1.2 UTI/PWD/2#12 • PUBLIC WORKS. 193 2. (Explosives) C.S. No. 185/32. SUBJECT. Hon. D. P. W. 193 2. General instructions with regard to the 30 th June. use of explosives. Previous Paper. MINUTES. Minutes from Aon. N. R. W. of 20/6/32. Y.S. Schatted for appront. Jul 1. 7. 32. An C.S. approved 1. y. 52 12. A.A.U. G. R. 4. 7. 32. P. M. Tras. Plane hotz. Hajutrak & Sther 1732 P. M. M. P. R. O. HSE Lully 4. 7. 32 2. 7. 32. Subsequent Paper.

Aline from Esceculive Engineer of 21/12/42. 7. (8) R. A.g. Please whe words under and in 6. This matter you will no doubt anange when tidying up all other rates of pay as discussed. KB 22/12 Strumable Colorial Seculary. Thank you, that to 20. Obr. E. 22. KH. 42

o. (It is requested	MINUTE.	
(It is requested hat, in any refer- nce to this minute he above Number and the date may guoted.) From	JUL. JUL. 1- HHX 1932	30th June 1932.
17011	ALAND ISLAND	<i>To</i>
THE COLONIAL SECRETARY,		DIRECTOR OF PUBLIC WORKS.
Stanley, Falkland Islands.		·····

Hon; Colonial Secretary,

With regard to the use of explosives in the future, I beg to sybmit the attached copy of instructions that it is proposed to carry out. They are comprehensive and in my opinion cover all the points necessary for safety.

2. It is proposed to put two men to do all blasting, they will be incharge and no other person will be allowed to use explosives. I suggest that they should be paid a skilled rate of 1/4d per hour for this work.

3. All tools, pans, nippers, etc, will be provided to allow these instructions to be carried out, and it is my intention in the first place, to go through all the various operations with the men to see that they are understood thoroughly.

4. Mr E. J. Gleadell will be the senior man in charge of blasting, I have every trust in this man, and he has had some ten years experience of blasting in the Colony.

Vide 17. P. 186/32

5. Two other minutes attached are submitted for approval, one in connection with the storage of detonators, and one for the destruction of I,000 detonators.

A. Roberts,

Director of Public Works.

INSTRUCTIONS FOR USING EXPLOSIVES.

1. PREPARING THE DETONATOR AND SAFETY FUZE.

(1) Cut the proper length of safety fuze <u>clean and</u> <u>straight across.</u>

<u>DONT</u> let the ends of the fuze get damp.

DONT cut slantwise, the end may get turned back and prevent the spit of the fuze reaching the composition, thus causing a misfire.

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- (2) Shake all the sawdust out of the detonator,
- (3) Slip the detonator over the end of the fuze until composition and fuge are in contact.
 <u>DONT</u> screw or twist the detonator on to the fuze.
- (4) Crimp the detonator gently but firmly on to the fuze.
- (5) For wet work make the joint between detonator and fuze waterproof with tallow or similar material.
- (6) For the above operation use an approved fuze cutter and detonator nipper.
- (7) When pinching the mouth of a detonator to grip the fuze, care should be taken not to squeeze the detonating end or to point it at anyone.

- 2. PREPARING THE PRIMER CARTRIDGE WITH DETONATOR AND SAFETY FUZE.
 - (1) Open a cartridge at one end, make a hole with a small stick in the opened-out end and gently push the detonator into the hole, leaving one-third of the detonator projecting.
 - (2) <u>DONT</u> use force when inserting the detonator.
 - (3) Tie the cartridge paper firmly round the detonator, this prevents the detonator from leaving the cartridge and so is a precaution against misfires.
 - (4) <u>DO NOT</u> entirely remove the paper or break the cartridge.

3. CHARGING THE BORE HOLE.

- (1) Clean out the bore hole.
- (2) Feel the bottom of the hole with a wooden rod to make sure of depth and cleanliness.
- (3) Insert the cartridges one at a time and squeeze each home gently with a clean wooden rod.
 <u>DONT</u> use a metal rod.
 <u>DONT</u> ram or pound the cartridge in the bore hole.
 <u>DONT</u> bunch, double up, or break the cartridges, use a size suitable for the diameter of the bore hole.
- (4) Lower or push the primer cartridge very gently into the hole until it rests against the charge.
- (5) <u>ALWAYS</u> put the primer cartridge last with the detonator at the end nearest the mouth of the bore hole. <u>DONT</u> squeeze the primer cartridge home.
 - (6) Tamp with sand or clay, putting deveral inches loosely, and then lightly ram.

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4. MISFIRES.

(1) <u>DONT</u> touch a misfired hole.

- (2) <u>DONT</u>, when blasting with safety fuze approach or allow anyone else to approach a misfired hole until a safe time has elapsed, i,e, nothing less than half an hour.
- (3) Bore a second hole at a safe distance from the misfired hole, and in such a direction as will keep the boring tool well clear of it.
 Position and depth of this second hole is to be decided by the india in charge of blasting.
- (4) Charge and fire this hole.
- (5) Search the debris thoroughly by hand for unfired detonators and cartradges.
 - <u>NOTE</u>. With regard to instruction 3, a case may occur where it is impossible owing to confined space to drill a second hole at a safe distance from the misfire. <u>Then and then only</u> may you withdraw a charge.

The method is as follows. - The tamping must be carefully cleared away from the detonator with pieces of wood, the hole and its surroundings having been previously drenched with water. You may then insert another primer cartridge and fire in the ordinary way.

<u>DO NOT</u> use a rod or instrument of metal for this <u>BUT USE WOOD</u>.

DO NOT USE FORCE.

5. FROZEN GELIGNITE.

Gelignites freeze at 40° F. and remain frozen at higher temperatures. When cold weather is likely they should be protected. A woollen blanket is suitable for this purpose.

Chilled or frozen gelignite can be distinguished by being harder than unfrozen, by being more brittle than plastic, and being of slightly lighter colour.

Frozen gelignite must be thawed before use, but this must be done with every care and only small quantities of not more than 8 No 2oz cartridges should be dealt with at a time.

/Chilled.

5. FROZEN GELIGNITE.

<u>Chilled or Frozen Gelignite must not</u> be warmed on or near fires, stoves, ovens, steam pipes or heated bodies, or in the direct rays of a strong sun. They are to be thawed in a watertight tin can, which should be placed in a vessel containing water previously and separately heated to a temperature not hotter than the wrist can bear, i.e. **100** F.*e.R.* this temperature is to be tested with a thermometer <u>DO NOT</u> put the thawing pan on or near a fire.

GENERAL PRECAUTIONS.

- (1) Cartridges and detonators must be handled <u>WITH VERY GREAT CARE.</u>
- (2) <u>Detonators must be stored apart from explosives.</u>
- (3) Every precaution should be taken in firing charges, against a possible failure.
- (4) When tamping a charge, the detonator should be protected from blows, and the fuze from wrenches which might displace it.
- (5) When a charge fails to explode it should not be approached for at least half an hour.
- (6) The person firing the explosive is to see that any explosives have been removed to a place of safety, and that steps have been taken to ensure the safety of people and property.
- (7) <u>ALWAYS</u> give ample warning before lighting the fuze.
- (8) Fuze burns at the rate of four feet per minute, allow ample time to get clear after lighting <u>Only authorised persons</u> are to use explosives.
- (9) <u>DONT</u> allow other workmen to assist in charging or firing holes, or to handle explosives.
- (10) When dealing with or handling explosives the orders of the man in charge are to be obeyed and any irregularities or disobedience of this order is to be immediately reported.

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- (11) A record is to be kept of charges fired with the number of cartridges used in each charge, and a special entry made of misfires.
- (12) Not more than one 5 lb box of gelignite is to be kept in the ready issue store at one time.

SPECIAL NOTE.

- 1. <u>SMOKING IS STRICTLY PROHIBITED WHILST</u> HANDLING OR IN THE VICINITY OF EXPLOSIVES.
- 2. IT IS HIGHLY DANGEROUS TO DISREGARD ANY OF THESE INSTRUCTIONS.

Cr. Roberts,

Director of Public Works. 30th June, 1932.

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MINU	TE.
a	21 st DECEMBER, 1942
YXXX TO:	XX FROM:
THE COLONIAL SECRETARY,	THE EXECUTIVE ENGINEER,
Stanley, Falkland Islands.	STANLEY.

In M.P. 185/32 His Excellency approved on (6) para 3 that men engaged on blasting should be paid 1/40 per hour. This ruling was given presumably when blasting was being done regularly, but the two men concerned continue to draw this pay although there has been practically no blasting by Government for some years, nor will it be necessary in future as I propose using an alternative source of stone supply.

In view of this may I be informed please whether the men were intended to be paid extra whether they were blasting or not and if not whether their pay may be put at ordinary labourers rate i.e. 1/2d in which capacity they are now employed.