DECLASSIFIED E.O. 12065 SECTION 3 402/MNDS NO:

笠戸工場案内

THE GUIDE OF KASADO ROLLING STOCK WORKS

笠戸工場全景
Birds Eye View of Kasado Works

笠戸工場事務所 Office of Kasado Works

日立製作所

Hitachi, Ltd.

GF-001A

DECLASSIFIED E.O. 12065 SECTION 3 402/NNBS NO.

笠戸工場概況

當工場は大正六年に創業され、山陽本線下松驛（山口縣）より東南二粁に位し、氣候溫暖な瀨戸內海に面し、完備した港灣施設を有し、專用引込線と共に極めて有利な立地條件の下にある車輛製造の專門工場であります。

大正十三年に本邦最初の ED 15 形電氣機關車及び廣軌用 58 瓲過熱蒸氣機關車を完成し、車輛界に一新紀元を劃しました。

昭和十二年に最新設備を誇る客電貨車專門工場を完成し、全種目の車輛製作に進出し、國有鐵道を初め民間鐵道會社は勿論、各方面よりの需要に應じ、一方朝鮮、中國、タイ、ソ連等に多數の車輛を輸出し、年と共に飛躍を遂げて參りました。

他方ロコモビル、暖房、船舶用汽罐其他の需要に對しても、多年の經驗と最新の技術による製品を供給して斯界の好評を博して參りました。

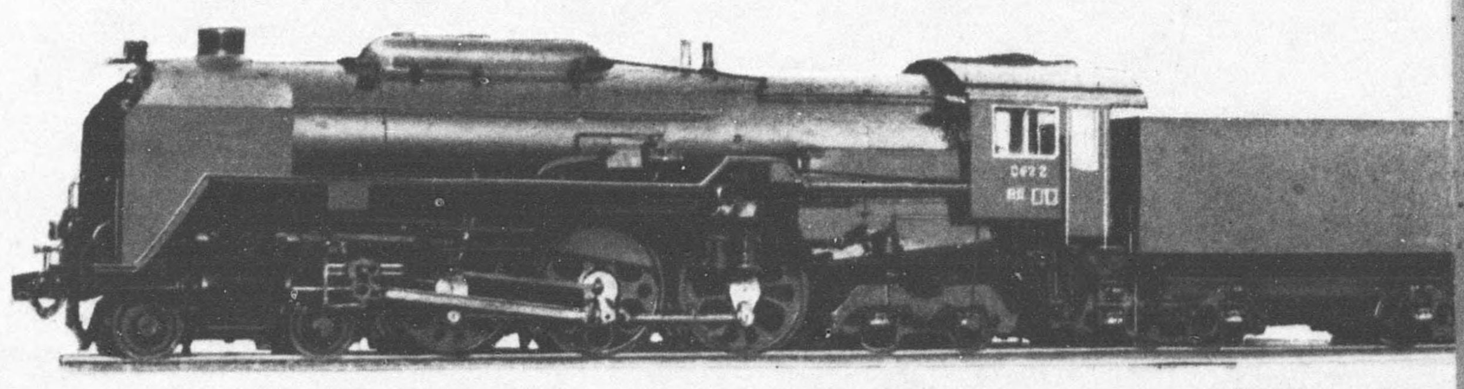
戰後直ちに國鐵の蒸氣機關車、客貨車等の新造に邁進して產業復興の先鞭を附け、續いて大型車輛を南鮮、中國に輸出し、尙ソ連、タイ、フイリツピン其他への輸出車輛も銳意製作し相次いで輸出しつゝあります。

現在市街の電車製造は、創立以來の劃期的盛況を呈し、大阪、神戸の大都市を初め各都市に多數納入し好評を博し、他面郊外電車は再生制動裝置付高級電動車を初め次々と納入し、尙國鐵幹線電化に伴い大型電氣機關車の製作を行い、交通發展に貢獻しつつあります。

又一般產業部門に對しても機關車、消火車、其他各種車輛を納入して居ります。

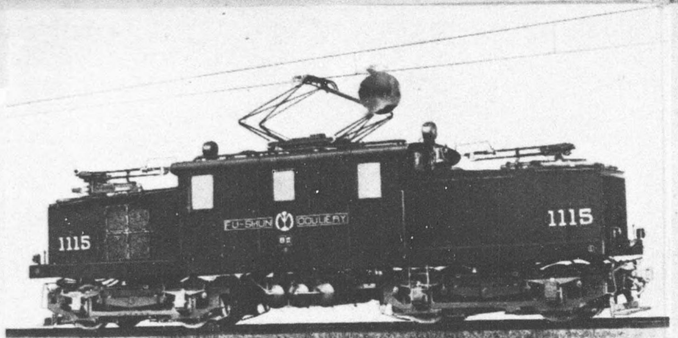
三拾有餘年の車輛製作の豐富な技術と優秀な研究、完備した製作設備と日立綜合技術の妙を發揮して完成される優秀な車輛は、明るい美しい日本建設の一大原動力となりましよう。

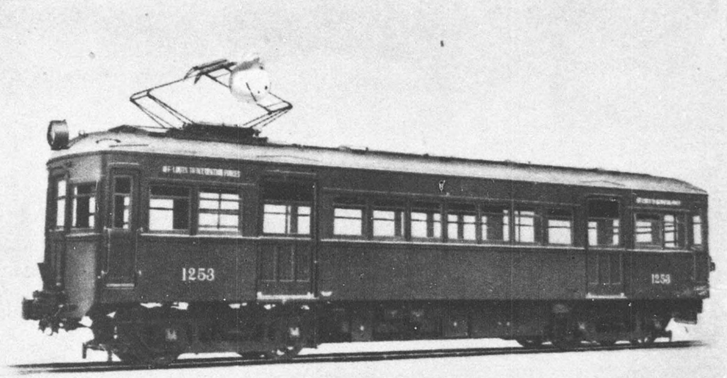
益々皆樣の御期待にそい度く倍舊の御愛顧を希い願う次第であります。



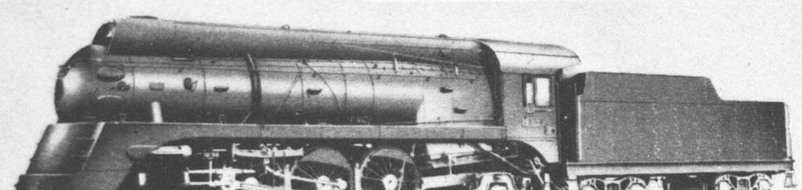
C62 形過熱テンダー蒸氣機關車
Steam Locomotive (Type C62)

85 t 電 氣 機 關 車
Electric Locomotive (85 ton)

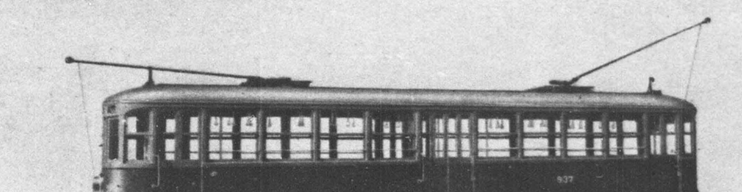




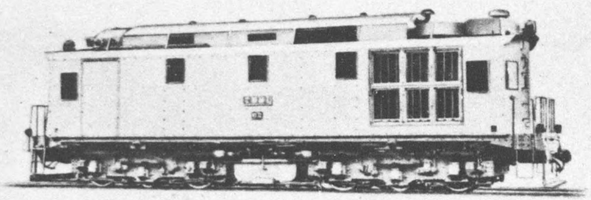
半鋼製二軸ボギー電動客車
(郊外高速度用)
Electric Car (High Speed Car)



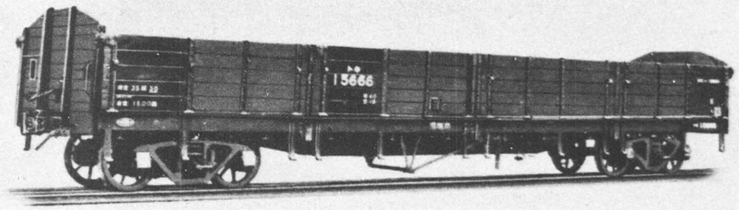
パシハ形過熱テンダー蒸氣機關車
Steam Locomotive (Type Pacific)



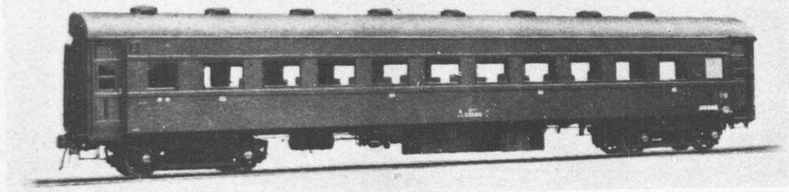
半鋼製二軸ボギー電動客車（市街電車）
Electric Car (Street-Car)



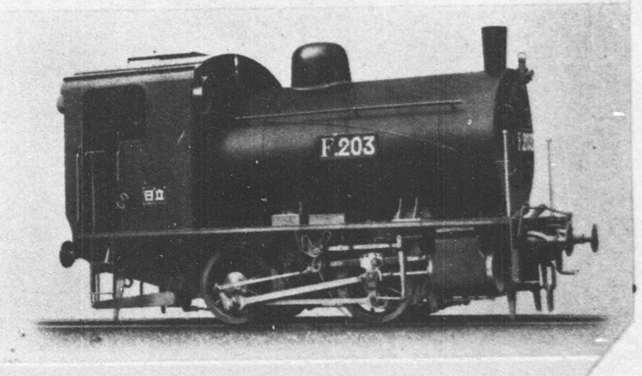
85 t 750 HP デイーゼル電氣機關車
Diesel Electric Locomotive



35t 積15000型式トキ形
二軸ボギー無蓋車
Gondla Car (Type Toki)



オハフ形鋼製二軸ボギー三等客車
Passenger Car (Type OHA)



35t B形無火機關車
Fireless Locomotive
(35 ton)

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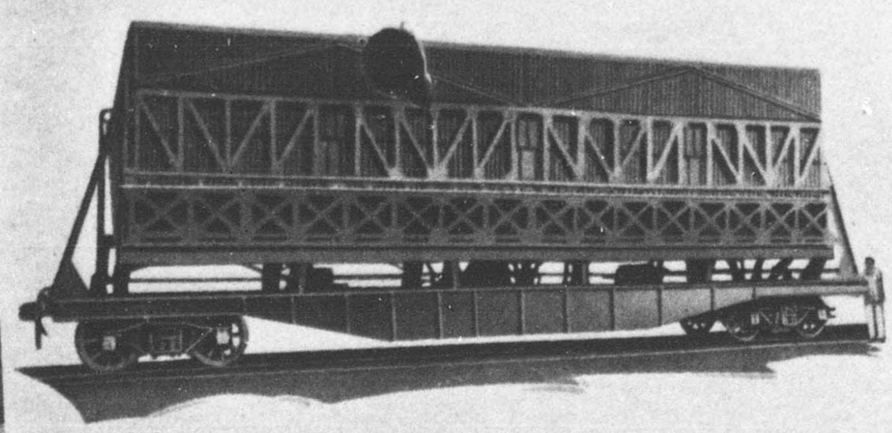
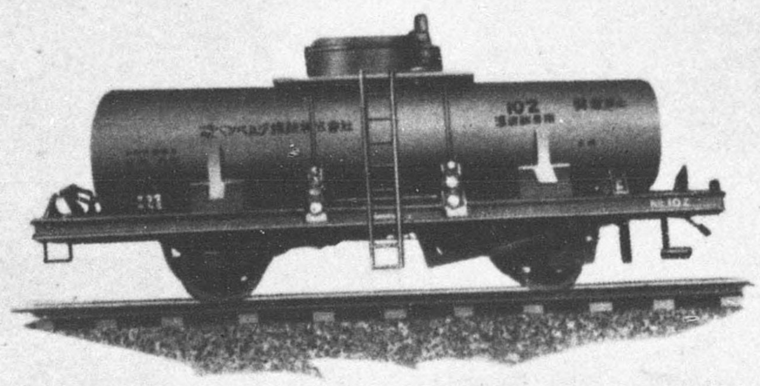
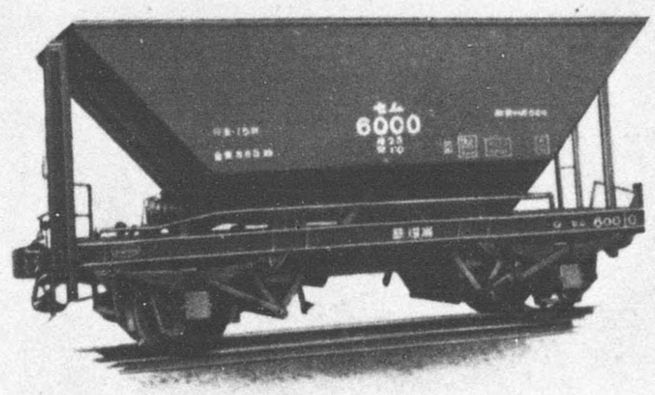
DECLASSIFIED E.O. 12065 SECTION 3 402/NNBS NO.



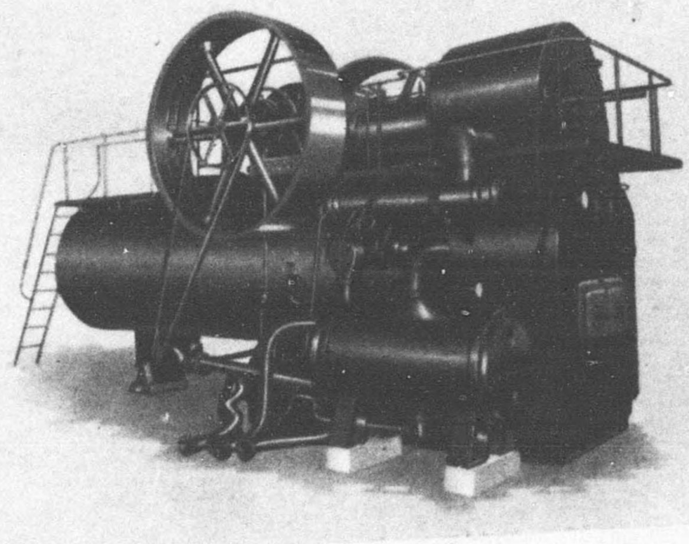
濃硝酸用全熔接アルミニユームタンク車
Aluminium Tank Car (For Nitric acid with all Welding Tank)



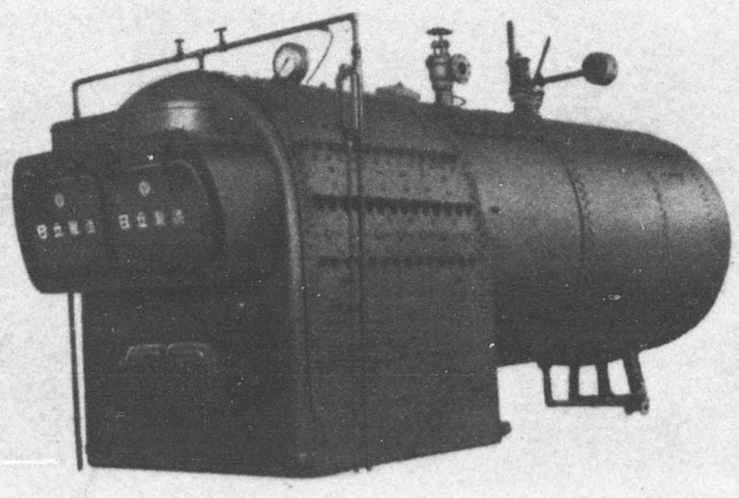
骸炭消火車
Coke Quenching Car



15瓲積セム 6,000 形石炭車
Coal Car

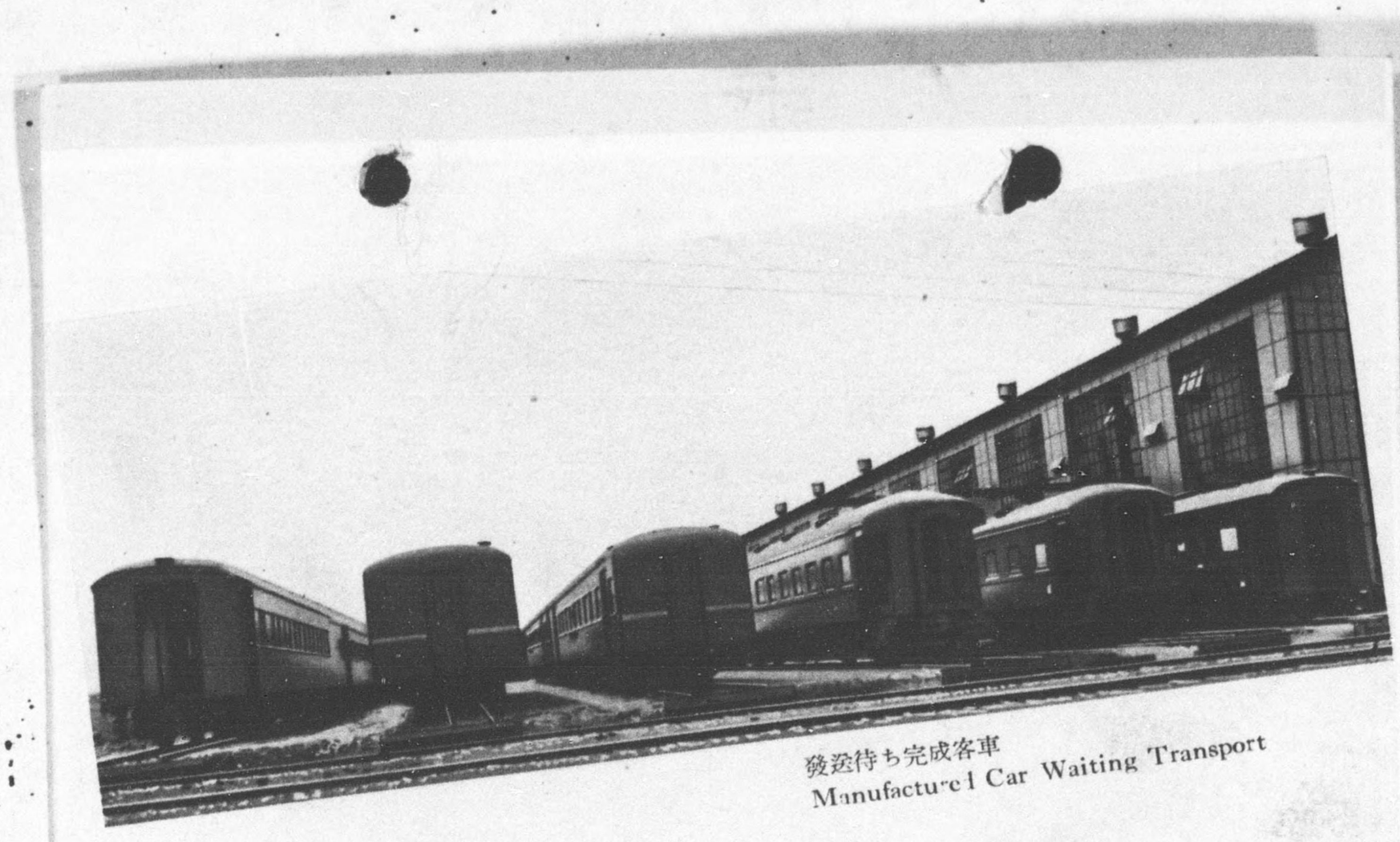


295 IP ロコモビル
Locomobile (295 IP)



上向通風型 HK 汽罐
Boiler (Type HK)

DECLASSIFIED E.O. 12065 SECTION 3-402/NNBS NO.



發送待ち完成客車
Manufactured Car Waiting Transport

主なる納入先

日本國有鐵道	昭和電工、東洋高壓、其他、化學會社
東京、大阪、神戸、京都、横濱、熊本、各都市交通局	舊朝鮮鐵道
南海、廣島、日立、其他、電鐵會社	中華民國鐵道(華中、華北、滿洲、其他)、臺灣
岡山、水濱、其他電氣軌道會社	ソビエツト聯邦國有鐵道(樺太、其他)
館山、小野田、津輕、長野、其他鐵道會社	タイ國有鐵道
日本製鐵、小倉製鋼、其他製鐵製鋼會社	フイリツピン國有鐵道
日本鑛業、三菱鑛業、其他、鑛業會社	

笠戸工場製品概目

蒸氣機關車、電氣機關車、內燃機關車
無火機關車、其他各種機關車
電車、內燃動車、其他各種動車、動車用附隨車
客車、貨車、特殊鐵道車輛、車輛部品、鐵道用諸機械
各種汽罐類、ロコモビル、ロードローラー、トラクター

文祥堂印刷株式會社印刷

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO: 1[illegible]

COPY

GENERAL HEADQUARTERS
SUPREME COMMANDER FOR THE ALLIED POWERS
Economic and Scientific Section
APO 500

MWH/WT/yt

5 April 1951

387.6(5 Apr 51) ESS/IND

MEMORANDUM FOR: Reparations Agency, Tokyo

SUBJECT: Application for Movement and Authorized Use of Items Listed for Reparations

1. Reference is R.A.R. No. 337 (MS), 16 February 1951, subject: Application for Movement and Authorized Use of Reparations Equipment of Iwahana Factory, Tokyo 2nd Military Arsenal (Code No. 10-23) Filed by Asa Factory, Nippon Kayaku Co., Ltd. (Non-reparations plant).

2. The application requesting permission for the transfer and authorized use of the one (1) item of reparations equipment listed in reference 1, above, is approved as indicated in inclosure 1.

3. A rental fee shall be established for the authorized use of the equipment listed in reference 1, above, based upon current valuation and comparable to rental charges assessed by private interests for the use of similar equipment.

4. This permit is issued subject to any and all directives affecting reparations plants which have been issued or may hereafter be issued by the Supreme Commander for the Allied Powers. Reports will be rendered as required by current directives and instructions.

FOR THE CHIEF, ECONOMIC AND SCIENTIFIC SECTION:

MAURICE M. CLASS
Chief, Industry Division

2 Incls
1. Item author. for mvmt & use. (dup)
2. R.A.R. No. 337 (MS) 16 Feb 51 (dup)

MEMO FOR RECOR:

The above ltr is self-explanatory.

Cys furnished:
CA Sec. (dup)
CPC

W.A. Thurman, 26-8485 M.M.C.

COPY

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C O P Y

Items Authorized for Movement and Use

The application requesting permission for the transfer and authorized use of the following one (1) item of reparations equipment is approved as listed below:

Present Location	No. of Items	T. Be Transferred to
Tokyo 2nd Military Arsenal Iwahana Plant (10-23)	1 (10-23-5128)	Nippon Kayaku Co., Ltd. Asa Factory No. 2,300, Kori, Asa-machi Asa-gun, Yamaguchi Pref.

- nothing follows -

C O P Y

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. [redacted]

YAMAGUCHI PREFECTURAL GOVERNMENT
Commerce & Industry Department

6 February, 1951

SUBJECT: Gunpowder Manufacture for Industrial Use in 1951 (January - December)

TO: Chief,
Chugoku Civil Affairs Region

Reference: 'Gunpowder Manufacture for Industrial Use in 1951' by Sho-ko 119 dated Jan. 23, 1951

We have pleasure in informing you that approval for gunpowder manufacture was given to the following gunpowder manufactory by the Trade & Chemistry Bureau, Ministry of International Trade & Industry on the basis of the 'Memorandum of ESS, GHQ, SCAP dated Dec. 28, 1950 under the following limitations on the quality and quantity of gunpowder;

Industries File

1. Company & its location:

Asa Workshop, Nippon Chemical Ind. Co. Ltd., Gori, Asa-cho, Asa-gun, Yamaguchi Prefecture.

2. Approved quality & quantity:

7,519 kilotons of explosive compounds.

Yours respectfully,

Tsutomu Hironaga

TSUTOMU HIRONAGA
Director,
Commerce & Industry Dept.,
Yamaguchi Pref. Govt.

MS/sn

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. [illegible]

HEADQUARTERS
CHUGOKU CIVIL AFFAIRS REGION
ECONOMICS SECTION

D/WFA/ftk

CCAR 319.1

23 January 1951

SUBJECT: Report of Field Trip, Shimonoseki, Asa, Onoda, Ube, Yamaguchi , Tokuyama and Iwakuni, 16 - 20 January 1951

TO : Chief
Economics Section

PREPARED BY: W. F. Armstrong, Distribution and Industry Division

E X T R A C T

1. REFERENCE:

O.D. 11.

2. PURPOSE:

Reparations Inspection, Surveillance of Shipyards, Oil Storage Facilities and Explosive Plants in compliance with O.D. 11.

3. BACKGROUND:

Routine.

4. DISCUSSION:

Explosive: (Kayaku)

Asa Plant of Nippon Chemical - Production figuers for 1950 were reviewed and authorization for 1951 production was discussed. No violations observed.

5. CONCLUSIONS:

a. Custody and maintenance of reparations equipment very satisfactory.

6. RECOMMENDATIONS:

None.

W. F. ARMSTRONG
Distribution & Industry Division

MANUFACTURING AND INDUSTRY FILE

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDS NO. [illegible]

THE HIROSHI A INTERNATIONAL TRADE & INDUSTRY BUREAU

5 Jan. 1951

To : Mr. Stradley,
Chief, Commerce & Industry Section, Chugoku Civil Affairs Region

Subject : Report on Production of explosives during Dec. 1951

We have the honour of submitting a report on subject matter as per enclosed sheet.

Material	Actual Production as of 25th	Prospect of Production from 26th to 31st	Production Plan for Dec.	Prospecting Ratio
Gelatine Dynamite	240.097.500 ton	13.680	281.250	90.2
Nitrate Lineage	239.490	0	213.750	112.0
(ammonium nitrate dynamite)	90.045	0	67.500	133.3
(ammonium nitrate dynamite)	149.445	0	146.250	102.1
Total	479.587.500	13.680	495.000	99.5

Note :
P.D. explosive none

Production of Explosives permitted for 1950

Gelatine Dynamite and Hagitypedynamite 3364 Kilo ton

Ammonium nitrate dynamite and ammonium nitrate explosives 3,163 Kilo ton

Cultivation dynamite 100 ton

Total 6,627 Kilo ton

Yakio Hara

~~For~~ Y. HARA
Director, Hiroshima
International Trade
& Industry Bureau.

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO.

D + I RJS
Labor copy

THE HIROSHIMA INTERNATIONAL TRADE & INDUSTRY BUREAU

21 Dec. 1950

Serial No. : 25 Hiro Tsu San Ka 1020

To : Chief, Chugoku Civil Affairs Region

Subject : On Labor Dispute at Nihon Kayaku K.K.

Location of Nihon Kayaku K.K. : Asa-Machi, Yamaguchi Prefecture.

file

Regarding the bonus for 3rd quarter period of 1950 fiscal year, negotiation had been carried out between Nihon Kayaku Co. and Labour Union of the same, but they failed to get to a settlement.

On December 19 the Union notified the Co. to the effect that they were going into strike beginning from 10 a.m., 22nd of December to 10 a.m., 23rd of December 1950. The brief outline of the Labor Dispute is as follows:

1. Cause :

(a) Demands made by the Union

Owing to the rise in Price of daily necessities, taxes, debt-payment, special expenditure during Christmas and New Year period and others, workers' life life is by no means an easy one.

In order to save the distress of their life, the Co. should take special measure so that bonus totalling to ¥ 46,000,000 be given to the workers (average : ¥ 1,2000 per head)
Taking financial condition of the Co. and others into condideration, this demand is by no means absurd.

(b) Contention of the Co.

Considering from business condition this term, ¥ 30,000,000 is good enough, but the Co. will pay ¥ 36,000,000 since taxes are due now.

It is impossible for the Co. to pay more than that when business condition and financial aspect this ~~are~~ term are taken into dondideration.

The Co. would not comply with the demand of the Union.

2. Date of Walkout :

From 10 a.m. 22nd Dec. to 10 a.m. 23rd December.

3. Process :

8th and 9th of December.

Regarding the bonus, central Labor Union conference was held in accordance with Labor Agreement and each party submitted their final decision.

The Union ¥ 46,000,000 The Co. ¥ 36,000,000
The conference faild to reach an agreement.

12th and 13th of December :
Special conference was held again but could not get to a sellement.
14th of December :
Application was mad to Central Labour Union Committee for mediation
18th of December :
Series of mediations were proposed, which, however, were rejected by both parties. 19th of December:
The Co. was notified by the Union that they were going into strike in

DEC 22 1950

2052

DECLASSIFIED E.O. 12065 SECTION 3 (E), NARS NO.

accordance with Labor Agreement, beginning from 10 a.m. 22nd of December to 10 a.m. 23rd of December.

4. Effect of Strike

(a) Asa sagyo-sho (manufacturing explosives) :
No particular effect is expected.
No serious matter will arise since guards are on watch.

(b) Fukuyama Dye Plant
10 % decrease in production is expected for December.

Settlement :
We received a telegram from the Co. at 2 p.m. 21st of December stating briefly that the labour dispute came to a final settlement.

For Y. Hara
Director, Hiroshima
International Trade
& Industry Bureau.

DECLASSIFIED E.O. 11652 SECTION 3 (E), NARS NO.

民事部

Copy

Application for Movement and Authorized Use of Designated Reparations Machinery and Equipment

Date: 24 November 1950.

TO : Ministry of International Trade and Industry

FROM : Nippon Kayaku Co., Ltd.

Address: No.15-5, Ichiban-cho, Chiyoda-ku, Tokyo

1. Name, Code No. and location of the plant which intends to use designated reparations machinery and equipment:

Asa Factory of Nippon Kayaku Co.,Ltd. FILE

(Not designated as reparation factory)

No. 2,300, Kori, Asa-machi, Asa-gun, Yamaguchi-ken.

2. Name, Code No., Category and Location of the plant where designated reparations machinery and equipment to be used actually exist:

Iwahana Factory of Tokyo 2nd Military Arsenal (10 - 23)

No. 239, Iwahana-mura, Gumma-gun, Gumma-ken.

3. List of designated reparations machinery and equipment to be moved and used:

Inv. No.	Name of Machinery	Brief Specification	Quantity	Remarks
10-23-5,128	Energy-Test-Pendulum	See attached blueprint on details of specification. Made in Japan, manufacturer unknown.	1	With accesso-ries

DECLASSIFIED E.O. 12065 SECTION 3 402/MDS NO.

4. Necessity for movement and use of machinery and equipment:

The explosive power of industrial explosives now manufactured at our Asa factory is measured by such testing methods as lead block test, brisance test and detonation velocity test. But it can be more clearly measured if an energy-test Pendulum is used for in addition to the above tests.

Such pendulum is widely used for testing of the explosive power in Japan as well as in various countries of Europe and in the United States,too. However, the factory has no such testing equipment and we consider there's seldom that a factory has enough techniques to manufacture it in Japan because it is scarcely demanded,further because the manufacture of ordnance is at present prohibited. Even if there were such a factory, a pendulum just conformable to the standard would hardly be manufactured and a long time would be required to get the desired ones.

Fortunate it is for us, an energy-test pendulum is kept idle as designated reparation equipment at our Iwahana factory,former Iwahana plant of the 2nd Military Arsenal.

Such being the case, wishing to move the pendulum to our Asa factory and to make the best use of it, we hereby apply for movement and authorized use of the pendulum, with the hope to help in the long run improve the quality of industrial explosives we manufacture and to avoid wasting money and time for getting the desired one.

Signed Yasusaburo Hara
Yasusaburo Hara

President
NIPPON KAYAKU CO.,LTD.

DECLASSIFIED E.O. 12065 SECTION 3 402/NNSS NO. [illegible]

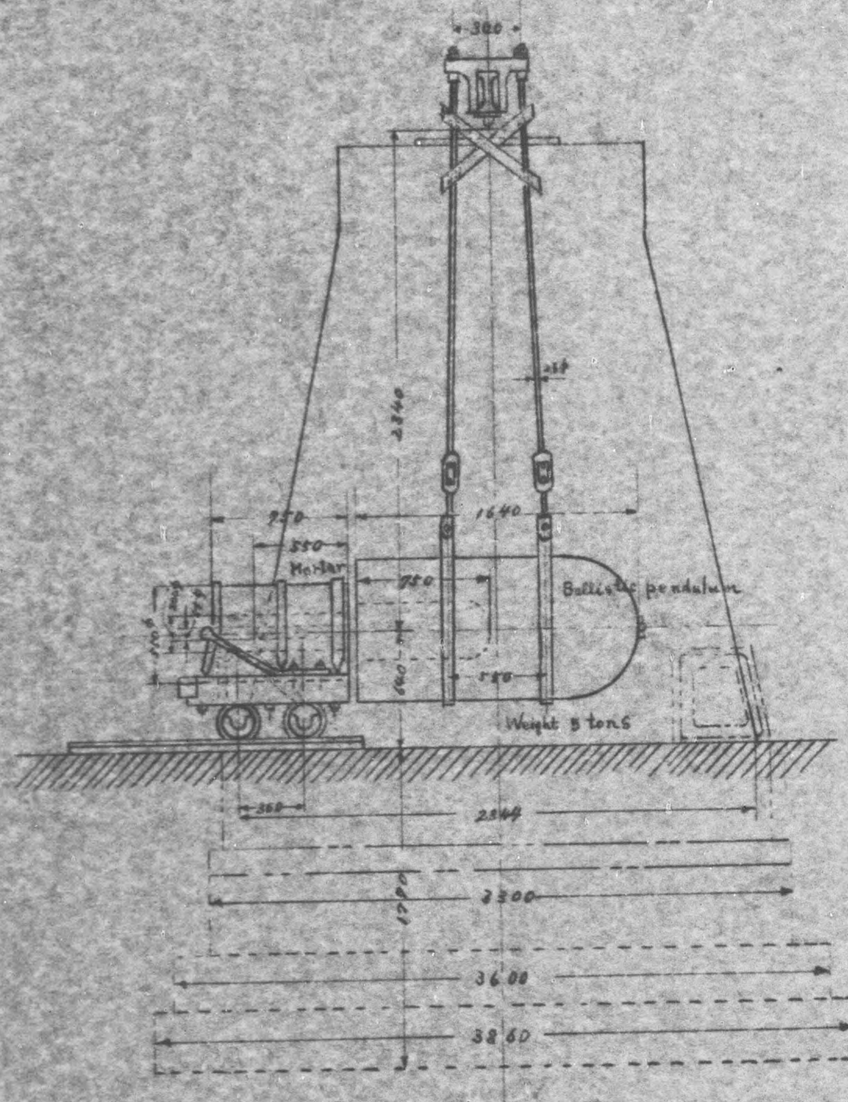
List of designated equipment to be moved and used

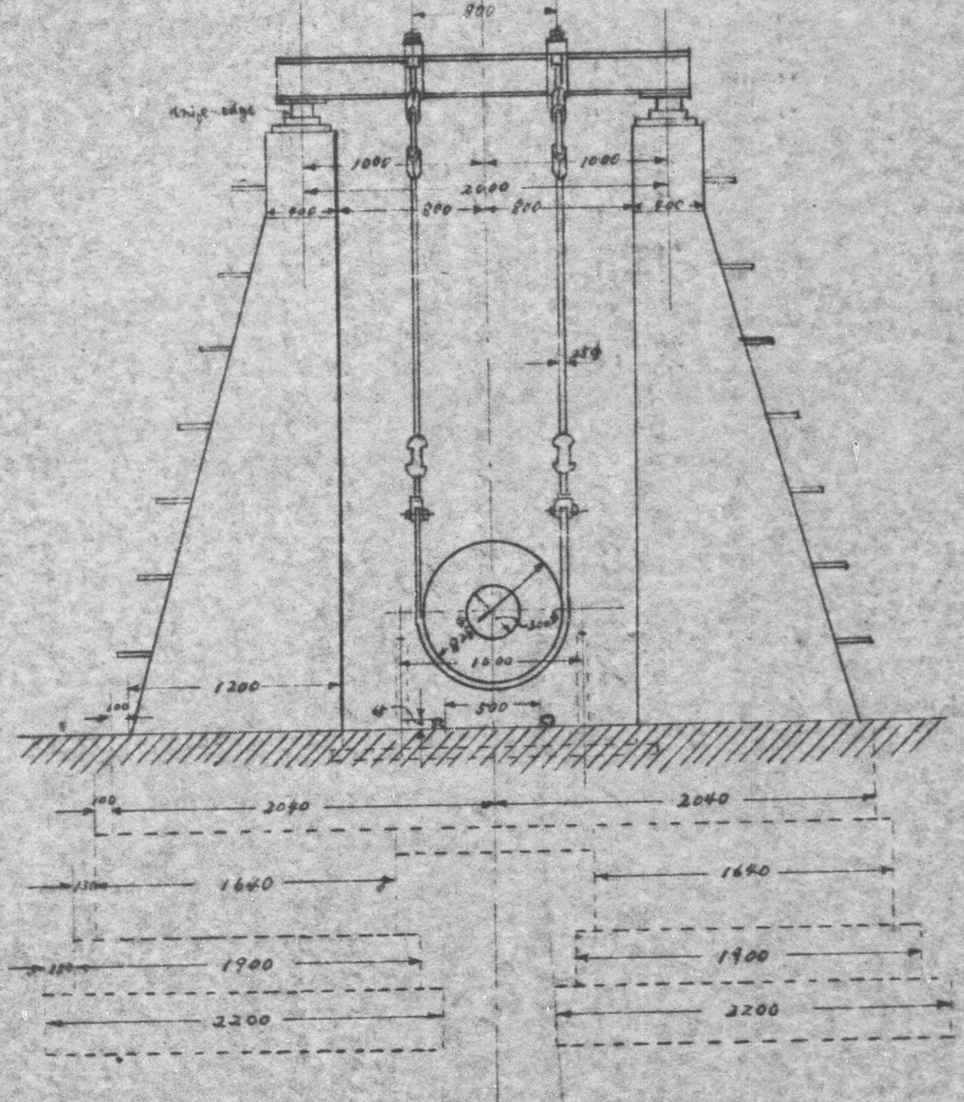
Code No. 10 - 23

Name of Plant: Iwahana Factory of Tokyo 2nd Military Arsenal

Location of Plant: No.239, Iwahana-mura, Gumma-gun, Gumma-ken.

Inv. No.	Name of Machinery	Brief Specification	Quantity	Remarks
10-23-5,128	Energy-Test-Pendulum	See attached Blueprint on details of specification. Made in Japan, manufacturer unknown.	1	With accesso-ries





Scale 1:40 Unit m/m

Enegy Test Ballistic Pendulum

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO.

R+Q

C O P Y

CHUGOKU
INFORMATION:
O.D. 11
DEC - 1. 1950

GENERAL HEADQUARTERS
SUPREME COMMANDER FOR THE ALLIED POWERS
Economic and Scientific Section
APO 500

420(15 Nov 50)ESS/IND

MWH/HSC/EAD/sm
15 November 1950

MEMORANDUM FOR: Ministry of International Trade and Industry ATTN: Chemical Bureau

SUBJECT: Application for Permission to Alter Authorized Production of Industrial Explosives

1. Reference is letter FOM No. 2219 (MITI) to General Headquarters, Supreme Commander for the Allied Powers, 31 October 1950, subject: Application for Permission to Modify Permitted Output of Explosives.

2. No objection is offered to proposed change in distribution of production among Nippon Kayaku K.K.'s Asa, Kiyama, and Iizuka plants, as outlined in reference application.

FOR THE CHIEF, ECONOMIC AND SCIENTIFIC SECTION:

MAURICE M. CLASS
Chief, Industry Division

4-35

MEMO FOR RECORD:

SUBJECT: Application for Permission to Modify Permitted Output of Explosives

1. FOM 2219(MITI) requested permission to change distribution of explosives production in Nippon Kayaku K.K. as follows:

a. Increase production of gelatin and Hagi-type dynamite by 250 MT at its Asa plant and decrease production of ammonia dynamite and ammonium nitrate explosive by an equal amount at the same plant.

b. Increase production of electric detonators by 240,000 pieces at its Kiyama mill and decrease by an equal quantity the number produced in the Iizuka mill.

2. The application, as received by ESS/IND, referred to two of the plants as the "Atsuka Mill" and the "Motoyama Mill". However the names were changed to "Asa" and "Kiyama", respectively, by ESS/InD,

1918

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COPY

Memo for Record, cont'd

per MITI's telephone request.

3. Memo for MITI, 420(15 Nov 50)ESS/IND, 15 Nov 50, subj: Application for Permission to Alter Authorized Production of Industrial Explosives offers no objection to the proposed production change as outlined in ref application.

4. No concurrences necessary.

5. No additional surveillance required.

E. A. De Windt
26-6639

M. M. C.

DECLASSIFIED E.O. 12065 SECTION 3 402/NNSC NO.

Output of Industrial Explosives

in 1950

at the Asa Mill of the Nippon Kayaku K.K.

1. At the Asa Mill of the Nippon Kayaku K.K. the actual output of Explosives during 9 months of January to September is

Gelatine dynamite & Hagi type dynamite	2,427,300 kg.
Ammonia dynamite & Ammonium nitrate explosives	2,260,575 kg.

While the permitted output of explosives in 1950 is

Gelatine dynamite & Hagi type dyamite	3,114,000 kg.
Ammonia dynamite & Ammonium nitrate explosives	3,413,000 kg.
Reprocessed military high explosives	100,000 kg.

And therefore, the remainder of the permitted output, which is able to be produced during 3 months of October to December, is

Gelatine dynamite & Hagi type dynamite	686,700 kg.
Ammonia dynamite & Ammonium nitrate explosives	1,152,425 kg.
Reprocessed military high explosives	100,000kg.

But to satisfy the consumer's demand, it had been supposed necessaxy to make production mentioned below during the same period.

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Gelatine dynamite & Hagi type dynamite	927,000 kg.
Ammonia dynamite & Ammonium nitrate explosives	877,500 kg.

There is, consequently, a difference as described below between the permitted out put and requirements.

Gelatine dynamite & Hagi type dynamite	-240,300 kg.
Ammonia dynamite & Ammonium nitrate explosives	+274,925 kg.

(cf. Tab. I)

2. For the above reasons, 10 October 1950, "the Application for Permission to Modify Permitted Output of Explosives" within the framework of the total permitted quantity was presented by the head office of our company to Ministry of International Trade and Industry.

	Permitted output in 1950	Applied output
Geline dynamite & Hagi type dynamite	3,114,000 kg.	3,364,000 kg.
Ammonia dynamite & Ammonium nitrate explosives	3,413,000 kg.	3,163,000 kg.
Reprocessed military high explosives	100,000 kg.	100,000 kg.

3. In compliance with our application, 26 October 1950, Ministry of International Trade and Industry sent the letter as an annexed paper to General Headquarters, Supreme Commander for the Allied Powers through Ministry of Foreign Affairs.
As an answer to this letter the memorandum as an annexed paper was given to Ministry of International Trade and Industry from General Headquarters, Supreme Commander for the Allied Powers, and our application was consequently formally authorized.

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4. At the beginnig of this month, We received the formal authorization of Ministry of International Trade and Indutry, dated 15 Nov. 1950.

5. Tab. II shows the actual output of Asa Mill during 11 months of January to November.

6. The production schedule for December is

Gelatine dynamite & Hagi type dynamite	281,250 kg.
Ammonia dynamite & Ammonium nitrate explosives	213,750 kg.

Therefore, at the end of this year, the altered permitted output will be above the actual one by

Geletine dynamite & Hagi type dynamite	131,897.5 kg.
Ammonia dynamite & Ammonium nitrate explosives	104.147.5 kg.
Reprocessed military high explosives	100,000 kg.

Tab. I Output of Industrial Explosives at Asa Mill

unit = Kg

Kind of Products	Permitted Output in 1950	Actual Output during Jan. To Sep.	Remainder of Permitted Output (A)	Production Schedule for Oct to Dec. (B)	A — B	Correction	Altered Permitted Output
Gelatine dynamite & Hazi type dynamite	3,114,000	2,427,300	686,700	927,000	—240,300	+250,000	3,364,000
Ammonia dynamite & Ammonium nitrate explosives	3,413,000	2,260,575	1,152,425	877,500	+274,925	—250,000	3,163,000
Reprocessed military high explosives	100,000	0	100,000	0	+100,000	0	100,000
Total	6,627,000	4,687,875	1,939,125	1,804,500	+134,625	0	6,627,000

Tab II. Actual Output during 11 months of January to November at Asa Mill

Kind of Products	Actual Output Unit = Kg ( ) Case (1 case net 22.5 Kg)											Total
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	
Gelatine dynamite & Hazi type dynamite	249,997.5 (11,111)	289,710.0 (12,876)	252,180.0 (11,208)	227,205.0 (10,098)	266,175.0 (11,830)	240,660.0 (10,696)	252,270.0 (11,212)	336,847.5 (14,971)	312,855.0 (13,878)	285,727.5 (12,699)	237,825.0 (10,570)	2,950,852.5 (131,149)
Ammonia dynamite	140,827.5 (6,259)	138,105.0 (6,138)	86,985.0 (3,866)	65,340.0 (2,904)	123,255.0 (5,478)	124,312.5 (5,525)	58,477.5 (2,599)	46,237.5 (2,055)	95,172.5 (4,141)	136,485.0 (6,066)	89,910.0 (3,996)	1,105,107.5 (49,127)
Ammonium nitrate explosives	125,032.5 (5,557)	120,982.5 (5,377)	94,837.5 (4,215)	122,647.5 (5,451)	178,132.5 (7,917)	217,170.0 (9,652)	186,730.0 (8,388)	161,592.5 (7,173)	157,837.5 (7,015)	192,600.0 (8,560)	165,532.5 (7,357)	1,741,992.5 (77,422)
Total	265,860.0 (11,816)	258,187.5 (11,475)	181,822.5 (8,081)	187,987.5 (8,355)	301,387.5 (13,395)	341,482.5 (15,177)	247,207.5 (10,987)	207,830.0 (9,228)	269,010.0 (11,956)	329,085.0 (14,626)	255,442.5 (11,353)	2,846,102.5 (126,449)
Reprocessed military high exp.	0	0	0	0	0	0	0	0	0	0	0	0
Total	515,857.5 (22,927)	547,897.5 (24,351)	434,002.5 (19,289)	415,192.5 (18,453)	567,562.5 (25,225)	582,142.5 (25,873)	499,477.5 (22,199)	544,477.5 (24,199)	581,865.0 (25,834)	621,812.5 (27,525)	493,267.5 (21,923)	5,795,955.0 (257,598)

Ammonia dynamite & Ammonium nitrate exp.

COPY

LO. No. 136 October 26, 1950

TO : General Headquarters,
Supreme Commander for the Allied Powers

FROM : Ministry of International Trade and Industry

THROUGH : Ministry of Foreign Affairs

SUBJECT : Application for Permission to Modify Permitted Output of Explosives

1. Reference is made to paragraph 4 of Directive No.3 of the Office of the Supreme Commander for the Allied Powers, dated 22 September, 1945.

2. At the Asa Mill of the Nippon Kayaku K.K. the remainder of the permitted output of gelatine dynamite and Hagi Type dynamite as of the end of September is 686,700 kg., while the production schedule for 3 months of October to December is 927 m.t., which means the former is short of 240, 300 kg. as compared with the latter.

Moreover, at the Kiyama Mill of the same company, the remainder of the permitted output of electric detonater as of the end of September is 360,450 pieces short.

3. For the above reasons, it is requested that your special consideration be given us so as to authorize the application to modify the output of the mill and the kind of product as mentioned below within the framework of the total permitted output of the same company.

Name of company and mill	Kind of products	Permitted output in 1950	Requirements in 1950
Asa Mill of Nippon Kayaku K.K.	Gelatine dynamite & Hagi Type dynamite	3,114 m.t.	3,364 m.t.
ditto	Ammonia dynamite & Ammonium nitrate explosive	3,413 "	3,163 "

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Kiyama Mill of same company	Electric detonator	Pieces 2,230,000	Pieces 2,630,000
		"	"
Iizuka Mill of same company	Ditto	9,600,000	9,200,000

FOR THE MINISTER:

Katsumi Ikeo,
Chief, Liaison Office,
Ministry of International Trade
and Industry

TY:ys

DECLASSIFIED E.O. 12065 SECTION 3 402/NNSS NO. [illegible]

COPY

GENERAL HEADQUARTERS
SUPREME COMMANDER FOR THE ALLIED POWERS
Economic and Scientific Section
APO 500

420(15 Nov 50) ESS/IND 15 November, 1950

MEMORANDUM FOR: Ministry of International Trade and Industry
ATTN: Chemical Bureau

SUBJECT: Application for Permission to Alter Authorized Production of Industrial Explosives.

1. Reference is letter FOM No. 2219 (MITI) to General Headquarters, Supreme Commander for the Allied Powers, 31 October, 1950, subject: Application for Permission to Modify Permitted Output of Explosives.

2. No objection is offered to proposed change in distribution of production among Nippon Kayaku K.K.'s Asa, Kiyama, and Iizuka plants, as outlined in reference application.

FOR THE CHIEF. ECONOMIC AND SCIENTIFIC SECTION:

MAURICE M. CLASS
Chief, Industry Division

Received: 18 Nov. 12:00
Shukan : Inorganic Section
Copy : C. of Chemical B.
C. of M's Secretariat

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. [redacted]

昭和２５年に於ける日本化薬株式會社
厚狭作業所の　爆薬生産状況

１・厚狭作業所に於ける昭和２５年１月～９月の生産實績は
　膠質ダイナマイト及萩系ダイナマイト　2,427,300 瓩
　硝安ダイナマイト及硝安爆薬　2,260,575 瓩
である
これに對して昭和２５年の生産許可量は
　膠質ダイナマイト及萩系ダイナマイト　3,114,000 瓩
　硝安ダイナマイト及硝安爆薬　3,413,000 瓩
　開　墾　爆　薬　100,000 瓩
であるため１０月～１２月の生産可能量は
　膠質ダイナマイト及萩系ダイナマイト　686,700 瓩
　硝安ダイナマイト及硝安爆薬　1,152,425 瓩
　開　墾　爆　薬　100,000 瓩
となる
所が需要状況より推測すると１０月～１２月に
　膠質ダイナマイト及萩系ダイナマイト　－ 927,000 瓩
　硝安ダイナマイト及硝安爆薬　＋ 877,500 瓩
の生産を必要とすると考へられた　從つて生産許可量に對して
　膠質ダイナマイト及萩系ダイナマイト　－ 240,300 瓩
　硝安ダイナマイト及硝安爆薬　＋ 274,925 瓩
の過不足を生ずることが豫想せられた
（附表１參照）

２・それで１０月１０日本社より通産省當てに膠質ダイナマイト及萩系ダイナマイト生産許可量３，１１４，０００瓩に硝安ダイナマイト及硝安爆薬生産許可量より２５０，０００瓩を振替へ３，３６４，０００瓩に變更し得るやう申請した

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	生産許可量	申請許可量
膠質ダイナマイト及 萩系ダイナマイト	3,114,000瓩	3,364,000瓩
硝安ダイナマイト及 硝安爆薬	3,413,000瓩	3,163,000瓩

3・此の問題に關して通産省より１０月２６日外務省を經て最高司令部當て申請書が提出せられ（添附申請書寫參照）これに對し最高司令部より１１月１５日附通産省當ての覺書に依つて正式許可が下りた（添附覺書參照）

4・通産省より日本化藥株式會社に對しては 通商産業省指令三五化第三一九二号（昭和25年11月15日附）を以て正式許すが下された.

5・昭和２５年１月～１１月の生産實績は別表２の如し

6・１２月生産計畫は

膠質ダイナマイト及萩系ダイナマイト　281,250　瓩
硝安ダイナマイト及硝安爆薬　213,750　瓩

であるから變更生産許可量に對して昭和２５年度は

膠質ダイナマイト及萩系ダイナマイト　131,897・5　瓩
硝安ダイナマイト及硝安爆薬　104,147・5　瓩
開墾爆薬　100,000　瓩

の余裕を生ずる見込である

DECLASSIFIED E.O. 12065 SECTION 3 402/MDS

附表　1　　膠狹作業所生產狀況

品　　名	昭和25年 生產許可量(瓲)	1月～9月 生產實績（瓲）	許可量殘 （瓲）	10月～12月 生產予定（瓲）	過不足量 （瓲）	修正量 （瓲）	變更許可量 （瓲）
膠質ダイナマイト 及萩系ダイナマイト	3,114,000	2,427,300	686,700	927,000	−240,300	+250,000	3,364,000
硝安ダイナマイト 及硝安爆薬	3,413,000	2,260,575	1,152,425	877,500	+274,925	−250,000	3,163,000
開　盤　燐　藥	100,000	0	100,000	0	+100,000	0	100,000
合　　計	6,627,000	4,687,875	1,939,125	1,804,500	+134,625	0	6,627,000

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附表　2　　厚狭作業所　昭和２５年１月～１１月生産實績

品種	生産實績　単位 瓩　（）内は箱數を示す　（一箱＝２２・５瓩）											1月～11月 合計
	1月	2月	3月	4月	5月	6月	7月	8月	9月	10月	11月	
膠質ダイナマイト及び硬系ダイナマイト	249,997.5 (11,111)	289,710.0 (12,876)	252,180.0 (11,208)	227,205.0 (10,098)	266,175.0 (11,830)	240,660.0 (10,696)	252,270.0 (11,212)	336,847.5 (14,971)	312,255.0 (13,878)	285,727.5 (12,699)	237,825.0 (10,570)	2950,852.5 (131,149)
硝安ダイナマイト及硝安爆薬 硝安ダイナマイト	140,827.5 (6,259)	138,105.0 (6,138)	86,985.0 (3,866)	65,340.0 (2,904)	123,255.0 (5,478)	124,312.5 (5,525)	58,477.5 (2,599)	46,237.5 (2,055)	93,172.5 (4,141)	136,485.0 (6,066)	89,910.0 (3,996)	1,103,107.5 (49,027)
硝安爆薬	125,032.5 (5,557)	120,082.5 (5,337)	94,837.5 (4,215)	122,647.5 (5,451)	178,132.5 (7,917)	217,170.0 (9,652)	188,730.0 (8,388)	161,392.5 (7,173)	157,837.5 (7,015)	192,600.0 (8,560)	165,532.5 (7,357)	1,741,995.0 (77,422)
合計	265,860.0 (11,816)	258,187.5 (11,475)	181,822.5 (8,081)	187,987.5 (8,355)	301,387.5 (13,395)	341,482.5 (15,177)	247,207.5 (10,987)	207,630.0 (9,228)	269,010.0 (11,956)	329,085.0 (14,626)	255,442.5 (11,353)	2,845,102.5 (126,449)
開盤爆薬	0	0	0	0	0	0	0	0	0	0	0	0
總合計	515,857.5 (22,927)	547,897.5 (24,351)	434,002.5 (19,289)	415,192.5 (18,453)	567,562.5 (25,225)	582,142.5 (25,873)	499,477.5 (22,199)	544,477.5 (24,199)	581,265.0 (25,834)	614,812.5 (27,325)	493,267.5 (21,923)	5795,955.0 (257,598)

DECLASSIFIED E.O. 12065 SECTION 3 402/NNSC NO.

FIELD TRIP REPORT

R.G. STRADLEY

Asa
18 August 1950

1. Purpose:

Inspection of Asa Plant of Nippon Kayaku Company.

2. Background:

Surveillance in accordance with O.D. 11.

3. Discussion:

Mr. Ueno, Manager and his staff.

The reconstruction of the buildings and equipment damaged by the explosion has been completed.

The plants expects to produce 25,000 cases of explosives in August 1950. (1 case = 22.5 kg)

The volume of orders from coal mines in Kyushu are not fluctuating much but orders from the 8th Army are increasing. The plant is capable of completing the 4,000 cases of Sakura Dynamite to be delivered to the Ikego Warehouse located at Zushi, Kanagawa Prefecture by 29 August 1950.

The plant has the capacity of producing 32,000 cases per month. It would probably require about two months to rehabilitate the plant so as to double the present actual production amount to 50,000 cases per month.

Power situation:

	Allocation	Consumption
August 1950	110,000 KWH	200,000 KWH
Under normal production		140,000 - 150,000 KWH

The company has applied to the Hiroshima Bureau of MITI for further allocation of 72,000 KWH per month under the special demands allocation.

Raw material:

The plant normally uses 25 tons of Glycerin per month. The total amount of stock on hand of Glycerin is 20 tons which is equivalent to less than

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one month's requirements. The chief suppliers are Nippon Yushi, Asahi Denka and Lion Yushi Companies. It is noted that the Sakura Dynamite contains 60% of Glycerin.

The company officials pointed out that the Kiri Dynamite contains about 35% - 50% of Glycerin. Consequently, it is easy for the company to produce more of the Kiri Dynamite than the Sakura Dynamite, besides, the Kiri Dynamite (Ammon-Gelatine Dynamite) has more explosive power than the Sakura Dynamite.

According to Mr. Inoue every precaution is being taken with respect to the security of the plant in cooperation with the Police. It is noted that the radical elements have been distributing, frequently, a number of hand bills in front of the main gate of the plant criticizing the plant as a military plant.

The plant's production will be hampered to a great extent if some subversive elements should cut off the main electric transmission line. Mr. Ueno fears a possibility of some such acts as a result of the contemplated nation wide mass-discharge of the communist elements in the Densan Union.

The allocation of necessary number of freight cars for shipment is constituting a problem.

Mr. Ueno would like to have the nature of the 8th Army orders clarified as to whether or not the said orders will be regarded as over and above the GHQ, SCAP's authorization for production in view of the following production status.

Classification	All Products	Gelatine Dynamite
a. SCAP authorization for 1950	6,627 ton	3,114 ton
b. Aggregate production authorized by 31 July 1950 (A x 7/12)	3,866	1,816
c. Actual aggregate production up to 31 July 1950	3,562	1,778
C/B	92%	98%

NOTE: Inclusion of 4000 cases of the Sakura Dynamite ordered from the 8th Army will exceed the authorization in August 1950 as the 4000 cases are being produced over and above the normal production amount of the same month.

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4. Conclusions:

Major problems are electric power allocation, security, procurement of Glycerine and clarification of GHQ, SCAP's authorization on production in connection with the emergency orders from the 8th Army.

5. Recommendations:

a. It was recommended to Mr. Ueno that in view of the important nature of the plant security measures be carefully maintained under constant vigilance.

b. SCAP will be requested to clarify the status of 8th Army orders in regard to annual production authorization.

RGS

R. G. STRADLEY
Chief, Distribution and
Industry Division

Mr. Woodward 31 august 1950 advised that explosives produced on PD by this company would not be considered as a part of the SCAP authorization for the Japanese economy. RGS.

D/RGS/fk

DECLASSIFIED E.O. 12065 SECTION 3 402/NNBS NO:

FIELD TRIP REPORT

R.G. STRADLEY

13 June 1950
Asa

1. Purpose:

Inspection of Asa Plant of Nippon Kayaku Company, Asa-machi, Yamaguchi Prefecture.

2. Background:

Surveillance in accordance with O.D. 11.

3. Discussion:

Conferees,

Mr. Ueno, Managing director,

Mr. Yoshikawa, Chief engineer,

Dr. Hino, Chief of Laboratory,

Mr. Takahara, Chief of General Affairs Section

a. Effects of explosion.

The explosion of six waste-acid tanks which took place on the night of 15 May are as follows;

Total amount of damage	¥ 40,000,000
Physical facilities destroyed,	a building and its 6 waste acid tanks. 2 paper tube manufacturing shops.

Casualities, 3 employees slightly injured.

Production, No effects.

NOTE: A total of 400 buildings are sparsely dispersed in the 220 acres of the company's land because of the hazardous nature of its industry. This is the chief reason why the damage was no greater.

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b. Cause of explosion.

Nothing has been scientifically proven with regard to the cause of the explosion but Mr. Yoshikawa, Chief engineer, attributed the cause to the following assumption.

On 15 May the temperature in the afternoon was 30.7 degree centigrade but the temperature went down to 9.5 degree centigrade in the night. Under 17 degree centigrade which is the dew point moisture in the air transforms into dews especially during the rainy season.

It is probable the dews transformed in this way dropped in Nitro Glycerine which had been coming up to the surface of waste-acid in the tanks. Nitro Glycerine is unstable and liable to be subjected to natural break-down due to heat of dilution. The breakdown of Nitro Glycerine finally caused the explosion of six Waste Acid tanks. Consequently, the Waste Acid flowed into the nearby two paper tube manufacturing shops causing these two building to be burned down.

c. Countermeasure taken in order to prevent the recurrence of the same accident.

As the existence of Nitro-Glycerine layer which came out of the waste acid was the direct cause of the explosion the company has began to add a substantial quantity of water to the waste acid in the tanks in order to increase the degree of dilution of Nitro Glycerine in waste acid and to insure that nitro glycerine might not come out and form a layer on top of waste acid while in storage.

It is evident that the quantity of water added to the waste acid while in storage had been insufficient. Although the company has replaced the burned down six waste acid tanks with five spare tanks it will stop using horizontal closed tanks and intends to use vertical open tanks in the future.

d. Production.

A report on production from 1 Jan through 31 May 1950 is in our file. The plant is operating at 80% of its full capacity.

e. Stockpile.

A report on stocks on hand as of 12 June 1950 is in our file.

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The company's magazine has the storage capacity for one weeks' supply. The estimated quantity of stockpiles at each mine is about seven to ten day's supplies on an average in Kyushu due to lack of funds on the part of mine operators.

The oldest production date on the cases in storage was of 7 June 1950 on 13 June 1950.

f. Marketability.

The marketability of the company's products is slow at present due to the fact that the mining production during the Summer is usually low and that many mines are flooded by too much rain during this time of the year.

g. The authorized production quantity of 6627 ton per year is sufficient for the company to meet the demands in 1950.

h. Shipment.

The company is shipping its Dynamite to be used by mines in Kyushu to Sotominato, Moji port, Kyushu as follows;

No. of boats per month,	Approx 30 boats.
No. of cases carried per boat,	500-600 cases
Total tonnage carried,	337.5 tons-382.5 tons per month.

i. Flow sheet of manufacturing process of explosives and summary of the plant are in our file.

j. Labor.

There are 303 staff and 1200 workers who have organized into one labor union affiliated with Sodomei. No labor trouble was in evidence.

4. <u>Conclusion</u>:

In spite of the explosion no particular difficulty was in evidence with the exception of the port of unloading. The local people of Sotominato of Moji Port are against the use of Sotominato as port of unloading by the company.

The company is trying to get its official permit renewed from Kyushu Maritime Safety Bureau to use Sotominato as heretofore and from 24th Division a written permit to

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. [illegible]

use Sunatsu port of Kokura in case the use of Sotominato is denied to the company.

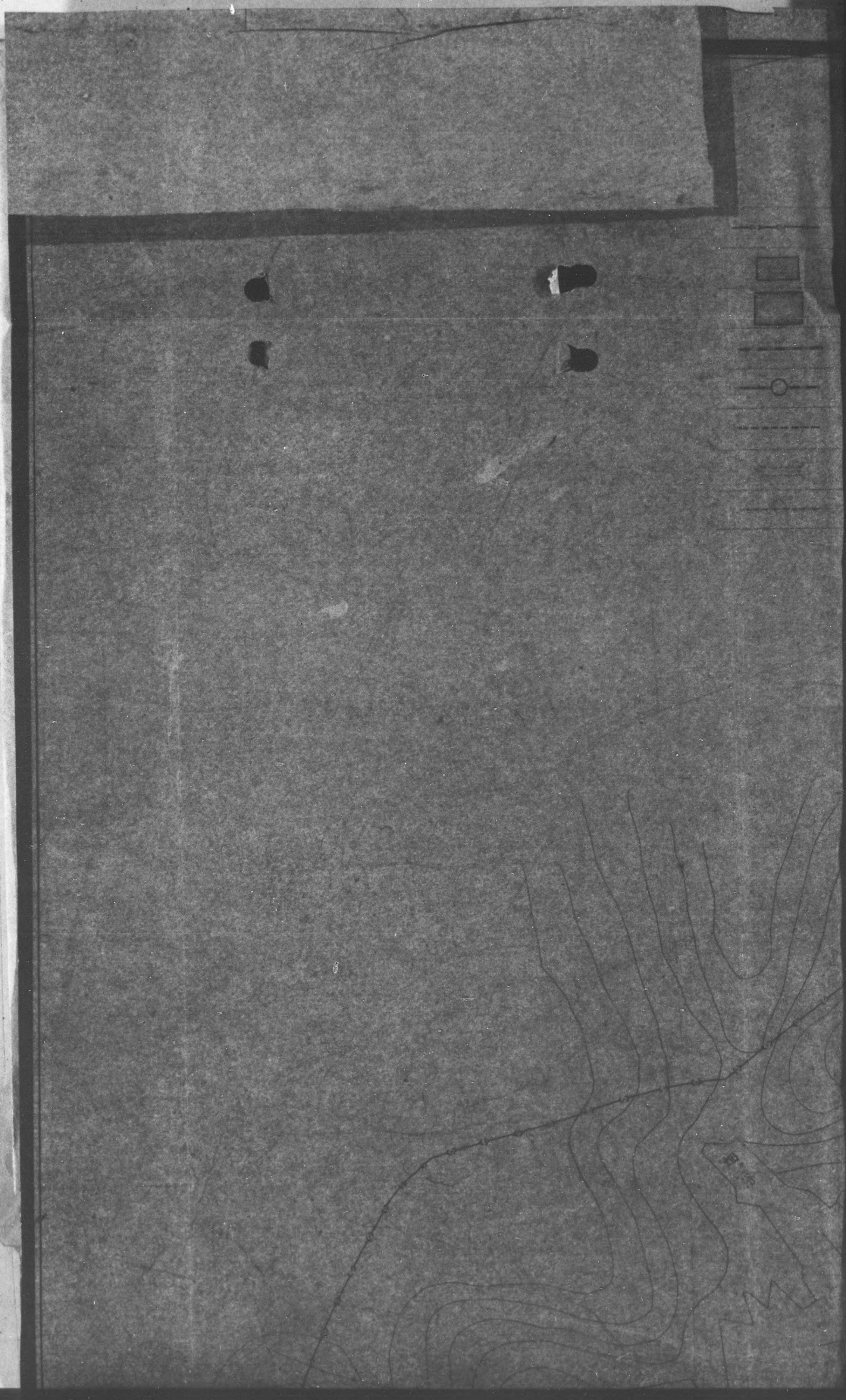
The Asa plant of Nippon Kayaku Company supplies approximately 65% of the total Dynamites being used by the mines in Kyushu.

5. Recommendations:

It was recommended to the officials of the company present that the mechanization of packing process be studied in order to reduce its production cost.

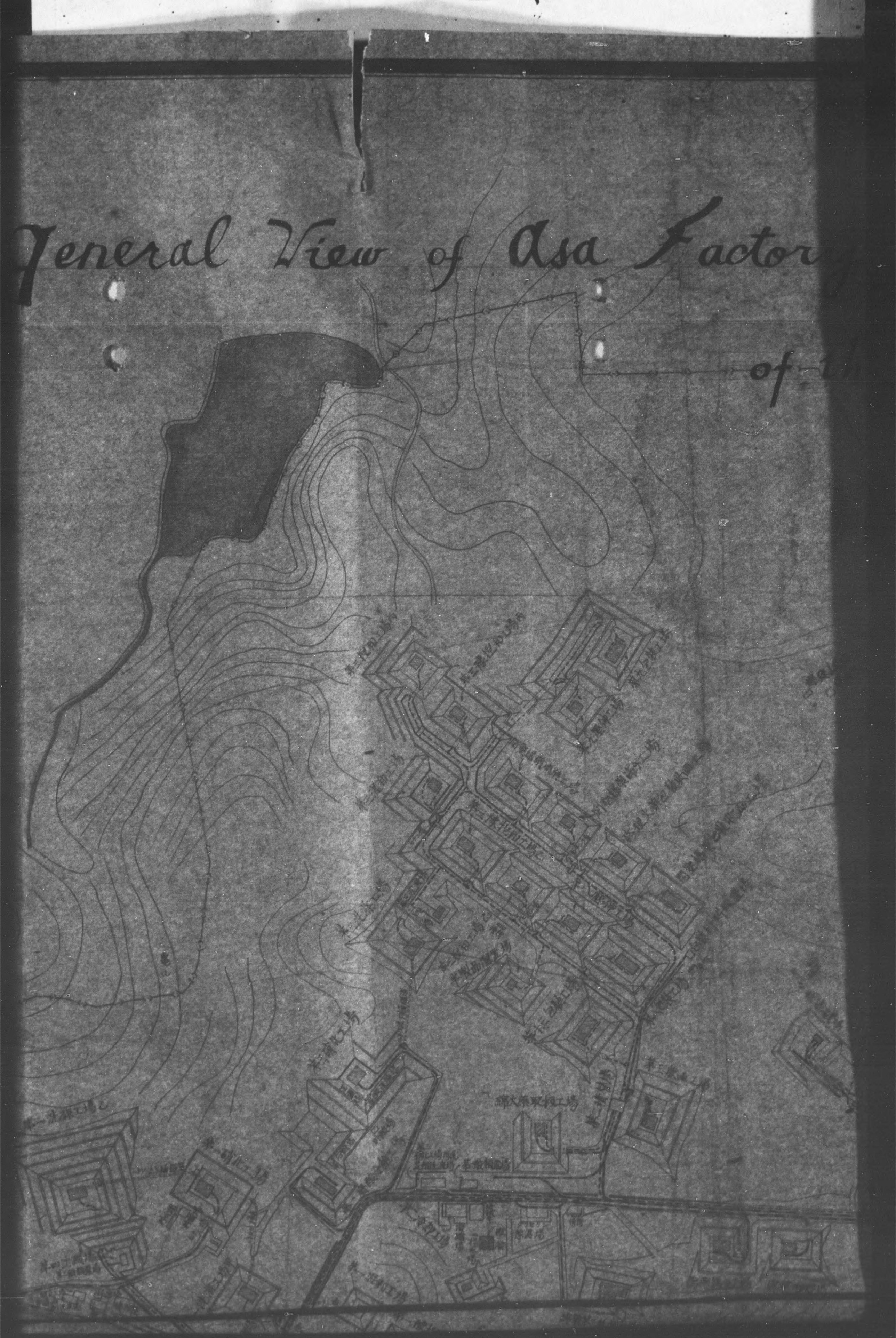
R. G. STRADLEY

DECLASSIFIED - E.O. 11652 - SECRET - NOFORN



凡例
境界柵ヲ示ス
危険工場ヲ示ス
用水池及溜ヲ示ス
軌條ヲ示ス
廻転盤ヲ示ス
鋪道ヲ示ス
道ヲ示ス
竹柵ヲ示ス
General

General View of Asa Factor

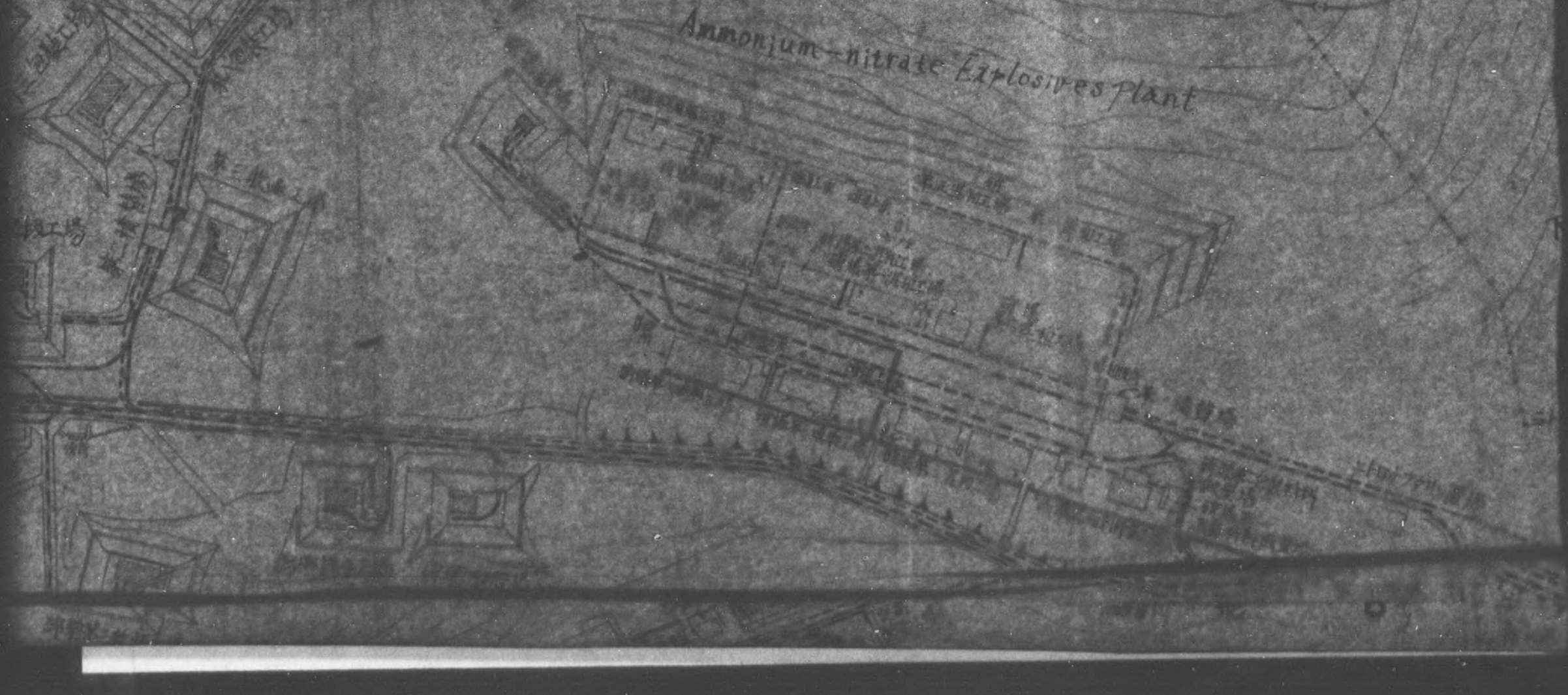


DECLASSIFIED E.O. 12065 SECTION 3 402/NNSC NO.

Usa Factory

of the Nippon Kayaku K.K

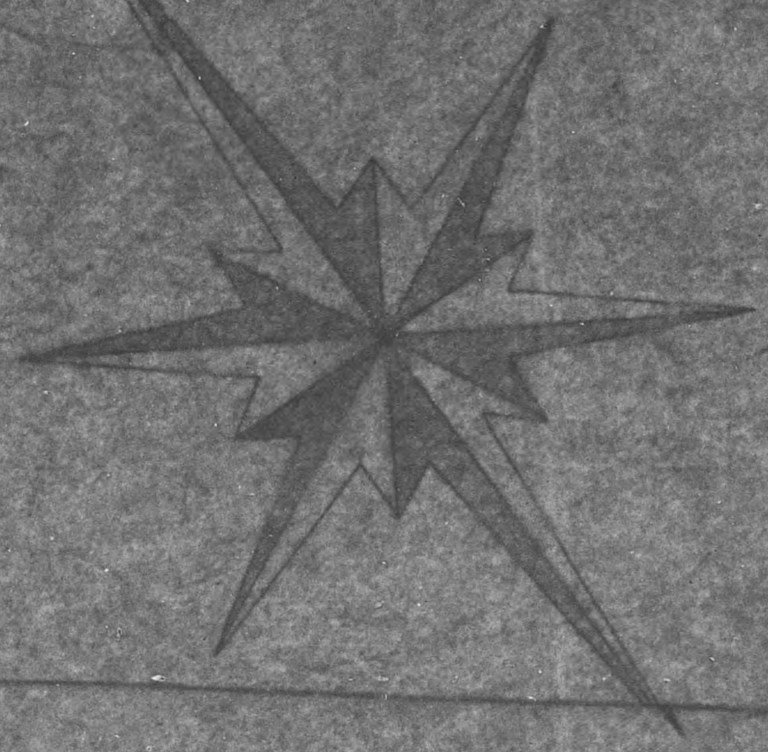
1/2000



DECLASSIFIED E.O. 12065 SECTION 3 402/NNSC No.

Kayaku K.K.

1/2000



Explosives plant

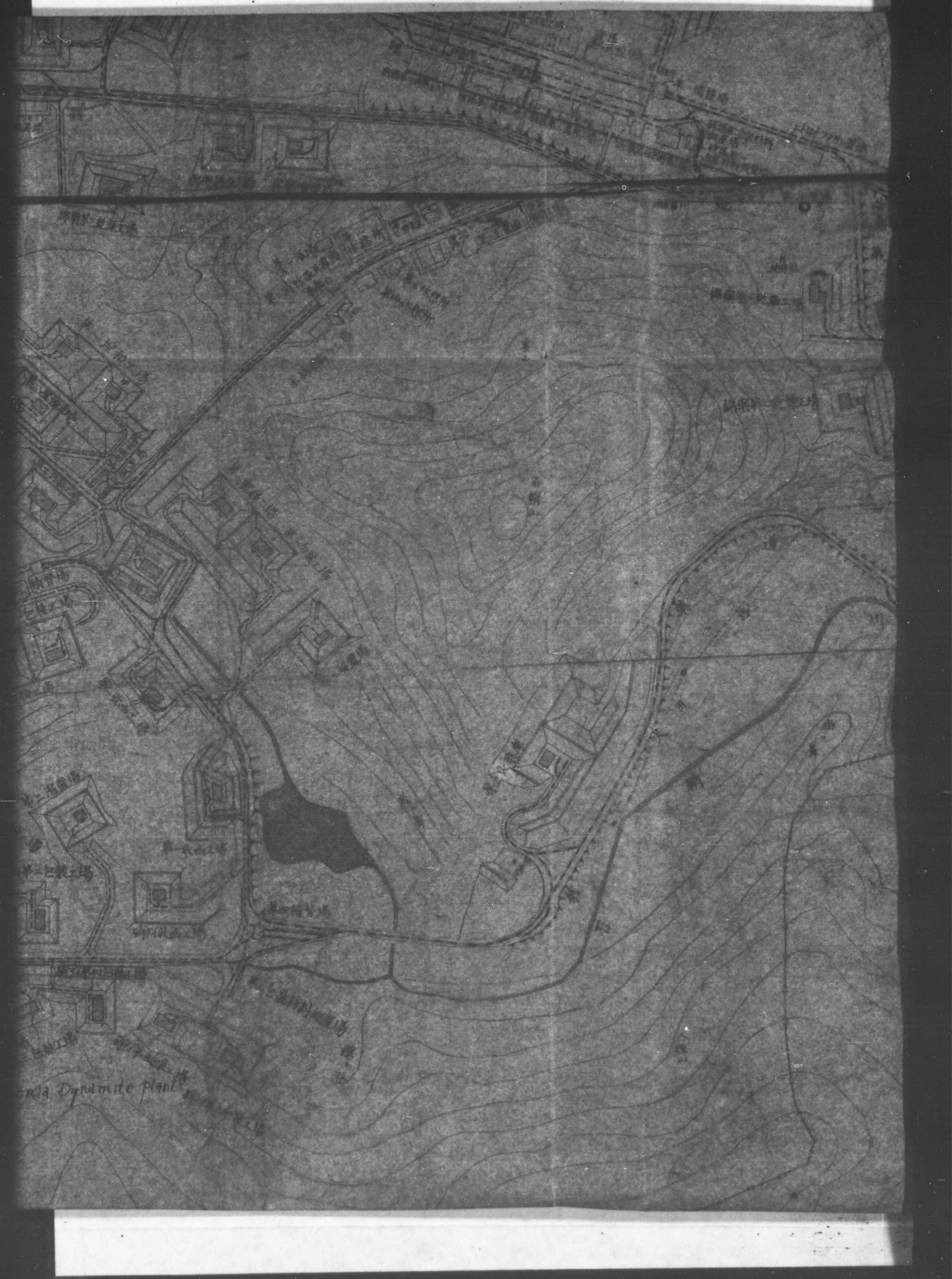
Residential Quarters

DECLASSIFIED E.O. 12065 SECTION 3 102/NNSC NSC

DECLASSIFIED E.O. 12065 SECTION 3 402/NNSC NO.

DECLASSIFIED E.O. 12065 SECTION 3 402/NNSC NO.

DECLASSIFIED E.O. 12065 SECTION 3 402/NNBS NO:



DECLASSIFIED E.O. 12065 SECTION 3 402/NNBS NO:

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO.

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDS NO.

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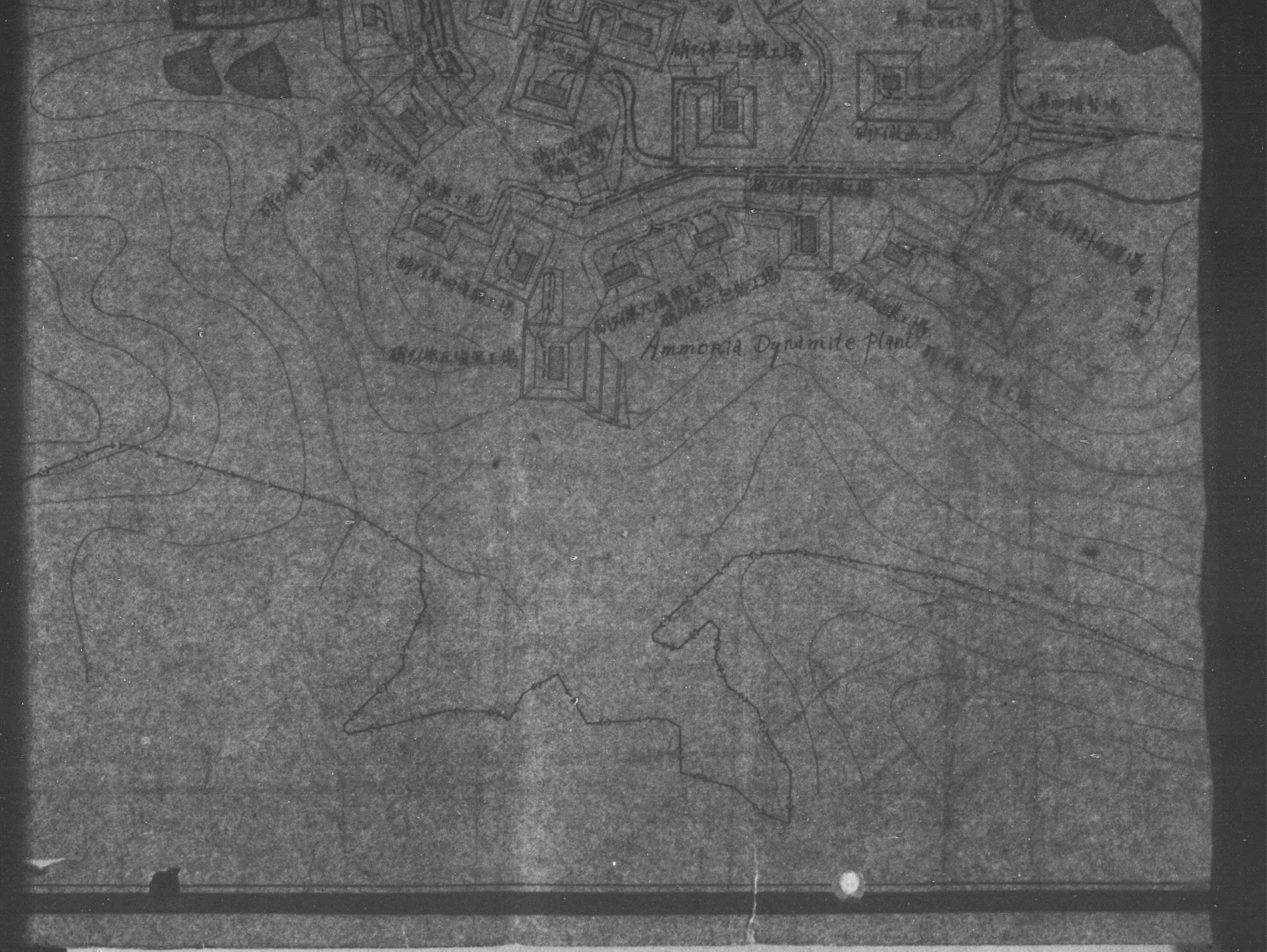

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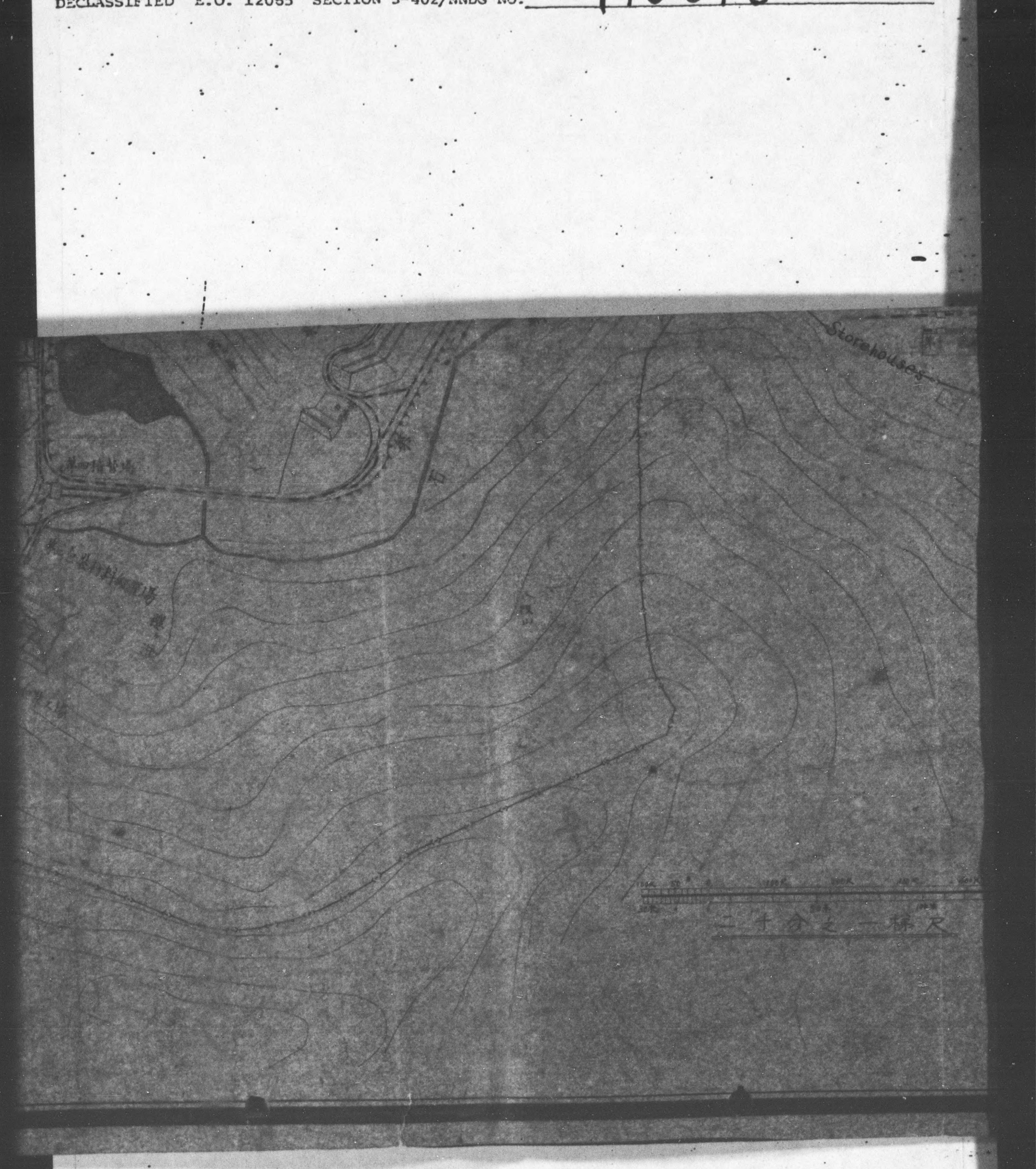


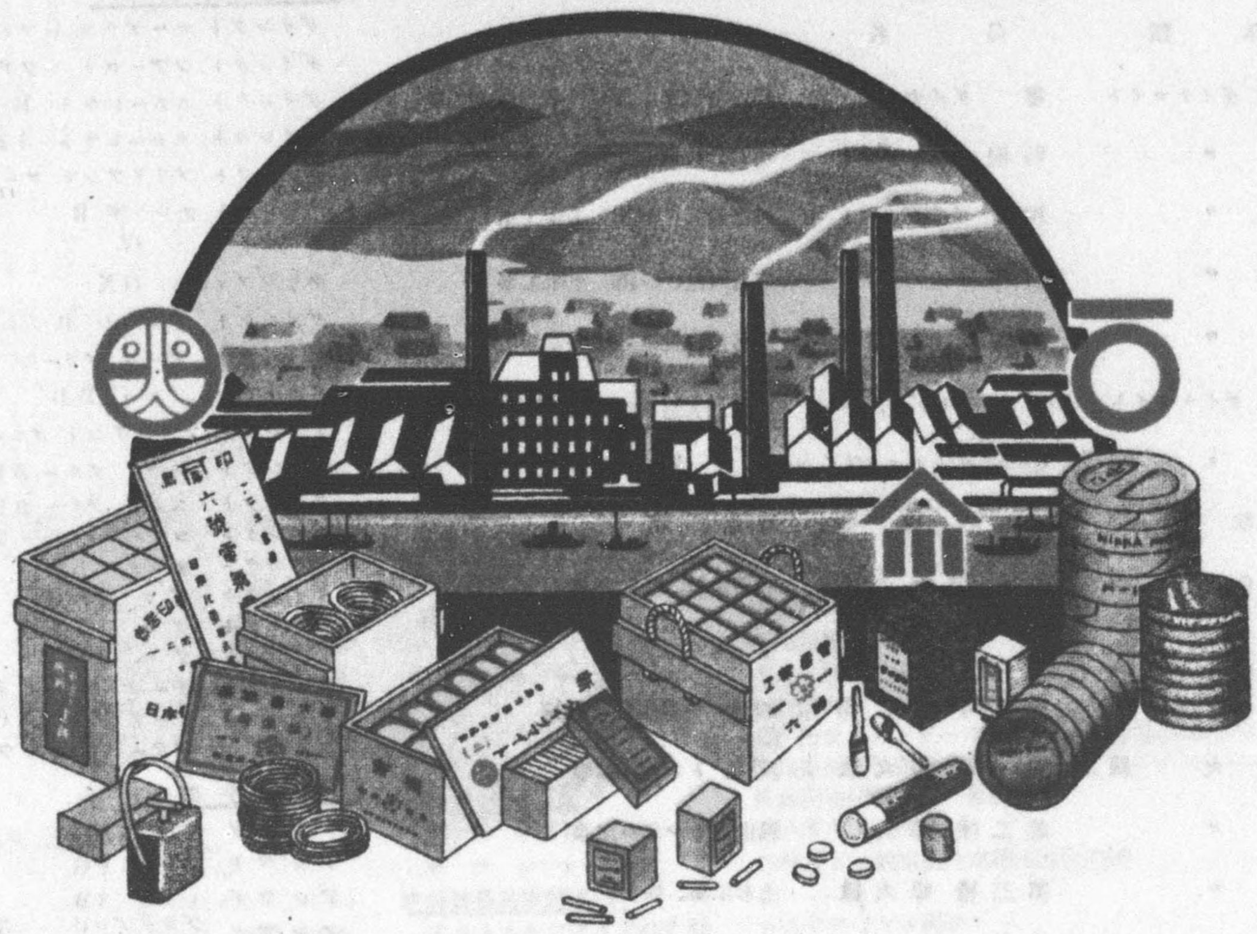
DECLASSIFIED E.O. 11652 SECTION 3 (E)/NNSC NO.

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO.

DECLASSIFIED E.O. 12065 SECTION 3 402/NNSC NO.

營業品目

爆藥・火藥・火工品・染料・中間物・醫藥品・甘味料・農藥・塗料



日本化藥株式會社

取締役社長・原 安三郎

本 社 東京都千代田區一番町十五番地五

電話 九段(33) { 0587—9・2135—7 / 4217—8・4337—8

受信略號 コウチマチ」カヤク

日本化藥の優良製品

火藥類

種類	品名	用途
膠質ダイナマイト	櫻ダイナマイト	硬岩層堀進、水中爆破、土木工事
〃	特桐ダイナマイト	硬岩心抜掘、採鑛、土木工事
〃	桐ダイナマイト	坑道堀進、採鑛、土木工事
〃	新桐ダイナマイト	坑道堀進、採鑛、土木工事
〃	白梅ダイナマイト	危險炭山坑道堀進、硬岩破碎
粉狀ダイナマイト	萩ダイナマイト	採石、坑道堀進、土木工事
〃	硝安ダイナマイト	採炭
粉狀爆藥	硝安爆藥	塊炭採取
黑色火藥	黑色鑛山火藥	岩石採取、小割發破、
〃	粉火藥	導火線
〃	猟用火藥	狩猟、害蟲驅除、捕鯨
導火線	第一種導火線	炭坑、トンネル工事
〃	第二種導火線	鑛山、トンネル工事
〃	第三種導火線	土木工事、採石
工業電管	三號電管	
〃	六號電管	
〃	八號電管	
電氣電管	六號電氣電管	
〃	八號電氣電管	
〃	段發六號電氣電管	
〃	段發八號電氣電管	
猟用電管	標印猟用村田電管	
發雷信號	發雷信號	鐵道危險信號
電氣發破器	鳥居印電氣發破器	

註 寒地又は冬期用として膠質ダイナマイト及粉狀ダイナマイトには凍凍品及不凍品がございます。

染料及中間物、農藥

(1) 直接染料

ダイレクト ローズリン レツド B
ダイレクト フアースト レツド F
ダイレクト スカーレツト B
ダイレクト スカーレツト 3B
ダイレクト ブリリアント ローズ BD
ダイレクト オレンヂ R
クリサミン G
クリソフエニン GX
ダイレクト グリーン B
ダイレクト ダーク グリーン B
ダイレクト ブルー BB
ダイレクト ブリリアント ブルー RW
ダイレクト スカイ ブルー 5B
ダイレクト スカイ ブルー 6B
ダイレクト コツパー ブルー 2B
ダイレクト ボルドー NS
ダイレクト ブロン KGG
ダイレクト ブロン 3G
ダイレクト ブロン M
ダイレクト チープ ブラツク EX
ダイレクト チープ ブラツク GX
ダイレクト フアースト ブラツク D

(2) 酸性染料

アシツド レツド RS
アシツド レツド PG
アシツド レツド 3B
アシツド ブリリアント スカーレツト 3R
シルクスカーレツト
ロクセリン
アマランス
アシツド オレンヂ II
アシツド ライト エロー 2G
タートラヂン
アシツド サイアニン 5R
アシツド サイアニン GR
アシツド ブルー ブラツク 10B

(3) 塩基性染料

メチル バイオレツト

(4) 媒染及酸性媒染染料

モルダント エロー 2G
クローム グリーン ド
クローム ブロン RH
クローム ブループラツク R
アリザリン ブラツク SE

(5) 硫化染料

硫化 ブリリアント グリーン 4G
硫化 ブルー RC
硫化 ブルー TFB
硫化 ブルー 4R
硫化 ニユーブルー BL
硫化 ブリリアント ブルー BO
硫化 ブリリアント ブルー CLG
硫化 インヂゴ R
硫化 レツド ブロン 9R
硫化 ナフタレン ブロン RC
硫化 バイオレツト
硫化 ブラツク BX
硫化 ブラツク BRX
硫化 ブラツク RRX

(6) 硫化建染染料

カーバノール ブルー LB
カーバノール ブルー LR
カーバノール ブルー BX
カーバノール ブルー GX
カーボン D

(7) 不溶解性アゾ染料

フアースト レツド ソルト 3GL
フアースト レツド B ベース
フアースト レツド RL ベース
フアースト スカーレツト G ベース
フアースト スカーレツト RC ベース
フアースト スカーレツト GG ベース
ブルーソルト R
ブルーソルト B
ブルー B ベース

(8) 中間物及農藥

クロール ベンゾール
ニトロ トルオール(オルト、パラ)
チトロ クロール ベンゾール
アニリン
トルイヂン(オルト、パラ)
ベタナフトール
ベンヂ ヂンベース
ヂクロール ベンゾール (オルト、パラ)
ニトロ クロール ベンゾール (オルト、パラ)
パラフエニレン ヂアミン
メタフエニレン ヂアミン
H 酸
J 酸
ガンマ酸
ニトロ アニゾール(オルト)
石炭酸
ダイアニシヂン ベース
ベタナフトール
ニトロフエノール(パラ)
C 酸
G 酸
R 酸
鹽酸
硫化ソーダ
クロール ピクリン
D. D. T.

醫藥品

品名	適應症(藥効)
日本藥局方醫藥品	
アセトアニリド (アンチフエブリン)	解熱劑
アセトスルフアミン	(スルフアミン=同ジ)
アクリノール	防腐殺菌消毒藥、(外用)
アスピリン	敗血性化膿性疾患(靜注)、アメーバ赤痢(內服)
パラオキシ安息香酸ブチル	解熱、鎭痛
エチル炭酸キユーネ	食品ノ防腐、注射藥ノ變質防止
ゾルチン	小兒ノ解熱
グアヤコール	人工甘味質
炭酸グアヤコール	結核治療藥
グアヤコールスルホン酸カリ	結膜症
フェナセチン	結核症
サリチル酸フエニル	解熱、鎭痛劑(ロイマチス、神經痛等)
サザピリン	尿路、腸等ノ防腐劑
硝酸ストリキニーネ	解熱鎭痛劑(ロイマチス神經痛等)
スルフアミン	興奮劑(脈博不整、消化器アトニー等)强壯劑(衰能的神經衰弱等)
	連鎖球狀菌、肺炎菌、腦介髓膜炎菌、葡萄狀球菌等ニ殺菌力アリ、敗血症、敗血性猩紅熱、產褥熱丹毒、肺炎、アンギーナ、扁頭腺炎、多發性關節炎蜂窩織炎化膿性創傷、フルンケル、カルブンケル、淋疾炎症性尿路疾患、蓄膿症等
アスピリン錠	アスピリンニ同ジ
チアントール	疥癬及ピー般寄生性皮膚疾患治療藥
廣民醫藥品染醫藥品	
アセトスルフアミン注1號	スルフアミンニ同ジ
アセトスルフアミン注2號	
硝ストト注	悔心脚氣呼吸困難、神經衰弱
サルフアメラジン	スルフアミンニ同ジ
公定書外醫藥品	
ネオサザロン錠	局方サザピリン、フエナセチンヲ主成分トスルロイマチス神經痛等ノ鎭痛治療劑
ペニシリンナトリウム「山川」	肺炎、腦脊髓膜炎、腹膜炎、細菌性心內膜炎淋疾、癰毒、丹毒、敗血症、猩紅熱、產褥熱扁桃腺炎、中耳炎、結膜炎、角膜潰瘍臟漏眼、其他細菌感染ノ治療
結晶ペニシリンGナトリウム「山川」	
結晶ペニシリンGカリウム「山川」	
油脳ペニシリンカルシウム「山川」	
山川水蠢藥	水蠢
其他	
山川防蠢錠	主成分、パラヂグロールベンゾール 衣服防蠢
山川白毛染	主成分、パラフエニレンヂアミン 白毛染

其の他

	製品名	摘要
油脂加工	石鹸	家庭用石鹸(化粧用、洗濯用)
	グリセリン	ダイナマイト用
塗料	アルコールワニス	一般上塗仕上用
飲料	サンウイスキー	

DECLASSIFIED E.O. 12065 SECTION 3 402/MR83 NO: [redacted]

支　　店	大阪市東區瓦町二丁目五五番地（三和ビル内） 電　話　北　濱（23）1951—3・[redacted]48 受信略號　オウサカヒガシ」シテンニツカ
九州出張所	小倉市板櫃町下到津四八一（電話小倉515・1643）
磐城出張所	福島縣石城郡內鄉町綴（電話綴10番）

〔工　場　名〕		〔製　造　品　名〕
厚狹作業所	山口縣厚狹郡厚狹町大字郡二三〇〇 受信略號…ヤマグチアサ」ニホンカヤク 電　話…厚　狹　15. 138. 4…	膠質ダイナマイト、硝安ダイナマイト 硝安爆藥、開墾爆藥
岩鼻作業所	群馬縣群馬郡岩鼻村 受信略號…クラガノ」カヤク 電　話…倉賀野50　高崎569.	黑色鷄山火藥、導火線用粉火藥、燃用 火藥、緩燃導火線
折尾作業所	福岡縣若松市大字淺川六五九 受信略號…オリオ」ライカン 電　話…折　尾　11	工業雷管、發用雷管
仁豐野作業所	兵庫縣神崎郡豐富村 受信略號ヒメヂシニブノ」ニホンカヤク 電　話…仁豐野　3・5	工業雷管、發雷信號
小倉作業所	福岡縣小倉市板櫃町下到津四八一番地 受信略號…コクラ」ミチビ 電　話…小倉515・1643	緩燃導火線
大阪作業所	大阪府布施市大字西堤町六三二 受信略號…フセ」ミチビ 電　話…稻田2	緩燃導火線
飯塚作業所	福岡縣嘉穗郡穗波村大字著築一九六 受信略號…イイヅカ」ニホンカヤク 電　話…飯　塚　810	電氣雷管、電氣發破器
岩見澤作業所	北海道岩見澤市東利根別一七九二 受信略號…イワミザワ」カヤク 電　話…岩見澤2,95・333・515	電氣雷管
基山作業所	佐賀縣三養基郡基山町大字小倉 受信略號…キヤマグチ」ニホンカヤク 電　話…木山口　51・8114	電氣雷管
福山染料工場	廣島縣福山市入船町 受信略號…フクヤマ」センレウ 電　話…福　山　1200—4	硫化染料、硫化建染染料、塩基性染料 ナフトール染料、タール系中間物、甘 味料
王子染料工場	東京都北區志茂町二ノ一八三六 受信略號…オウジ」センリヨウ 電　話…赤　羽　2148・2974	直接染料、酸性染料、クローム染料、 アゾレート、タール系中間物
小倉染料工場	福岡縣小倉市板櫃二八四〇ノ二 受信略號…コクラ」センレウ 電　話…小倉1283・2503	タール系中間物、クロールピクリン、 DDT　塩酸
王子製藥工場	東京都北區志茂町二ノ一六七〇 受信略號…オウジ」ニツカセイヤク 電　話　赤　羽　3477. 2949. 2052	醫藥品、試藥、防蟲劑、甘味料、染毛 劑、タール系中間物
厚狹化成工場	山口縣厚狹郡厚狹町大字郡二九二四 受信略號…ヤマグチアサ」アサカセイ 電　話　厚　狹　23	グリセリン、雜酒、塗料、石鹼

DECLASSIFIED E.O. 12065 SECTION 3 402/NNSC NO.

INDUSTRIAL EXPLOSIVES *and* ACCESSORIES

NIPPONKAYAKU CO., LTD.
(NIPPON CHEMICALS & MEDICINS CO., LTD.)
TOKYO JAPAN

DECLASSIFIED E.O. 12065 SECTION 3 402/NNSG NO.

NIPPON KAYAKU CO., LTD.

(NIPPON CHEMICALS AND MEDICINES CO., LTD.)

Incorporated in 1916

HEAD OFFICE:

Address: 15 Ichiban-cho, Chiyoda-ku, Tokyo

Cable Address: "Kayaku" Tokyo

Phone: Kudan (33): 2135, 2136, 2137, 0587, 0588, 0589, 4217, 4218, 4337, 4338.

Departments: Industrial Explosives, Dyestuffs, Medicines

BRANCH OFFICE:

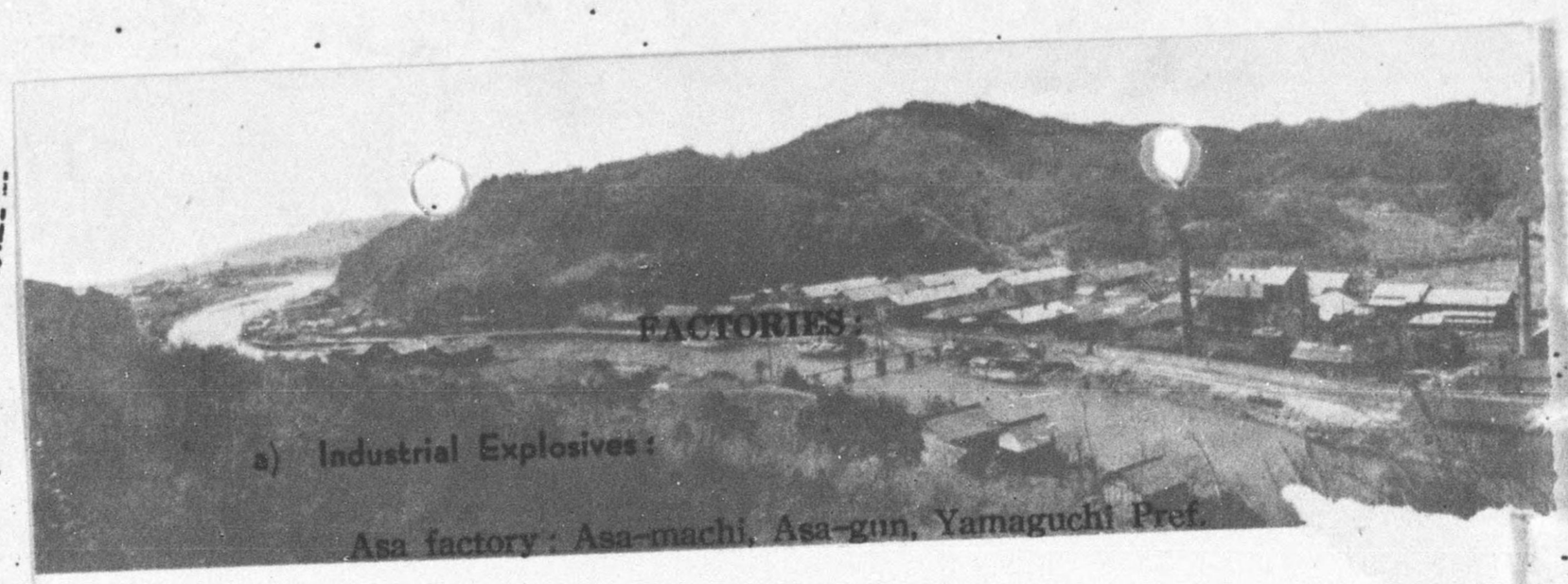
Osaka Branch:

Address: Sanwa Building, 55 Kawara-machi 2-chome, Higashi-ku, Osaka

Cable Address: "Shiten Nikka" Higashi Osaka

Phone: Kitahama (23) 1951, 1952, 1653, 1248.

DECLASSIFIED E.O. 12065 SECTION 3 402/NNSS NO.



FACTORIES :

a) **Industrial Explosives :**

Asa factory : Asa-machi, Asa-gun, Yamaguchi Pref.

b) **Black Powder :**

Iwahana factory : Iwahana, Gumma-gun, Gumma Pref.

c) **Safety Fuse :**

Kokura factory : Shimoitozu, Kokura, Fukuoka Pref.

Iwahana factory : Iwahana, Gumma-gun, Gumma Pref.

d) **Blasting cap :**

Nibuno factory : Toyotomi, Kanzaki-gun, Hyogo Pref.

Orio factory : Asakawa, Wakamatsu, Fukuoka Pref.

e) **Electric Detonator :**

Iizuka factory : Wakana, Iizuka, Fukuoka pref.

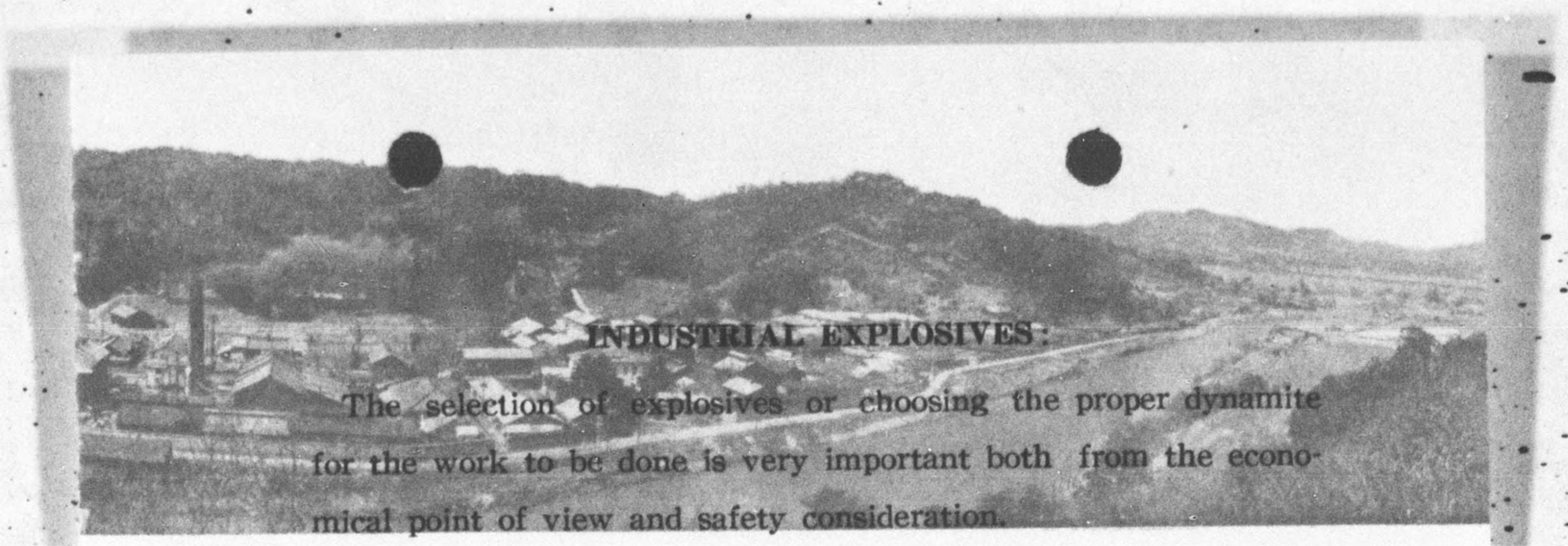
kiyama factory : Kiyama-machi, Miyaki-gun, Saga Pref.

Iwamizawa factory : Higashitonebetsu, Iwamizawa,

f) **Percussion cap :**

Orio factory : Asakawa, Wakamatsu, Fukuoka Pref.

DECLASSIFIED E.O. 12065 SECTION 3 402/NNSC NO.



INDUSTRIAL EXPLOSIVES:

The selection of explosives or choosing the proper dynamite for the work to be done is very important both from the economical point of view and safety consideration.

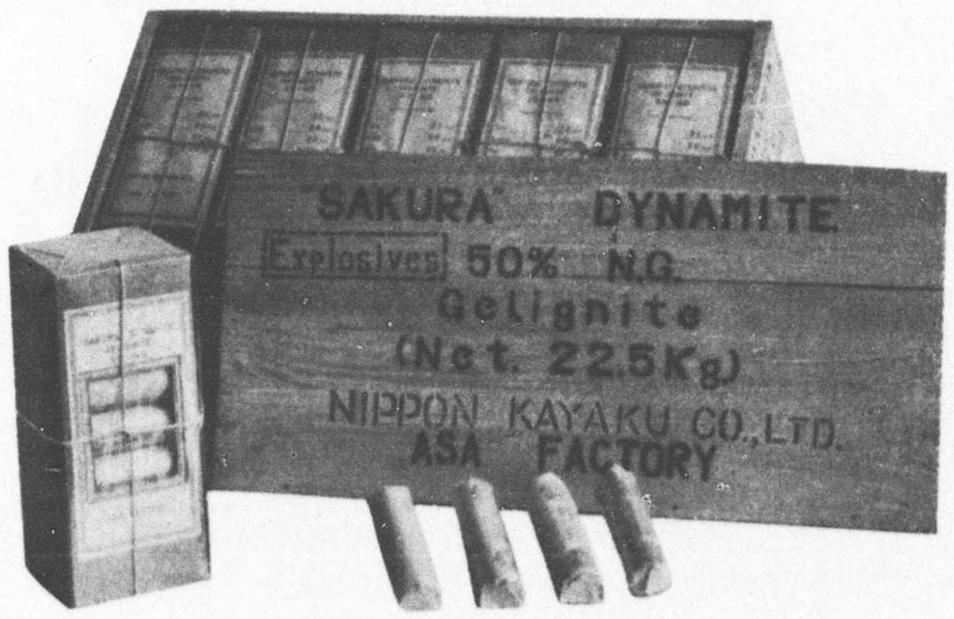
Dynamites vary in strength, sensitiveness, rate of detonation, water resistance and fumes given off. Hence to obtain the result desired, care must be given to choose the most appropriate one. Nippon Kayaku Co, Ltd. produce every kind of dynamites, of which the main products are as follows:

a) **For Metal Mining and Industrial Use:**

" Sakura" Dynamite (Gelignite)

This is of a gelatinous compound and composed of 50% nitroglycerin, 2% nitrocellulose, 9.5% wood meal and 38.5% potassium or sodium nitrate and is widely used for all kind of works either blasting dry or wet rocks.

It has great density 1.6.



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"Shin-Kiri" Dynamite(Ammonia gelatin dynamite)

This is of a gelatinous compound and composed of 30% nitroglycerin, 1.5% nitrocellulose, 4.5% starch, 2% trinitrotoluene, 62% ammonium nitrate.

It explodes without solid residue, so it has an explosive power much stronger than the Sakura Dynamite. It is therefore more economical than the latter, should care be taken to its hygroscopic character when handled.

b) For Coal Mines (Permissible explosives):

The only explosives which passed the test prescribed by the Government Bureau of Mines to determine their suitability for use in gassy and dusty coal mines, are only granted as "Permissible explosives".

"Shiraume" Dynamite (Permissible Gelatin dynamite)

This is of a gelatinous compound and a permissible explosive composing of 35% nitroglycerin, 1.6% nitrocellulose, 1.4% wood meal, 2.6% starch, 29.4% ammonium nitrate and 30% sodium chloride as cooler. It is suitably used for excavating galleries or removing rocks in the gassy coal mines.

"Shoan" Dynamite (Ammonia dynamite or ammonium nitrate explosive with nitroglycerin

This is a powdery permissible explosive composing of 65% ammonium nitrate with 8% nitroglycerin and 20% sodium chloride as cooler, 0.4% nitrocellulose, 6.6% wood meal, starch, naphthaline.

It fits for the blasting in several cartridges hole and is widely used because of its lower cost and more safety.

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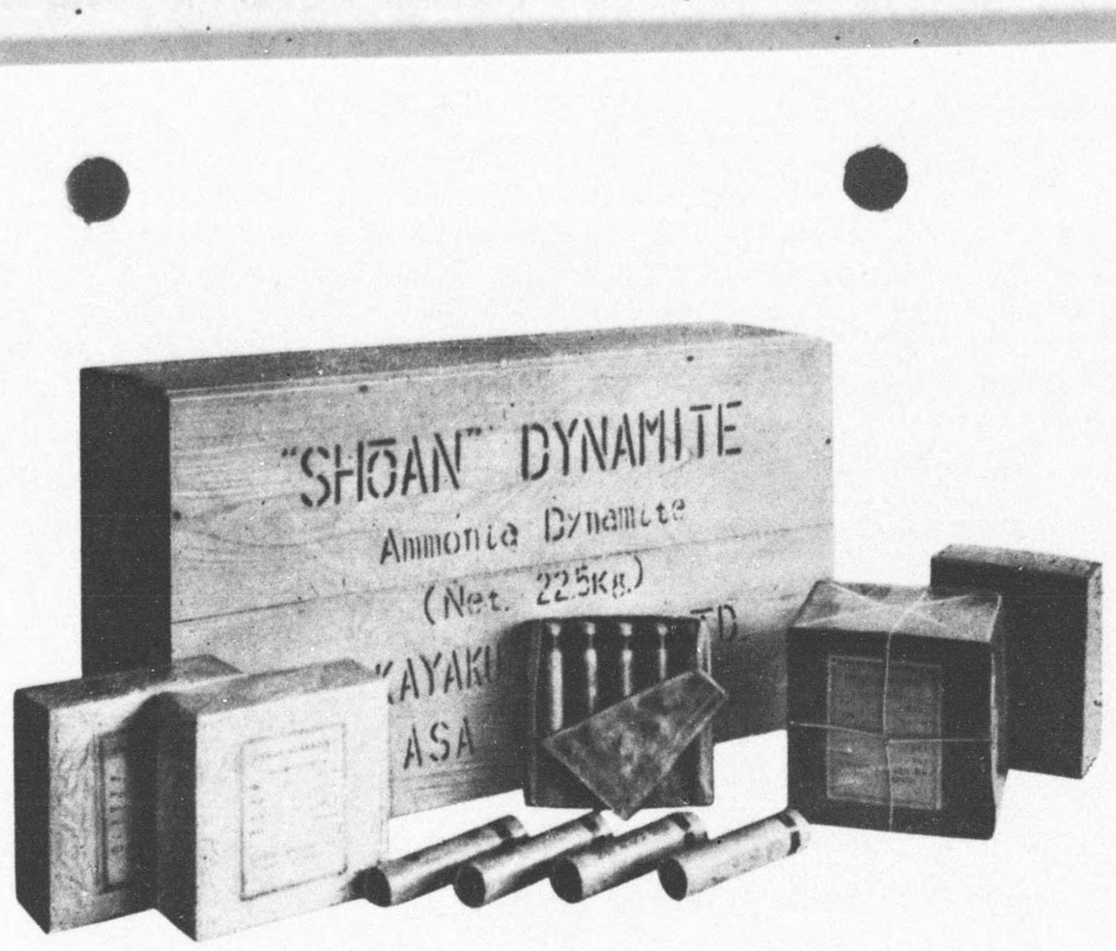

"Shoan" Bakuyaku" (Ammonium nitrate explosive without nitroglycerin)

It is composed of 73% ammonium nitrate, 15.8% sodium chloride, 3.2% starch, wood meal, 4.0% trinitrotoluene and 4.0% Dinitronaphthalene, and is a permissible explosive of finely powdered.

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It does not freeze in winter and is insensitive to any shock and friction as it contains no nitroglycerin.
It is suitable to blast hard coal, but being less sensitive, care should be given not to charge too much.

c) Low-freezing and Non-freezing Dynamite :

The disadvantages of nitroglycerin explosives attend on their relatively high freezing point. They freeze uniformly and slowly in cold weather and become stiff mass, very sensible to shock or friction.
Naturally, when frozen, they lose its effieiency and have to be thawed first before using. And it requires a special device for the purpose.
To prevent nitroglycerin explosives from freezing. nitroglycol is employed, as it is less sensitive and somewhat greater in brisance than nitroglycerin.
It has further an excellent gelatinizing power and the constitution is quite the same as nitroglycerin.
So, gelatin dynamite, nitroglycerin of which is partly replaced by nitroglycol, does not differ only in explosive power from the ordinary ones but has also a great advantage of low-freezing. Thus, nitroglycerin explosives, of which 10% of nitroglycerin is replaced by nitroglycol, are called "low-freezing dynamite" and freeze at about O°C, while the dynamites freeze in general at about 7°C.
And, nitroglycerin explosives, of which 25% of nitroglycerin is replaced by nitroglycol is called "non-freezing dynamite" and freeze at approximately -20°C.

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d) Packing, Size and weight of cartridges :

The industrial explosives produced by the Nippon Kayaku Co., Ltd. are all put up in parchment or paraffin paper cartridges and packed in a cardboard packet, 10 of these packets are enclosed in a wooden case, weighing 22.5 kilograms (50 pounds) of explosives net.

The following table shows the standard size and weight of the cartridges of the industrial high explosives. But these will be made in any size and weight on demand of the users.

"Sakura" dynamite, "Shin-Kiri" dynamite, "Shiraume" dynamite :

Diameter of cartridge	20mm	25	32	32
weight of a cartridge	45gram	75	112.5	250
Number of cartridges in a case	500pcs.	300	200	90

"Shoan" dynamite, "Shoan bakuyaku :"

Diameter of cartridge	25mm	32	32	32
Weight of a cartridge	75gram	75	112.5	150
Number of cartridges in a case	300pcs.	300	200	150

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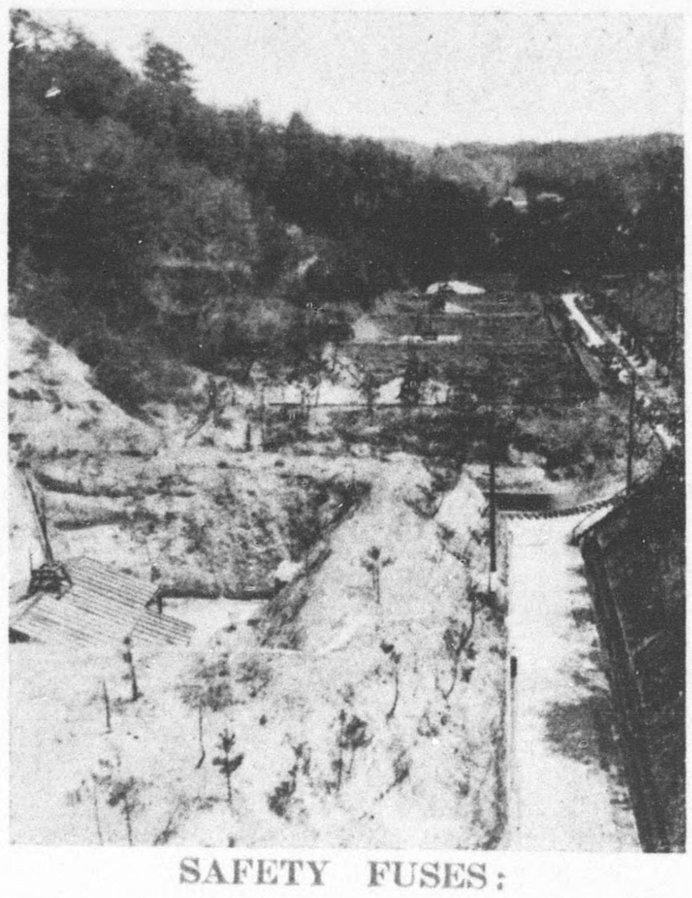

SAFETY FUSES:

Safety fuse is used to fire blasting caps, which in turn detonate dynamite.

It consists of a small train or core of black powder, around which are wrapped layers of thread or tape, then coated with waterpfoof substances. It burns at the rate of 110 to 140 seconds per meter with an allowable variation of 10 seconds to either from standard when burnt in the open. However, the burning speed varies owing to the circumstances and conditions the fuse is subjected to after delivered from the factory.

That is, differnces in altitude, weather conditions, character of tamping and mishandling will more or less affect the burning speed of the fuse.

The Nippon Kayaku Co., Ltd. gives every care and precaution in manufacturing the safety fuses and endeavours to bring its standard brands to a standard burning speed. And the following 3 kinds of safety fuses are manufactured at present;

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Safety fuse No. 1 :-

The powder core of the fuse is black powder. This powder train is doubly wound with jute or paper yarns and properly water-proofed. Over this it is again wound with cotton yarn and finished with white painting.
The diameter of a completed fuse is about 5 mm. It can withstand in water for more than two hours without injury and being protected by fire-proof coating it can be used in coal mines.

Safety fuse No. 2 :-

The black powder train is singly wound with jute or paper yarn, and after being wrapped with twisted cotton yarns so likely to cross the under coating it is made water-proof with black paint. Then the core is wound with cotton yarns and finished with white paint.

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The diameter of a completed fuse is about 4.8 mm. It is more economical than safety fuse No. 1 neverthless it has nearly the same characteristics and is used most frequently.

Safety fuse No. 3 :-

The black powder train is singly wound with jute or paper yarn, and after being wrapped with twisted cotton yarns so likely to cross the under coating is finished with black water-proof paint. The diameter of a completed fuse is about 4.6 mm.

This can withstand intact under water for one hour when the combustion proceed, the fuse broken down. So the charge of the successive hole is not drawn out by the former shot.

Safety fuses are all packed in wooden case containing 100 coils of 10 meters long each.

DETONATORS OR BLASTING CAPS:

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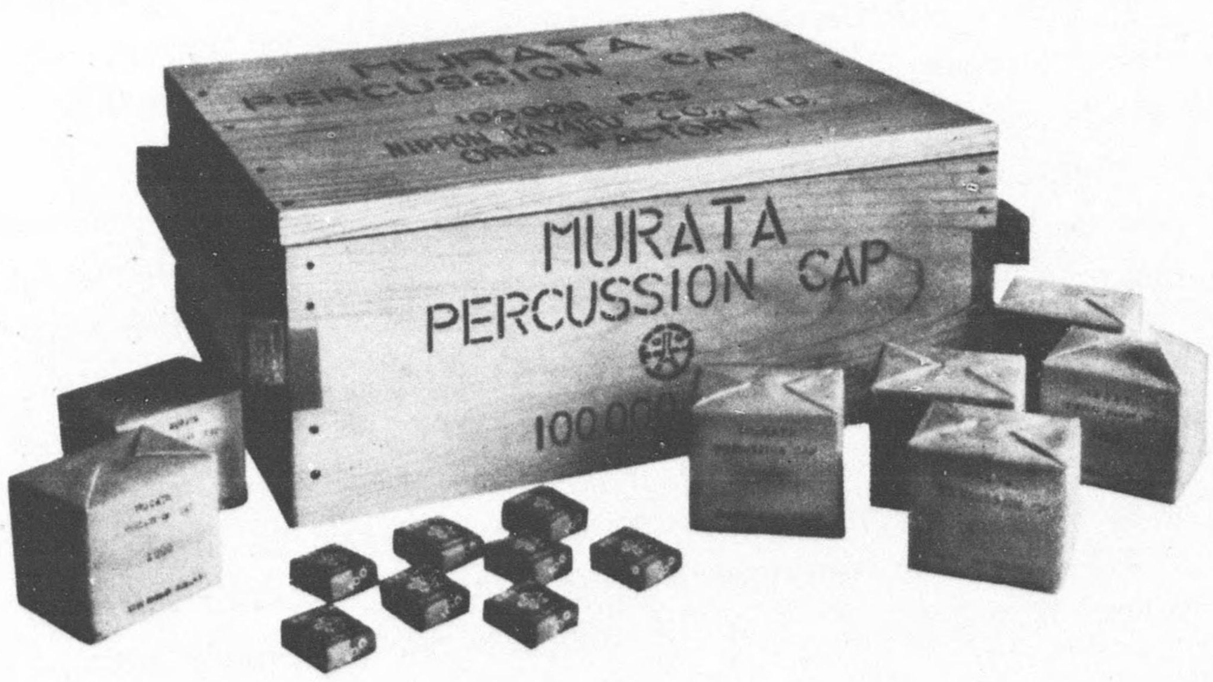
The efficiency of the industrial explosives depends on that of the detonator, especially the violence of the initial shock to induce detonation. To obtain the best results the stronger detonators should ever be employed. The detonator No. 6 is generally used at present but the other varieties of different strengths can be manufactured on request. The dimension of the detonator No. 6 is as follows:

Blasting Cap No. 6:

Material of capsule	: Copper
Inner diameter of capsule	: 6.20 mm
Outer diameter of capsule	: 6.50 mm
Length of capsule	: 35 mm
Priming material	: 0.4 gram
Detonating composition	: 0.45 gram

Priming material of blasting cap is mercury fulminate mixed with potassium chlorate and the detonating composition is tetryl etc.

The detonators are packed one hundred pieces into a container, 100 of which are enclosed in a woodencase. They



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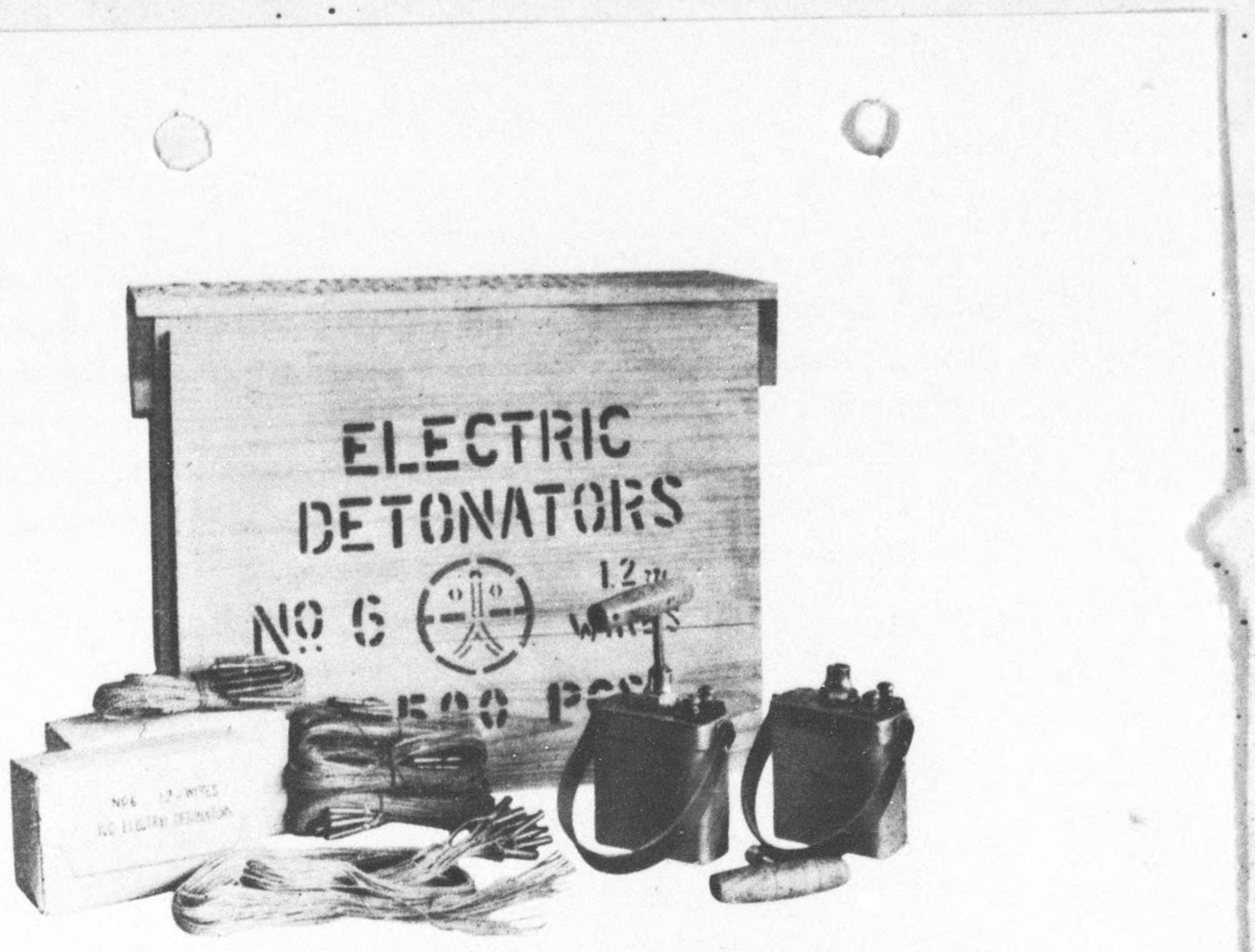

should never be stored in the same magazine with dynamite.

ELECTRIC DETONATORS:

Electric firing of explosives is recommended by all as safer and more effective than any other method. Indeed, with this method, the blaster can fire the shot at the moment desired and be sure that everyone is out of the way, further protecting himself from the flying materials.

Hangfires and premature explosions will thus be eliminated. For coal mines and tunnelling electric detonators are practically used in general, For this purpose electric detonator No. 6 is manufactured at present and is appreciated by all for its best quality.

Electric detonators are essentially the same as ordinary blasting caps except they are fitted with an electrical firing device consisting of a fine platinum wire bridge embeded in an ignition charge. They are composed of copper capsules with two insulated copper wires of 1.2, 1.5 or 1.8 meters long. The application of

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electric current heats the bridge wire to a temperature sufficiently high to ignite the priming explosive. The firing device is sealed within the cap by a water-proofing compound. A wooden case encloses 25 cardboard packets, each containing 100 electric detonators.

Besides the detonators above mentioned, specially sealed electric detonator for under-water blasting can be manufactured. It can withstand intactly for two hours in water of 10 meters deep.

Moreover, four steps delay electric detonators at 1.3 seconds interval are also manufactured. The distinction of each delay period is marked respectively with a colour painted on each wire.

BLACK POWDER:

It is composed of potassium nitrate, charcoal and sulphur, and used for blasting at quarry and destruction of boulder, hunting, and whaling.

RAILWAY SIGNAL DETONATOR:

It is compsed of Percussion caps with iron-strike piece, booster and detonating fuse and covered with mild steel plate. Detonating sound is promoted by detonating fuse. It explodes on rail securely by empty 10-tons-wagon. But it is safe for handling. It does not fire under the 10 kg hammer dropping down from 40 cm height.

EXPLODER:

For the electric blasting in coal and metal mine we supply hand exploders. It is portable dynamo-type and can shot 10 electric detonators at a time. It's standard capacity is 35 V, 2 amp.

PACKING:

Our export products are packed with special material so as to be able to withstand rain, moisture, high temperature of the tropics and handling for long transportion.

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INTRODUCTION

Our company was incorporated in 1916, a pioneer of the private enterprisers who undertake to manufacture industrial explosives and their accessories in Japan. The original trade name was Nihon Kayaku Seizo Co., Ltd. (Nippon Explosives Manufacturing Co., Ltd.). we have been supplying the products to the consumers to their complete satisfaction ever since over thirty years.

Our company has manufactured dyestuffs and medicines besides industrial explosives and their accessories.

Our dyestuffs department was organized by amalgamating Teikoku Senryo Seizo Co., Ltd. (Imperial Dyestuffs Manufacturing Co., Ltd.) whose products have had enjoyed good reputation under the trade mark of "Teisen dyes".

Our medicines deparment was made by amalgamating Yamakawa Seiyaku Co., Ltd. (Yamakawa Pharmaceutical Co., Ltd.), maker of "Yamakawa Aspirin", widelyfamed to match with "Bayer Aspirin".

In 1945, the Company's trade name changed to the present Nippon Kayaku Co., Ltd. (Nippon Chemicals and Medicines Co., Ltd.).

Over 20 years long we exported explosives, dyestuffs and medicines to foreign markets and won reputation on their superior quality.

Explosives etc.

Dyestuffs etc.

Medicines etc.

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Standard Size, Volume & Weight of Cases for Export Explosives & Accessories

I. DYNAMITE:

	Net weight (kg)	Wooden Case (cm)			volume (Litre)	Gross weight (kg)
		length	width	height		
Gelatine Dynamite	22.5	61.6	27.4	23.3	39.3	31.5
Ammonia Dynamite	22.5	71.2	37.1	20.6	54.4	35.6
Ammonium Nitrate Explosives	22.5	66.2	36.8	21.8	53.1	35.7

II. SAFETY FUSE:

	Contained (m)	Wooden Case (cm)			volume (Litre)	Gross weight (kg)
		length	width	height		
Safety Fuse No. 1	1,000	47.0	36.4	47.0	80.4	29.0
Safety Fuse No. 2	1,000	45.4	34.6	45.4	72.1	27.0
Safety Fuse No. 3	1,000					

III. BLASTING CAP:

	Contained (pcs)	Wooden Case (cm)			volume (Litre)	Gross weight (kg)
		length	width	height		
Blasting cap No. 6	10,000	39.0	36.5	23.5	33.4	30.8

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IV. ELECTRIC DETONATOR:

	Contained (pcs)	Wooden Case (cm)			volume	Gross weight (kg)
		length	width	height	(Litre)	
Wire length 1.2 m	2,500	62.5	24.0	46.5	69.7	~~38.2~~ 35.7
Wire length 1.5 m	2,500	62.5	24.0	46.5	69.7	~~33.7~~ 38.2
Wire length 1.8 m	2,000	62.5	24.0	46.5	69.7	~~35.7~~ 39.7

V. DELAY ELECTRIC DETONATOR:

	Contained (pcs)	Wooden Case (cm)			volume	Gross weight (kg)
		length	width	height	(Litre)	
Wire length 1.2 m	2,000	62.5	24.0	46.5	69.7	30.7
Wire length 1.5 m	2,000	62.5	24.0	46.5	69.7	33.2
Wire length 1.8 m	2,000	62.5	24.0	46.5	69.7	35.7

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Business guide

NIPPON KAYAKU CO., LTD.

(NIPPON CHEMICALS AND MEDICINES CO., LTD.)

DECLASSIFIED E.O. 11652 SECTION 3 (E)(2), NARS DATE

Incorporated : 1916

NIPPON KAYAKU CO., LTD.

(Nippon Chemicals and Medicines Co., Ltd.)

Head Office :

15 Ichiban-cho, Chiyoda-ku, Tokyo.

Osaka Branch :

Sanwa Bldg., 55 Kawara-machi 2-chome,
Higashi-ku, Osaka.

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. [redacted]

Introduction

Our company was incorporated in 1916, a pioneer as a private enterpriser in Japan to manufacture industrial explosives and their accessories. The original trade name was the Nihon Kayaku Seizo Kabushiki Kaisha (The Nippon Explosives Manufacturing Co., Ltd.) We have been supplying the products to domestic consumers to their complete satisfaction over thirty years since then.

Our dyestuffs department was organized by amalgamating the Teikoku Senryo Seizo Kabushiki Kaisha (The Imperial Dyestuffs Manufacturing Co., Ltd.) whose products had enjoyed great reputation under the trade mark of "Teisen dyes".

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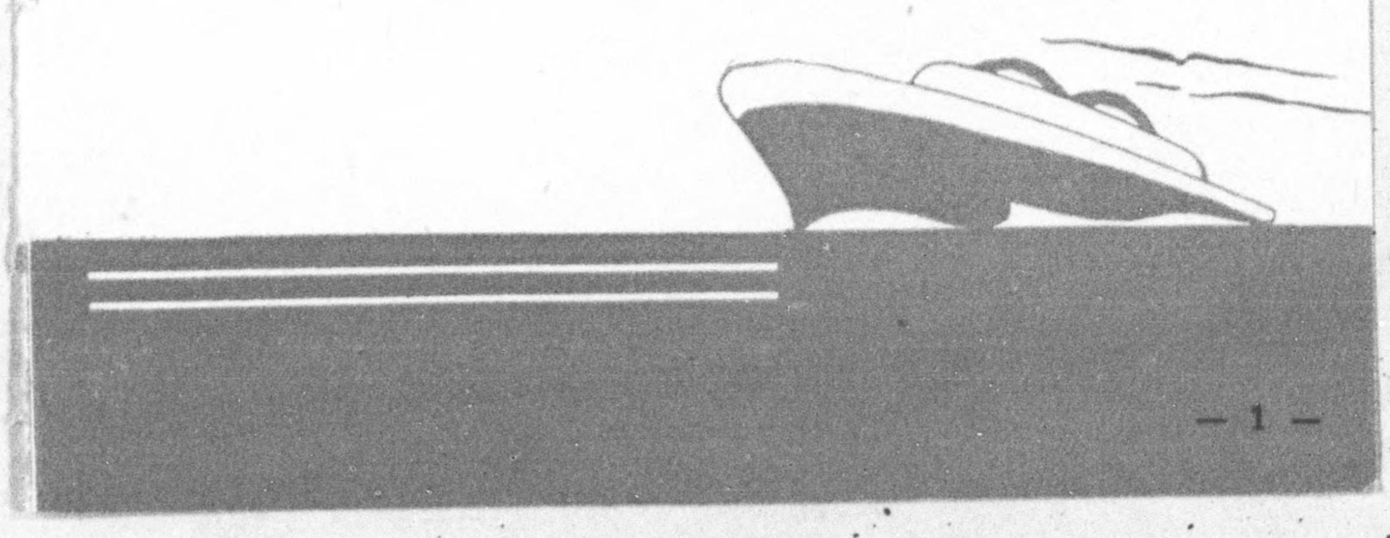
In 1945 the Company's trade name was changed into present the Nippon Kayaku Co., Ltd. (The Nippon Chemicals and Medicines Co., Ltd.)

Pre-war we exported explosives, dyestuffs and medicines to various foreign markets and all of them acquired reputation of fine quality.

Explosives etc. Dyestuffs etc. Medicines etc.



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EXPLOSIVES & ACCESSORIES :

Type	Items in Japanese	Name in English	Brands or Grade
Gelatine Dynamite	"Sakura" Dynamite	Gelignite	50% N.G.
〃	"Kiri" Dynamite	Ammonia gelatine dynamite	30% N.G.
〃	"Shira-Ume" Dynamite	Permissible ammonia gelatine dynamite	35% N.G.
Powdery Dynamite	"Shoan" Dynamite	Permissible ammonia dynamite	8% N.G.
〃	"Hagi" Dynamite	Ammonia dynamite	15% N.G.
Powdery Explosives	"Shoan Bakuyaku"	Permissible ammonium nitrate explosives	15% Salt
〃	"Ammon Bakuyaku"	Ammonium nitrate explosives	non-salt
Black Powder	"Ryoyo Kayaku"	Black powder for sporting	
〃	"Kozan Kayaku"	Black powder for blasting	
Blasting cap	"Kogyo Raikan"	Blasting cap	No. 3 No. 6 No. 8
Electric Detonator	" Denki Raikan"	Electric detonator	No. 6 No. 8
Safety Fuze	"Kannen Dokasen"	Safety fuze	No. 1 No. 2
Percussion Cap	"Ryoyo Raikan"	Percussion cap	

Remarks: For use in colder area or in winter season, Low-freezing and Non-freezing dynamites can be made if required among Gelatine and Powdery Dynamites.

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DECLASSIFIED E.O. 12065 SECTION 3 (E)(2) NLS #

DYESTUFFS, INTERMEDIATES & CHEMICALS:

Color Index Nnmber	Commercial Name	Corresponding Foreign Colors	
(1) Direct Colors:			
—	Kayaku Direct Rhoduline Red B	Benzo Rhoduline Red B	(SCI)
		Chloramine Red B	(S)
419	Kayaku Direct Fast Red F	Pontamine Fast Red F	(Dup)
		Benzo Fast Red FC	(By)
382	Kayaku Direct Scarlet B	Pontamine Scarlet B	(Dup)
		Chloramine Red B	(S)
—	Kayaku Direct Scarlet 3B	Diamine Scarlet 3B	(C)
128	Kayaku Direct Brill. Rose BD	Diamine Rose BD	(C)
		Erie Pink 2B	(NAC)
415	Kayaku Direct Orange R	Pontamine Orange R	(Dup)
		Benzo Orange R	(S)
		Benzo Orange R	(By)
410	Kayaku Chrysamine G	Chrysamine G	(S)
365	Kayaku Chrysophenine GX	Direct Yellow C conc	(S)
		Cotton Yellow CH	(SCI)
		Pontamine Yellow CH	(Dup)
593	Kayaku Direct Green B	Direct Green B conc	(S)
		Pontamine Green BX	(Dup)
		Diamine Green B	(C)
583	Kayaku Direct Dark Green B	Erie Green WT	(NAC)
406	Kayaku Direct Blue BB	Pontamine Blue BBF	(Dup)
		Diamine Blue BB	(C)
512	Kayaku Direct Brill. Blue RW	Direct Blue RW	(SCI)
		Pontamine Blue RW	(Dup)
		Niagara Blue RW	(NAC)
520	Kayaku Direct Sky Blue 5B	Benzo Sky Blue	(By)
		Oxamine Sky Blue 5B	(B)
		Pontamine Sky Blue 5BX	(Dup)
518	Kayaku Direct Sky Blue 6B	Diamine Sky Blue FF	(C)
		Diphenyl Brill. Blue FF	(Gy)
		Niagara Sky Blue 6B	(NAC)
		Oxamine Sky Blue 6B	(B)
		Pontamine Sky Blue 6BX	(Dup)
—	Kayaku Direct Copper Blue 2B	Benzo Copper Blue 2B	(By)
		Pontamine Copper Blue PRX	(Dup)

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DYESTUFFS, INTERMEDIATES & CHEMICALS :

Color Index Number	Commercial Name	Corresponding Foreign Colors	
—	Kayaku Direct Bordeaux NS		
—	Kayaku Direct Brown KGG		
569	Kayaku Direct Brown 3G	Diphenyl Brown GRI	(Gy)
420	Kayaku Direct Brown M	Pontamine Brown R	(Dup)
		Benzo Brown MC	(By)
		Diamine Brown M	(C)
		Naphthamine Brown H	(K)
581	Kayaku Direct Deep Black EX	Pontamine Black EX	(Dup)
		Cotton Black Extra	(B)
		Direct Deep Black Extra	(By)
—	Kayaku Direct Deep Black GX		
—	Kayaku Direct Fast Black D	Zambeisi Black D	

(2) Acid Colors :

Color Index Number	Commercial Name	Corresponding Foreign Colors	
430	Kayaku Acid Red RS	Polar Red RS	(Gy)
435	Kayaku Acid Red PG	Polar Red G conc	(Gy)
—	Kayaku Acid Red 3B	Polar Red 3B	(Gy)
185	Kayaku Acid Brill. Scarlet 3R	Brill. Scarlet 3R	(NAC)
196	Kayaku Silk Scarlet	Scarlet for Silk	(By)
		Acid Ponceau E	(Gy)
176	Kayaku Rocceline	Rocceline	(Gy)
		Rocceline	(C)
		Rocceline	(S)
		Rocceline	(SCI)
184	Kayaku Amaranth	Amaranth	(SCI)
		Amaranth	(C)
151	Kayaku Acid Orange II	Orange II conc	(Gy)
		Orange II	(SCI)
639	Kayaku Acid Light Yellow 2G	Xylene Light Yellow 2G	(S)
640	Kayaku Tartrazine	Tartrazine	(By)
		Tartrazine	(B)
289	Kayaku Acid Cyanine 5R	Cloth Fast Blue B	(SCI)
288	Kayaku Acid Cyanine GR	Cloth Fast Blue R	(SCI)
246	Kayaku Acid Blue Black 10B	Pontacyl Blue-Black SX	(Dup)
		Napthol Blue-Black	(C)
		Naphthylamine Black 10B	(By)

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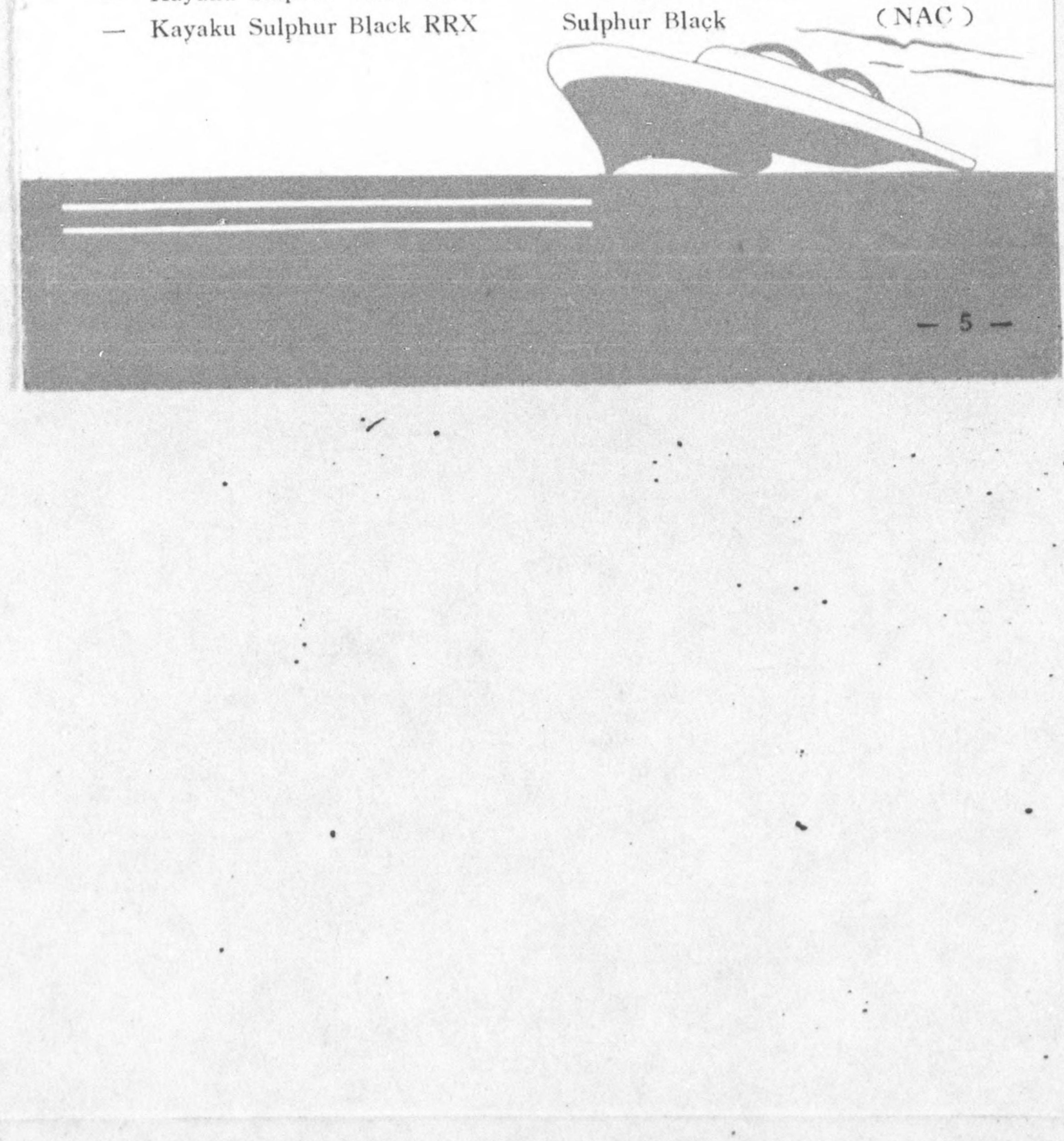
DYESTUFFS, INTERMEDIATES & CHEMICALS :

Color Index Number	Commercial Name	Corresponding Foreign Colors	
(3) Basic Colors :			
680	Kayaku Methyl Violet (Various Brands)	Methyl Violet	(C)
		Methyl Violet	(Gy)
		Methyl Violet	(By)
(4) Chrome Colors :			
36	Kayaku Mordant Yellow 2G	Alizarine Yellow Go	(CAC)
99	Kayaku Chrome Green F	Erie Chrome Green H	(Gy)
105	Kayaku Chrome Brown RH	Acid Anthracene Brown RH Extra	(Gy)
		Chrome Fast Brown TV	(SCI)
202	Kayaku Chrome Blue Black R		
336	Kayaku Alizarine Black SE	Palatine Chrome Black F	(By)
(5) Sulphur Colors :			
1006	Kayaku Sulphur Brill. Green 4G	Immedial Green 4G	(C)
		Katigen Green 4G	(By)
959	Kayaku Sulphur Blue RC	Immedial Indon R	(C)
959	Kayaku Sulphur Blue TFB		
959	Kayaku Sulphur Blue 4R		
957	Kayaku Sulphur New Blue BL	Immedial Pure Blue	(C)
961	Kayaku Sulphur Brill. Blue BO	Pyrogen Indigo BL	(SCI)
961	Kayaku Sulphur Brill. Blue CLG	Pyrogen Indigo GL	(SCI)
961	Kayaku Sulphur Indigo R	Pyrogen Indigo R	(SCI)
1012	Kayaku Sulphur Red Brown 9R	Bordeaux 5RC	(Dup)
940	Kayaku Sulphur Naphthalene Brown RC	Kryogene Brown G	(B)
		Thiogen Brown R	
1010	Kayaku Sulphur Violet	Thion Violet 3R	(K)
978	Kayaku Sulphur Black BX	Katigen Deep Black B	(By)
—	Kayaku Sulphur Black BRX	Immedial Carbon B	(C)
—	Kayaku Sulphur Black RRX	Sulphur Black	(NAC)



DECLASSIFIED E.O. 12065 SECTION 3 402/NNBS NO:

DYESTUFFS, INTERMEDIATES & CHEMICALS :

Color Index Number	Commercial Name	Corresponding Foreign Colors

(6) Sulphur Vat Colors :

969	Kayaku Carbanol Blue LB	Hydron Blue R pdr.	(C)
969	Kayaku Carbanol Blue LR		
—	Kayaku Carbanol Blue BX	Hydron Dark Blue B	(C)
971	Kayaku Carbanol Blue GX	Hydron Blue G	(C)
970	Kayaku Carbon D	Indo Carbon CLX	

(7) Naphthol Colors : (Developer)

— Kayaku Fast Red Salt 3GL
117 Kayaku Fast Red B Base
— Kayaku Fast Red RL Base
68 Kayaku Fast Scarlet G Base
118 Kayaku Fast Scarlet RC Base
— Kayaku Fast Scarlet GG Base
— Kayaku Blue Salt R
— Kayaku Blue Salt B
— Kayaku Blue B Base

(8) INTERMEDIATES & CHEMICALS :

Aniline
Beta-Naphthylamine
Beta-Naphthol
Benzidine Base
C acid
Chlorobenzene
Chloropicrine
Dianisidine Base
Dichlorobenzene (Ortho, Para)
Dinitrochlorobenzene
D.D.T.

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DYESTUFFS, INTERMEDIATES & CHEMICALS :

Commercial Name

G acid
ϑ acid
Hydrochloric acid
H acid
J acid
Nitrochlorobenzene (Ortho, Para)
Nitroanizol (Ortho)
Nitrotoluene (Ortho, Para)
Nitrophenol (Para)
Phenol
Phenylendiamine (Para, Meta)
R acid
Sodium Sulphide
Toluidine (Ortho, Para)

etc.

Remarks :

(B) — Badische Anilin-und Soda-Fabrik, Ludwigshafen a./Rhein.
(By) — Farbenfabriken vorn Friedrich Bayer & Co., Leverkusen.
(C) — Leopold Cassells & Co., Frankfurt a./Main.
(CAC) — Clayton Aniline Co., Ltd., Clayton, Manchester.
(Dup) — Du Pont de Nemours & Co., Wilmington, Delaware.
(Gy) — E. I., T. R. Geigy S. A., Basel.
(K) — Kalley & Co., Aktiengesellschaft. Biebrich a./Rhein.
(NAC) — National Aniline & Chemical Co., Inc., New York.
(S) — Sandoz Chemical works, Basel.
(SCI) — Society of Chemical Industry, Basel.

— ☆ —

DECLASSIFIED E.O. 12065 SECTION 3 402/MNSC NO.

MEDICINES :

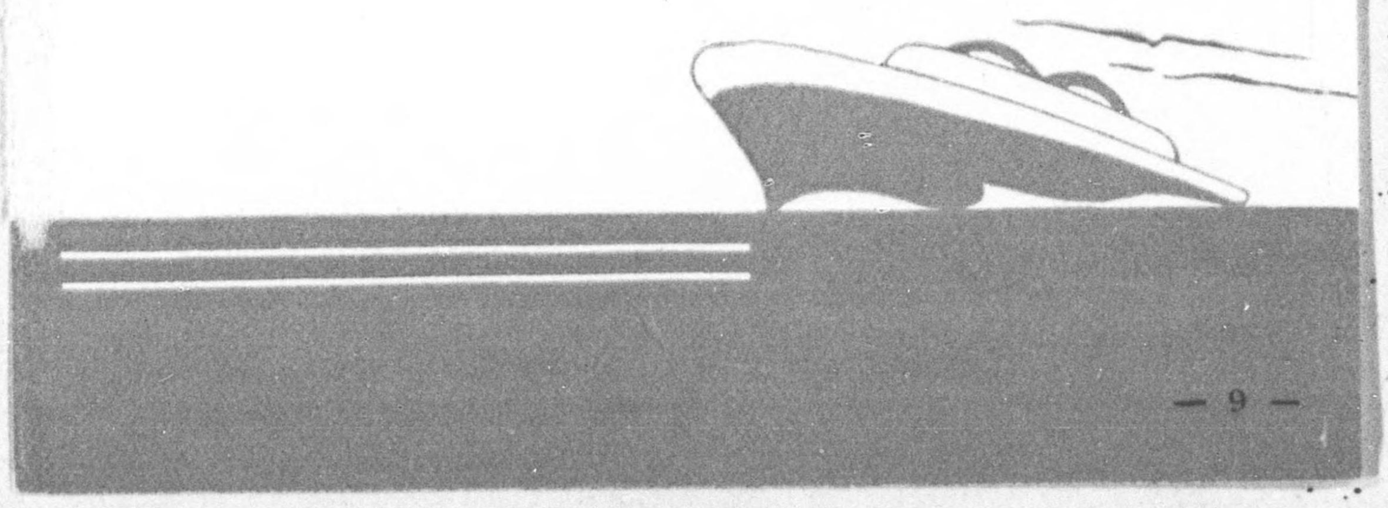
Items in English	Use for Diseases
1. Japan Pharmacopoeia :	
(1) Acetanilide	Antifebrile
(2) Sulphacetamide	Same as Sulfamin
(3) Rivanol	Antiseptic, Bactericide, Disinfectant, Septicaemia or suppurative disease by injection. Amoeba dysentery
(4) Acetylsalicylic acid	Antifebrile, Anodyne
(5) Buthyl paraoxybenzoate	Preserve foods, prevention against injections deterioration
(6) Quinine ethylcarbonate	Antifebrile for children
(7) Dulcin	Artificial sweetness
(8) Guaiacol	Tuberchlosis
(9) Guaiacol carbonate	〃
(10) Potassium guaiacol sulfonate	〃
(11) Acetophenetidin	Rheumatism,Neuralgia etc.
(12) Phenyl salicylate	Antiseptics for Urethra or Intestine
(13) Salysal (Salicylosalicylic acid)	Rheumatism, Neuralgia etc.
(14) Strychnine nitrate	Stimulant, Tonics
(15) Sulfanilamide Sulfamin)	All suppurative diseases such as Pneumonia
(16) Acetylsalicylic acid tablets	Same as Aspirin
(17) Thianthol	General skin diseases such as itch etc.
2. Japan National Formulary :	
(1) Sulphacetamide Injection 10% 2cc.	Same as Sulfamin
(2) Sulphacetamide Injection 30% 5cc.	Same as Sulfamin
(3) Strychnine nitrate Injection 0.1% 1cc.	Beri-beri from heart failure, Nervous dyspepsia, hard breathing
(4) Sulfamerazine	Same as Sulfamin

DECLASSIFIED E.O. 12065 SECTION 3 402/NNSC NO.

MEDICINES :

Items in English	Use for Diseases
3. Remedies Other than Japan Pharmacopoeia & National Formulary:	
(1) Neosasalon tablets	Anodyne for Rheumatism, Neuralgia etc. Component mainly of Salysal & Acetophenetidin
(2) Penicillin sodium "Yamakawa"	Acute infection due to Pneumococci, Staphylococci & Streptococci, Gonorrhea, Syphilis, Meningitis
(3) Crystalin Penicillin G Sodium "Yamakawa"	〃
(4) Crystalin Penicillin G Potassium "Yamakawa"	〃
(5) Penicillin Calcium in Oil & Wax "Yamakawa"	〃
(6) Yamakawa Fugicidal Solution	Skin Disease of "Water-insect"
4. Others :	
(1) Yamakawa Moth-Balls	Cloth protection from deterioration. component of dichlorobenzene
(2) Yamakawa Hair-Dyes	Black Hair-Dyeing, component of Phenylendiamine

— ☆ —



We shall greatly be pleased to give you full details upon your inquiries to the following address :

	TELEPHONE	CABLE ADDRESS
Tokyo Head Office :	Kudan(33) 587–9, 2135–7, 4217–8, 4337–8	"Kayaku" Tokyo
Osaka Branch Office :	Kitahama (23) 1951–3	

PLANTS :

Explosives etc. :

Asa: 2300, Kori, Asa-machi, Asa-gun Yamaguchi-ken.
Iwahana: Iwahana-mura, Gumma-gun, Gumma-ken.
Orio: 659, Asakawa, Wakamatsu-shi Fukuoka-ken.
Nibuno: Toyotomi-mura, kanzaki-gun, Hyogo-ken.
Kokura: 481, Shimoitozu, Itabitsu-machi, Kokura-shi, Fukuoka-ken.
Osaka: 632, Nishitsutsumi-cho, Fuse-shi, Osaka-fu.
Iizuka: 196, Wakana, Honami-mura, Kaho-gun, Fukuoka-ken.
Kiyama: Kokura, Kiyama-machi, miyaki-gun, Saga-ken.
Iwamizawa: 1792, Higashitonebetsu, Iwamizawa-shi, Hokkaido.
Asakasei: 2924, Kori, Asa-machi, Asa-gun, Yamaguchi-ken.

Dyestuffs etc. :

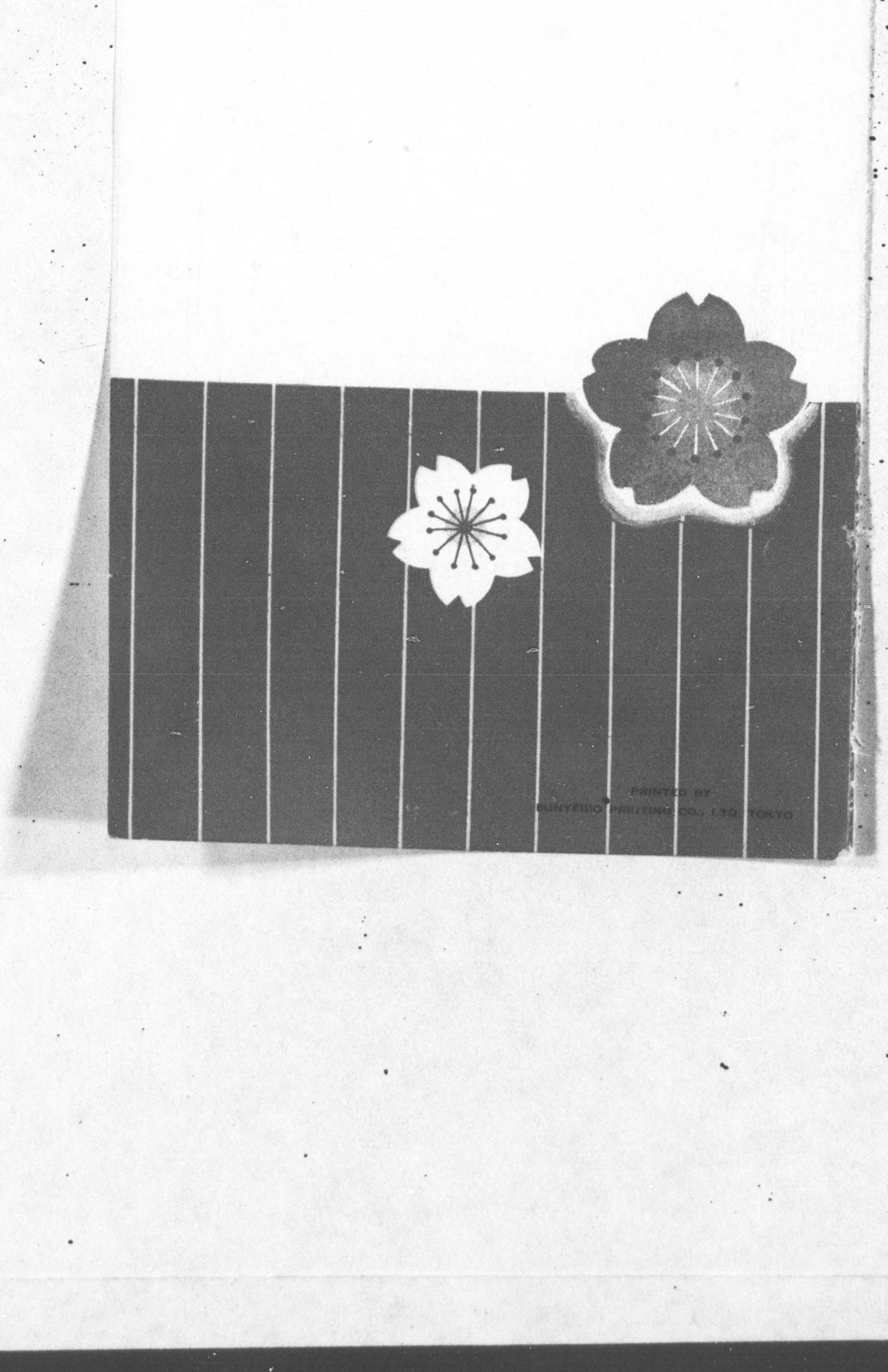
Fukuyama: Irifune-cho, Fukuyama-shi, Hiroshima-ken.
Oji: 1826, 2-chome, Shimo-machi, Kita-ku, Tokyo.
Kokura: 2840, Itabitsu, Kokura-shi, Fukuoka-ken.

Medicines etc. :

Oji: 1670, 2-chome, Shimo-machi, Kita-ku, Tokyo.

DECLASSIFIED E.O. 12065 SECTION 3 402/NNBS NO:

DECLASSIFIED E.O. 12065 SECTION 3 402/NNSC NO.



DECLASSIFIED E.O. 12065 SECTION 3-402/NNDS N.S. [redacted]

MEMORANDUM FOR RECORD

9 June 1950

January Production figures of ASA Plant of Nippon Kayaku Company.

Item	Auantity (Jan 1950) Authorized	Actually	%
Gelatine Dynamite	225 mt	249.9975 mt	111.1%
Ammonium Dynamite	135 mt	140.8275 mt	104.3%
Ammonium Nitrate Explosive	112.5 mt	125.0325 mt	111. %
	472.5 mt	515.8575 mt	109.2%

NOTE: Information furnished by Mr. Yamashita, Chemical Section Hiroshima MITI Bureau by telephone.

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. [illegible]

FIELD TRIP REPORT

R.G. STRADLEY

3 May 1950
Asa

1. Purpose:

Inspection of Nippon Kayaku Company Asa Plant at Asa, Yamaguchi Prefecture.

2. Background:

Surveillance in accordance with O.O. 11.

3. Discussion:

Discussion with Mr. Kaku, Assistant to the chief engineer and concurrently in charge of production revealed;

a. April Production Figures.

Name	Quantity (April 1950)
Gelatine Dynamite	10,098 cases
Ammonium Dynamite / Ammonium Nitrate Explosive	8,355 "
Total	18,453 cases (415 ton)

NOTE: 1 case - 22.5 kg.

b. Stockpile as of 1 May 1950.

Name	Quantity (May 1, 1950)
Gelatine Dynamite	1,955 cases
Ammonium Dynamite / Ammonium Nitrate Explosive	1,565 "
Total	3,520 cases

NOTE: 1 case - 22.5 kg.

c. Mr. Kaku stated that on 2 May 1950 the company contacted by telephone and send telegram to Mr. Motohashi, chief chemical section, Hiroshima Bureau of MITI regarding the April production figures in accordance with Mr. Motohashi's previous instructions that the said report be directly sent to Hiroshima Bureau of MITI where similar industrial plant's reports would be consolidated prior to submittal to our headquarters.

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4. Conclusions:

Submission by the Asa Plant of the monthly production report appears to go smoothly in the future without by-passing the Hiroshima Bureau of MITI as in the past and our headquarters' prior advice on the matter has been complied with by the Asa Plant.

5. Recommendation:

None.

R.G. STRADLEY

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO.

Tel CL+CO

Scop permit is sufficient

APPLICATION

February 23, 1950

To : Headquarters, Chûgoku Civil Affairs Region.

From: Asa Factory of the Nippon Kayaku K.K.
(Japan Chemicals and Medicines Co. Ltd.)

Asa-machi, Asa-county, Yamaguchi prefecture.

Subject: Application for the Permit to Manufacture Industrial Explosives in 1950.

Descriptions:

1. Reference,
G. H. Q. Memorandum for Ministry of International Trade and Industry, dated 2 February 1950, as shown in the attached copy.

2. We shall be much obliged to you, if you grant us to operate our factory to produce industrial explosives within the limitations set out below,

Maximum quantity to produce for the period from January 1, through December 31, 1950.

Gelatine Dynamite & "Hagi" Type Dynamite	3,114 metric tons
Ammonia Dynamite & Ammonium Nitrate Explosives	3,413 " "
Reprocessed Military High Explosives	100 " "
Total Amount	6,627 " "

For the Manager of Asa Factory
of the Nippon Kayaku K.K.

Eikichi Yoshikawa
Chief Engineer of Asa Factory

Eikichi Yoshikawa

I-11-Y

23/2/50

DECLASSIFIED E.O. 11652 SECTION 3 (E)(2), MAR 8, 1978

COPY

GENERAL HEADQUARTERS
SUPREME COMMANDER FOR THE ALLIED POWERS
Economic and Scientific Section
APO 500

2 February 1950

MEMORANDUM FOR: Ministry of International Trade and Industry
Attn: Chemical Bureau

SUBJECT: Manufacture and Use of Industrial Explosives and Accessories in 1950

1. References are:

a. Letter FOM No. 1715 (MITI) to General Headquarters, Supreme Commander for the Allied Powers, 20 December 1949, subject as above.

b. Paragraph 4a of SCAP Directive No. 3 (SCAPIN 47), 22 September 1945.

2. Permission is hereby granted to manufacture industrial explosives and accessories for the period 1 January 1950 to 31 December 1950 as shown in attached chart. The exceptions shown in the chart have been agreed upon by the Ministry of International Trade and Industry and are indicated by red figures.

FOR THE CHIEF, ECONOMIC AND SCIENTIFIC SECTION:

MAURICE M. CLASS
Chief, Industry Division

1 Incl
MITI Schedule for
Manufacture & Use
of Ind. Expls. &
Accessories in 1950.

COPY

DECLASSIFIED E.O. 12065 Section 3-402/NNDG No.

1950 Authorization for Explosives and Accessories Production

Ministry of International Trade & Industry

Gelatine Dynamite & "Hagi" Type Dynamite -------- 8,234 metric tons

Ammonia Dynamite & Ammonium Nitrate Explosives -- 8,727 metric tons

Carlit -- 2,662 metric tons

Reprocessed Military High Explosives ------------- 300 metric tons

Black Powder ---------------------------------- 590 metric tons

For Blasting --------------- 176 metric tons
For Fuse ------------------- 359 metric tons
For Pest Extermination ------ 10 metric tons
For Fireworks --------------- 45 metric tons

Smokeless Powder ---------------------------------- 32 metric tons

Total ----------------------------------- 20,545 metric tons

Fuse ---------------------------------- 63,000,000 meters

Blasting Cap ------------------------- 100,000,000 pieces

Electric Detonator ---------------------- 40,000,000 pieces

Percussion Cap -------------------------- 21,000,000 pieces

Detonating Fuse -------------------------- 300,000 meters

Electric Fuse ---------------------------1,700,000 pieces

Cartridge for Pest Extermination ------------- 400,000 pieces

Friction Tube --------------------------------17,700 pieces

Flame Signal Fuse ------------------------- 100,000 pieces

Signal Detonator -------------------------- 100,000 pieces

Signal Firing Devices for ships --------------- 33,200 pieces

Signal Cap ------------------------------ 25,000,000 pieces

Pest Extermination Detonator --------------- 1,000,000 sets

Liquid Oxygen Explosives ------------------------ 290 metric tons

DECLASSIFIED E.O. 11652 SECTION 3 (E) AND (J)

Sum

Manufacturer	Factory	Gelatine Dynamite & "Hagi" Type Dynamite	Ammonia Dynamite & Ammonium Nitrate Explosives	Carl
	(Unit)	metric ton	"	
Nippon Kayaku K.K.	Asa	3,114	3,413	
"	Iwahana			
"	Kokura			
"	Nibuno			
"	Orio			
"	Iwamizawa			
"	Iizuka			
"	Kiyama			
Asahi Kasei Kogyo K.K.	Nobeoka	1,817	2,564	
"	Kokura			
"	Kiyama			
Nihon Yushi K.K.	Taketoyo	3,303	2,500	
Kanto Denki Kogyo K.K.	Hodogaya			2,66
Hokuyo Kayaku K.K.	Sunagawa		250	
Teikoku Kakohin Seizo K.K.	Kawagoe			
"	Ueki			
Kanto Dokasen Seisakusho	Takasaki			
"	Hongo			
K.K. Mita Shoten	Morioka			
Karatsu Kakohin Seisakusho	Karatsu			
Kyushu Kakohin K.K.	Shime			
Koa Kako Kogyo K.K.	Tokyo			
"	Tsuruse			
Ishiwara Kakohin Seizosho				
Suzuki Enka Kogyo				
Chuo Kako K.K.				
Hosoya Enka Kogyo K.K.				
Nippon Chisso Hiryo K.K.				
Denki Kagaku Kogyo K.K.				
Showa Denko K.K.				
Total		8,234	8,727	2,66

DECLASSIFIED E.O. 12065 SECTION 3 402/NNBS NO: [illegible]

Summary of Production Project of Ind

	Factory	Gelatine Dynamite & "Hagi" Type Dynamite	Ammonia Dynamite & Ammonium Nitrate Explosives	Carlit	Reprocessed Military High Explosives	Black	
						For Blasting	For Fuse
	(Unit)	metric ton	"	"	"	"	"
	Asa	3,114	3,413		100		
	Iwahana					176	359
	Kokura						
	Nibuno						
	Orio						
	Iwamizawa						
	Iizuka						
	Kiyama						
	Nobeoka	1,817	2,564		50		
	Kokura						
	Kiyama						
	Taketoyo	3,303	2,500		100		
	Hodogaya			2,662	50		
	Sunagawa		250				
K.K.	Kawagoe						
	Ueki						
ho	Takasaki						
	Hongo						
	Morioka						
usho	Karatsu						
	Shime						
	Tokyo						
	Tsuruse						
osho							
.K.							
K.							
		8,234	8,727	2,662	300		

DECLASSIFIED E.O. 12065 SECTION 3 402/NNDS NO: [illegible]

of Production Project of Industrial Explosives and Accessories for the period from

Reprocessed Military High Explosives	Black Powder				Smokeless Powder	Total	Fuse	
	For Blasting	For Fuse	For Pest Extermination	For Fireworks				
"	"	"	"	"	"	metric ton	meter	
100						6,627		
	176	359	10	45		590	11,610,000	
							18,000,000	
								2
								2
						4,431		3
50							12,014,000	
					32	5,935		
100						2,712	1,840,000	
50						250		
								1
							11,226,000	
							4,265,000	
							4,045,000	
300	590				32	20,545	63,000,000	10

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDS NO: [illegible]

...ssories for the period from 1st January through 31st December 1950

...ess or	Total	Fuse	Blasting Cap	Electric Detonator	Percussion Cap	Detonating Fuse	Electric Fuse
metric ton	meter	meter	piece	piece	piece	meter	piece
	6,627						
	590	11,310,000					
		18,000,000					300,000
			27,700,000				
			27,830,000		7,000,000		200,000
				10,200,000			
				9,600,000			
				2,230,000			
	4,431		31,090,000				500,000
		12,014,000		400,000			
				5,270,000			
32	5,935					300,000	
	2,712	1,840,000					
	250						
			13,380,000		14,000,000		
							500,000
		11,226,000		3,930,000			
		4,265,000					200,000
		4,045,000					
				4,270,000			
				4,100,000			
32	20,545	63,000,000	100,000,000	40,000,000	21,000,000	300,000	1,700,000

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO.

1st December 1950

Ministry of Internati

rcussion Cap	Detonating Fuse	Electric Fuse	Cartridge for Pest Extermination	Friction Tube	Flame Signal Fuse	Signal Detonator	Signal Firing Devices for ships	Sign Cap
piece	meter	piece	piece	piece	piece	piece	piece	pi
		300,000				25,000		
7,000,000								
		200,000						
		500,000						
	300,000				100,000	75,000		
14,000,000			200,000	17,700				
		500,000						
		200,000						11,90
			200,000				16,600	
								11,90
							16,600	
								1,20
21,000,000	300,000	1,700,000	400,000	17,700	100,000	100,000	33,200	25,0