from the Magazine by the natural features of the ground or by good and sufficient artificial mounds of earth as not to be visible from any part of such Magazine, the distance assigned above as that to be observed between such building or work and the Magazine may be reduced by one half.

BE.

SCHEDULE.

Any authorized explosives of the under-mentioned classes (whether or not made up into cartridges or charges for cannon or blasting not containing their own means of ignition), *viz.*:—

Class 1. (Gunpowder.)

Class 2. (Nitrate Mixture.)

Class 3. (Nitro-Compound.)

Class 4. (Chlorate Mixture.)

As classified by an Order in Council made under the 106th section of the Act and in force for the time being.

Provided that an authorised explosive shall be deemed to be exclusively an explosive which for the time being is authorised to be manufactured for General Sale or to be Imported for General Sale (whether with or without a license).*

* A list of all "authorised explosives" of classes 1 to 4 (specifying their character and composition), and corrected up to the 31st December of the preceding year, can be obtained by any occupier of a Magazine on application to Her Majesty's Inspectors of Explosives, Home Office.

FORM A.

No.

Home Office / Registry No.

FACTORY LICENSE.

EXPLOSIVES.

Licensee's Name,

„ Calling,

„ Address,

Situation of the Factory { County, Parish, Place,

EXPLOSIVES ACT, 1875 (38 Vict., Cap. 17).

IN PURSUANCE of the power vested in me by the above-mentioned Act,

I, the Right Hon.

one of Her Majesty's Principal Secretaries of State, grant and confirm this license, authorising explosive to be manufactured at the factory at the above-named situation, subject to the provisions of the said Act, and of any Orders in Council, Orders of a Secretary of State, bye-laws, regulations, and rules made and to be made thereunder, and in force for the time being, and subject also to the terms hereunto annexed.

Home Office, Whitehall,

day of

TERMS OF LICENSE.

FORM A.*

The following are the terms annexed to the License No. , dated , for a Factory for Explosive.

The site of the Factory shall be that shown on the plan signed by a Government Inspector hereto attached,

2. The distances to be maintained between the Factory and such buildings and works as are specified in the Schedule hereto, shall be those set forth in the said Schedule; and if at any time after the grant of this license, by reason of the approach of any such buildings or works, the Factory ceases to be beyond the distances therein specified, this license shall cease to authorise the use of the Factory for the manufacture of explosive.

3. The mounds, buildings, and works on or connected with the Factory shall be those shown on the aforesaid plan, and their construction shall be

4. No explosive shall be manufactured at the Factory other than

5. The processes to be carried on in each part of the Factory, and the place at which each such process is to be carried on, shall be

6. The limitations set forth in the Schedule hereto, as to the description and amount of explosive and ingredients and articles liable to spontaneous ignition, or inflammable or otherwise dangerous, shall be duly observed.

7. The maximum number of persons to be employed in each building of the Factory shall be

TERMS OF LICENSE.

FORM A* (3).

The following are the terms annexed to the License No. , for a Factory for Fireworks. , dated

1. The site of the Factory shall be that shown on the plan signed by a Government Inspector hereto attached.

2. The distances to be maintained between the Factory and such buildings and works as are specified in the Schedule hereto, shall be those set forth in the said Schedule; and if at any time after the grant of this license, by reason of the approach of any such buildings or works, the Factory ceases to be beyond the distances therein specified, this license shall cease to authorise the use of the Factory for the manufacture of explosive.

3. The mounds, buildings, and works on or connected with the Factory shall be those shown on the said site, on the aforesaid plan, and their construction shall be as specified in the Schedule hereto. Each of the danger buildings shall be one storey only.

4. No explosive shall be manufactured at the Factory other than fireworks as defined in an Order in Council classifying explosives made under the 106th section of the said Act.

5. The processes to be carried on in each part of the Factory, and the place at which each such process is to be carried on shall be those specified in the Schedule hereto.

6. The limitations set forth in the Schedule hereto, as to the description and amount of explosive and ingredients and articles liable to spontaneous ignition, or inflammable or otherwise dangerous, shall be duly observed.

7. The maximum number of persons to be employed in each building of the factory shall be that stated in the Schedule hereto, and when no limitation is expressed the number may be unlimited.

8. Each of the following shall be deemed a danger building:—

I. Every magazine;

II. Every building in which any one or more of the following operations is carried on, *viz.*:—

(*a*) the mixing or preparing or packing of any explosive other than manufactured firework protected by a case;

(*b*) the filling or charging of cases with explosive;

(*c*) the breaking up or unmaking of any explosive.

III. Every building in which gunpowder or loose explosive composition, or firework unprotected by a case is present or is liable so to be:

And every other building in the Factory shall be exempt from being deemed a danger building.

9. All the outer clothing of all persons engaged in any danger buildings shall be of woollen or other uninflammable material.

10. Good and sufficient means of escape for all persons employed in every danger building and every building in which any explosive is present or is liable so to be shall be provided and maintained in connexion with each such building.

FORM A**.

SCHEDULE.

Distances to be maintained between each danger building (other than the Factory Magazines) of the Factory, and other buildings and works outside the Factory :—

From every	NOT LESS THAN
Mineral or private railway, whether worked by steam or otherwise	
Highway or public footpath	
Promenade or open place of resort for the public or for persons carrying on any trade or business	
Canal or navigable water	
Dock	
River wall or sea wall	
Pier or jetty	
Reservoir	
Room or workshop in connexion with any magazine, store, or registered premises in pursuance of section 46 or section 47 of the Act	
Any other room or workshop or any shop	
Magazine for explosive	
Store ditto	
Furnace, kiln, or fire for the use of any boiler, engine, or machine or for any manufacturing purpose	
Public railway	
Dwelling-house, *with* the consent, in writing, of the occupier	
Dwelling-house, *without* such consent	
Factory not belonging to Government	
Church or chapel	
University, college, or school	
Hospital or public institution	
Town Hall or Court of Justice	
Covered market	
Theatre or building wherein persons are accustomed to assemble	
Public building in charge of the Commissioners of Her Majesty's Works and Public Buildings	
Factory or Magazine occupied by a Secretary of State, the Commissioners of the Admiralty, or other Department of the Government, *with* the consent, in writing, of the Secretary of State, Commissioners, or Department	
Ditto *without* such consent	
Palace or house of residence of Her Majesty, Her Heirs and Successors	

FORM A***.

SCHEDULE

Distances to be maintained between each Factory Magazine of the Factory and other buildings and works outside the Factory :—

From every	NOT LESS THAN
Mineral or private railway, whether worked by steam or otherwise	
Highway or public footpath	
Promenade or open place of resort for the public or for persons carrying on any trade or business	
Canal or navigable water	
Dock	
River wall or sea wall	
Pier or jetty	
Reservoir	
Room or workshop in connection with any magazine, store, or registered premises in pursuance of section 46 or section 47 of the Act	
Any other room or workshop or any shop	
Magazine for explosive	
Store ditto	
Furnace, kiln, or fire for the use of any boiler, engine, or machine, or for any manufacturing purpose	
Public railway	
Dwelling-house, *with* the consent, in writing, of the occupier	
Dwelling-house, *without* such consent	
Factory not belonging to Government	
Church or chapel	
University, college, or school	
Hospital or public institution	
Town Hall or Court of Justice	
Covered market	
Theatre or building wherein persons are accustomed to assemble	
Public building in charge of the Commissioners of Her Majesty's Works and Public Buildings	
Factory or Magazine occupied by a Secretary of State, the Commissioners of the Admiralty, or other Department of the Government, *with* the consent, in writing, of the Secretary of State, Commissioners, or Department	
Ditto *without* such consent	
Palace or house of residence of Her Majesty, Her Heirs and Successors	

FORM A ***(2).

SCHEDULE.

Distances to be maintained between the Factory Magazine of the Factory marked on the plan attached to the License, and other buildings and works outside the Factory :—

From every	NOT LESS THAN
Mineral or private railway, whether worked by steam or otherwise	
Highway or public footpath	
Promenade or open place of resort for the public or for persons carrying on any trade or business	
Canal or navigable water	
Dock	
River wall or sea wall	
Pier or jetty	
Reservoir	
Room or workshop in connection with any magazine, store, or registered premises in pursuance of section 46 or section 47 of the Act	
Any other room or workshop or any shop	
Magazine for explosive	
Store ditto	
Furnace, kiln, or fire for the use of any boiler, engine, or machine, or for any manufacturing purposes	
Public railway	
Dwelling-house, *with* the consent, in writing, of the occupier	
Dwelling-house, *without* such consent	
Factory not belonging to Government	
Church or chapel	
University, college, or school	
Hospital or public institution	
Town Hall or Court of Justice	
Covered market	
Theatre or building wherein persons are accustomed to assemble	
Public building in charge of the Commissioners of Her Majesty's Works and Public Buildings	
Factory or Magazine occupied by a Secretary of State, the Commissioners of the Admiralty, or other Department of the Government, *with* the consent, in writing, of the Secretary of State, Commissioners, or Department ...	
Ditto *without* such consent	
Palace or house of residence of Her Masjesty, Her Heirs and Successors	

Provided that, in the case of any building or work above-mentioned which is so screened from the Factory Magazine by the natural features of the ground, or by good and sufficient artificial mounds of earth, as not to be visible from any part of such Factory Magazine, the distance assigned above as that to be observed between such building or work and the Factory Magazine may be reduced by one half.

SCHEDULE.

FORM A †.

Distinguishing number, letter, or name of building, mound, or work on plan attached to license.	Construction of building, mound, or work.

SCHEDULE.

FORM A****.

Distinguishing number, letter, or name of building, room, or place on plan attached to license.	Application of building, room, or place, or process to be carried on therein.	Explosive allowed or ingredients or articles liable to spontaneous ignition or inflammable, or otherwise dengerous, and limitation of quantity to be in each building, room or place.	Limitation of number of work-people to be in each building, room, or place.

FORM E.

No.

IMPORTATION LICENSE.

Home Office }
Registry No. }

EXPLOSIVES.

Licensee's Name,

,, Calling,

,, Address,

Place of Importation,

EXPLOSIVES ACT, 1875 (38 Vict., Cap. 17).

IN PURSUANCE of the power vested in me by the above-mentioned Act, I, the Right Hon. one of Her Majesty's Principal Secretaries of State, grant to the person above-named as licensee this license, authorising him to import explosive at the above-named place, subject to the provisions of the said Act, and of any Orders in Council, Orders of a Secretary of State, bye-laws, regulations, and rules made and to be made hereunder, and in force for the time being, and subject also to the terms hereunto annexed.

This license is valid only for the person above-named as licensee.

Home Office, Whitehall,

day of

FORM E*.

Home Office }
Registry No. }

TERMS OF LICENSE.

The following are the terms annexed to the Importation License, No. dated

1. No explosive shall be imported under this license at any place other than the place of importation named in this license.

2. No explosive shall be imported under this license other than the explosive named in the Schedule hereto.

3. The quantity of the explosive so imported shall not exceed lbs.

4. All explosive imported under this license shall be packed only in the manner

5. No ship or boat containing explosive imported in virtue of this license shall bring to or moor, and no such explosive shall be unloaded or transhipped from any ship or boat, except at such part of the place of importation as may be appointed or authorised for that purpose by the Local Authority having jurisdiction over such place of importation.

6. The licensee, and the owner and master of any ship or boat in which any explosive is being imported in virtue of this license, shall, when required by a Government Inspector or by any officer appointed by the Local Authority having jurisdiction over the place of importation, or by any Officer of the Commissioners of Customs, produce to him this license, or a properly certified copy of the same, and furnish such Inspector or officer with the means necessary to enable him to ascertain whether the conditions of the same are complied with; and shall, when required by any Inspector or officer as aforesaid open, or cause to be opened, any case or package imported under this license for the purpose of examination or for the taking of samples by such Inspector or officer, and shall repack, or cause to be re-packed, every case so opened, using all care and precautions in the opening and re-packing of the same, for the prevention of accidents.

7. The licensee, and the owner and master of any ship or boat in which any explosive is being imported in virtue of this license, shall when required by any Government Inspector, or by any officer appointed by the Local Authority having jurisdiction over the place of importation, or by any Officer of the Commissioners of Customs, allow such Inspector or officer to take for examination small samples of any explosive so imported.

8. The licensee shall furnish a correct copy of this license to the owner and master of any ship or boat in which explosive is imported in virtue thereof before any such importation is made.

9. All explosive imported under this license, of which samples are taken for examination by Her Majesty's Inspectors of Explosives shall be forthwith deposited in a duly licensed place or places of storage, and shall not be distributed for use until the importer has received from one of Her Majesty's Inspectors of Explosives a notice that it may be so distributed.

10 This license is valid for one importation only (whether or not the full amount authorised above is so imported); and when such importation has been effected, the particulars thereof shall be inserted on the form thereto attached, and this license and the said form (duly filled up) shall be forthwith returned to Her Majesty's Inspectors of Explosives, Home Office, S.W.

11. The duration of this license shall not exceed a period of six calendar months.

FORM E.†

OFFICIAL.

This form to be filled up so soon as the importation is effected, and returned with the License forthwith to Her Majesty's Inspectors of Explosives, Home Office, S.W.

EXPLOSIVES ACT, 1875.*

Notice of arrival of Explosive for Importation.

License under which the importation is made.		Port or place of importation.	Name of ship or boat in which the importation is made	Date of arrival.	Name and address of consignor.	Name and address of the manufacturer of the explosive.	Port or place at which the explosive was shipped.	Nature of the explosive imported.	Amount of the explosive imported.	Where proposed to be stored prior to distribution (*see Term 9 of License*).
No.	Date.									

Signature of Licensee _____

Address of Licensee _____

Date _____

G. C. Press, Simla.—No. 287 H. D.—20-5-95.—40.

CHIEF SECRETARY
28 MAY 1895
GOVERNMENT OF MADRAS

8 copies of this memo were received with Tel. C.No. 2634 of 1895

1 copy with this

CURRENT No. 2624

No. 825

From

H. Luson, Esq.,

Offg. Depy Secy. to the Govt. of India.

To

The Chief Secy. to the Govt. of Madras.

Home Department.

(Public)

Simla, the 22nd May 1895.

Sir,

With referece to the correspondence ending with your telegram No. 283 dated the 13th instant, I am directed to forward 8 copies o the Memorandum with enclosures by Colonel V. D. Majendi, Her Majesty's Chief Inspector of Explosives, on the subject of the rules made under the Indian Explosives Act, 1884.

I have the honour to be,

Sir,

Your most obedient Servant,

H. Luson.

Offg. Depy. Secy. to the Govt. of India.

Jud[l]

Judicial Dept

CURRENT NO. 2624

From. The Govt. of India,
Home Dept. (Public)

No. 825

Dated 22nd } May 1895.
Recd 28th }

Encl: 8 copies

Subject

Forwarding 8 copies of the Memorandum with enclosures by Col. V. D. Majendie, Her Majesty's Chief Inspector of Explosives, on the subject of the rules made under the Indian Explosives Act, 1884.

28/5

(A.O.)

2415

(for perusal of the memo.)

Order / Mins d/31st May 1895 No. 1179

The memorandum will be comd. to the Lt.-Genl. Commanding the Forces, the Comr. of Police, Madras, the D.M. of Malabar, the Chemical Examiner, Messrs Best & Co., Messrs Arbuthnot & Co. and Messrs Parry & Co., Madras, in continuation of G.O. of 14th May 1895, No. 1013, Judl.

D
29.5.95

To

The Dy. Adjutant-Genl.
.. Comr. of Police, Madras.
.. D.M. of Malabar.
.. Chemical Examiner.
Messrs Best & Co. } Madras.
.. Arbuthnot & Co. }
.. Parry & Co. }

(8) Sets of memo.

Despd. with S.C. of memo 31/5

28.V.95

Done 30/5

Manifold copy please

30/5

When given for copying ____
When copied ____
When examined ____
When signed ____ } 189 .

READ AGAIN G.O., No. DATED
189 ,

CURRENT No.

ENCLOSURES TO C. No.

ORDER OF GOVERNMENT .. .. .. A A A A A A A

LETTER OF GOVERNMENT.

STATEMENT WITH DITTO.

PAPERS NOT FILED UP, BEING MEANT FOR DESPATCH IN ORIGINAL.

N.B.—
A = Copy in full.
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