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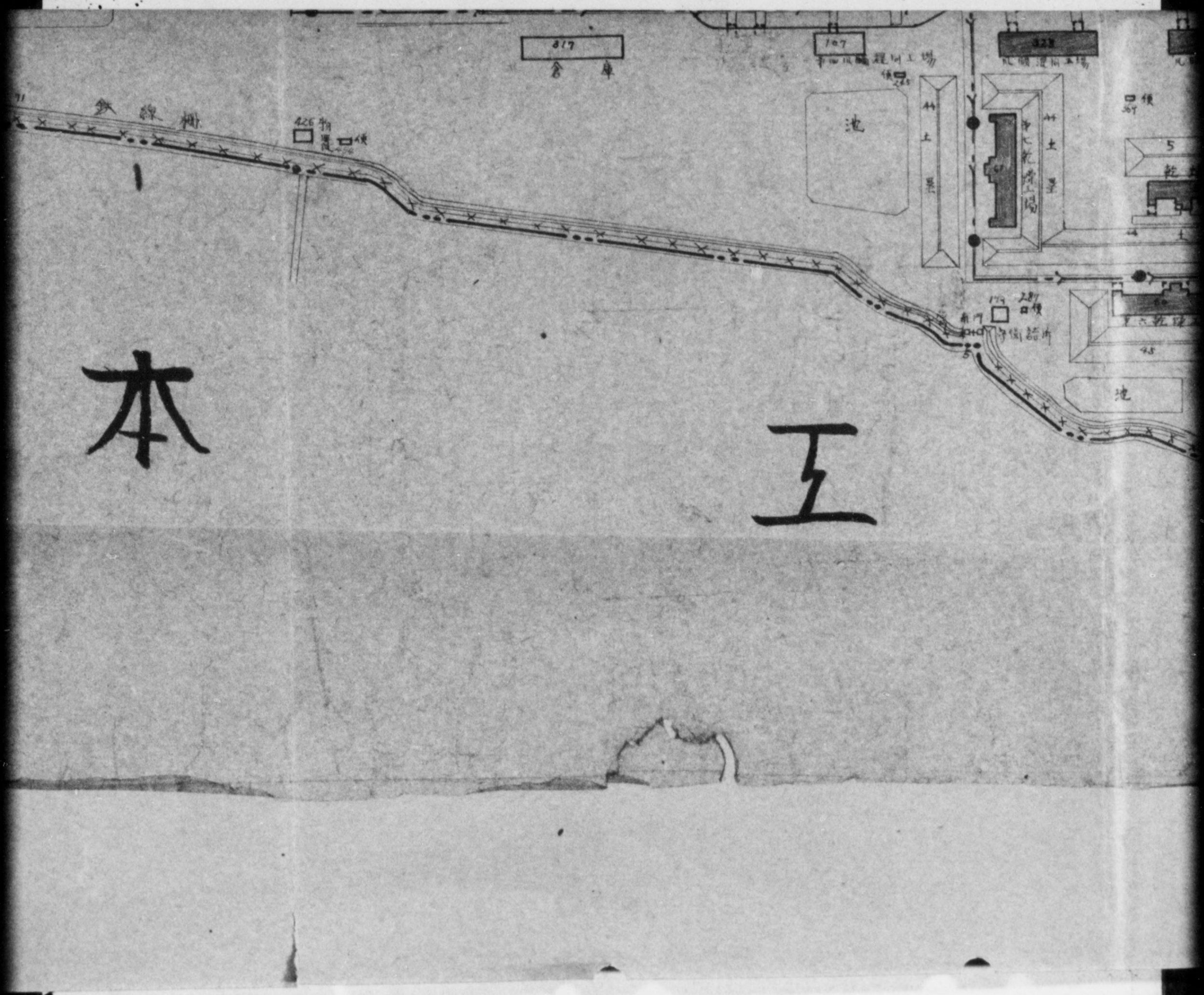

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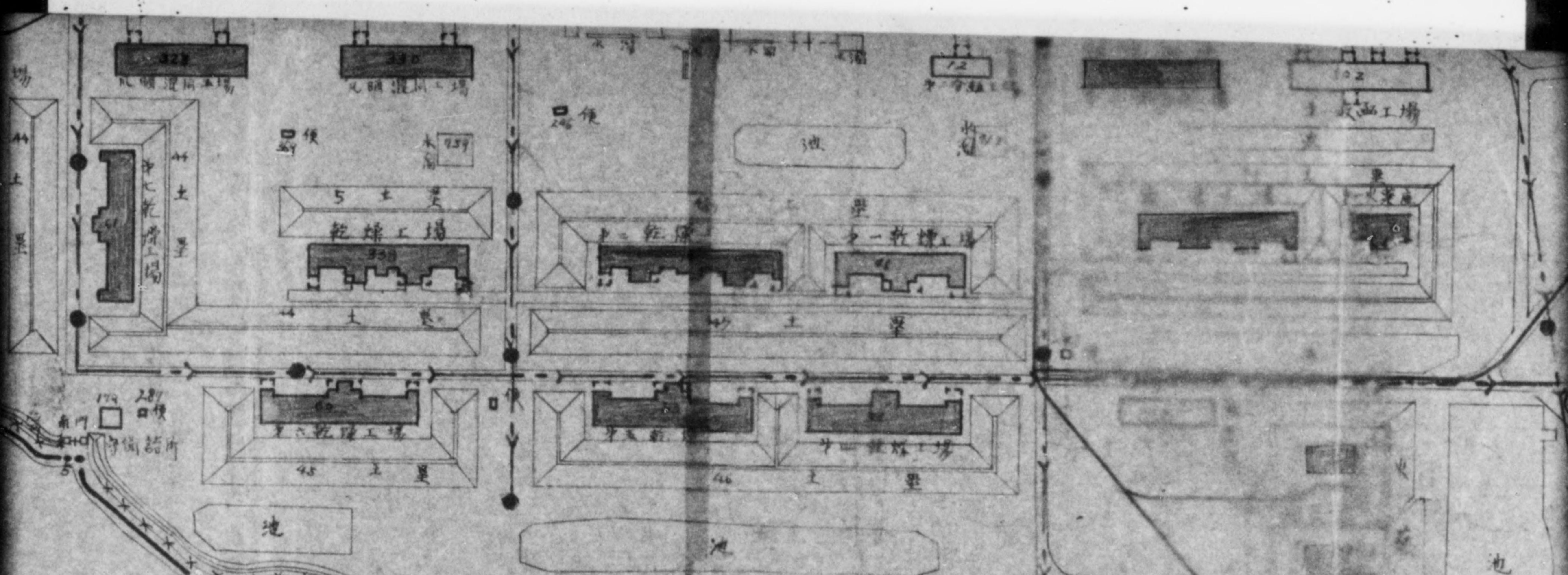

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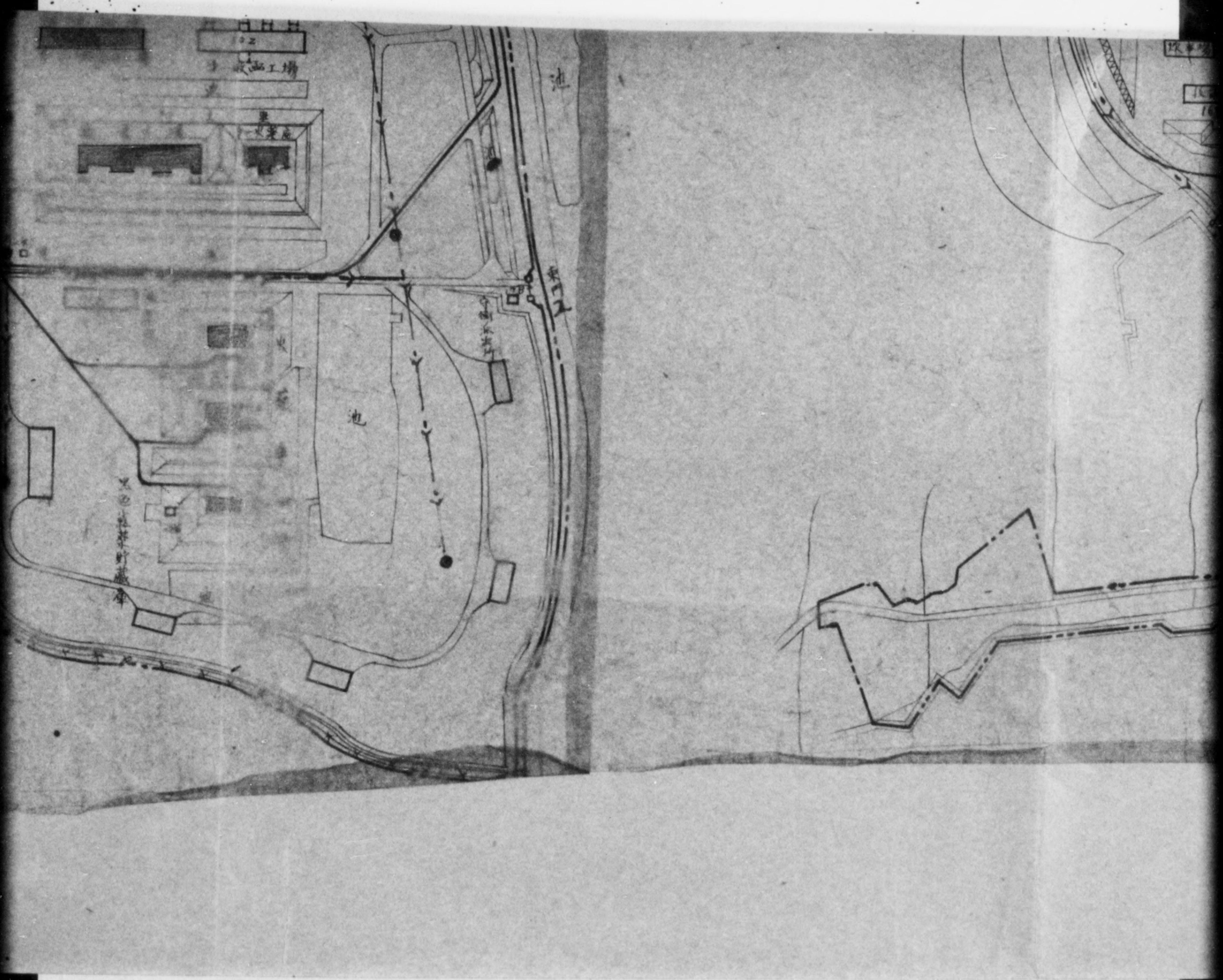

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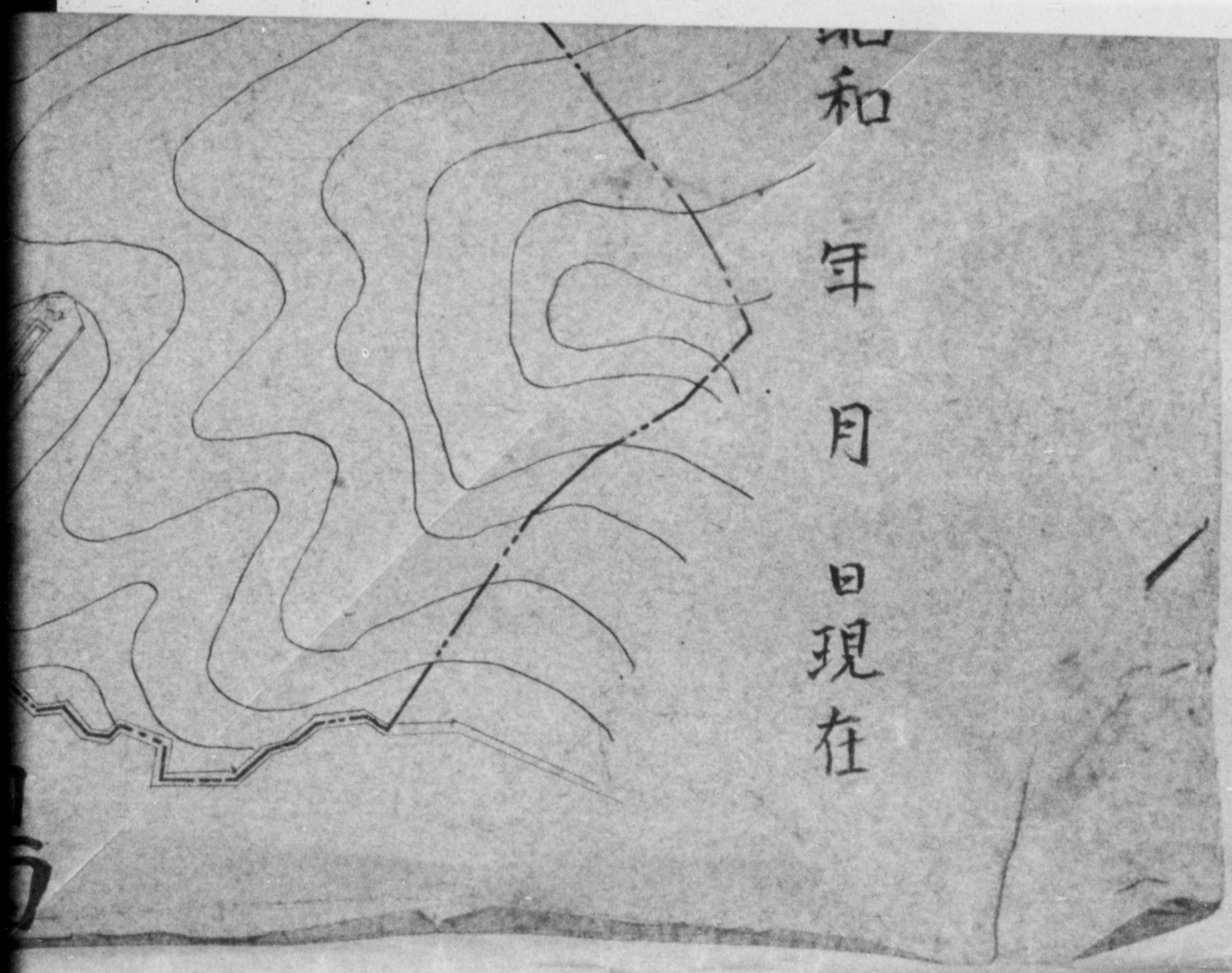

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(23)

NIPPON CHISSO HIRYO K. K.

(NIPPON NITROGENOUS FERTILIZER MFG. CO., LTD.)

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Tel. Tosabori 3250

TOKYO OFFICE:
3, 1 Uchisaiwai-cho 2-chome,
Kojimachi-ku, Tokyo.
Tel. Ginza (57) 8141

Uji, 9th April, 1946.

Subject: Notes of the development of our reconversion plan of ex-"Uji Factory of the Tokyo Second Military Arsenal"

To : Commanding Officer, Major Sheffield, the Kyoto Office of the 103rd Military Government.

1) Up to the end of the war, we had manufactured different kinds of chemical products---- such as chemical fertilizer, ammonium compounds, calcium cabide, soda ash, acetylene derivatives, fatty oil and its derivatives, caustic soda, chlorine derivatives, artificial resin, aluminium and magnecium, etc.

2) But since the end of the war, we were forming some plans of reconversion of the ex-"Uji Factory of the Tokyo Second Military Arsenal" to produce immediately the essential consumers' chemicals by reemploying the employees in our factories in Korea, thereby giving relief to them and, at the same time, making the best use of our preeminent technical skill and experence in the chemical industry in Japan.

3) Fabourably this company was appoited, by the Imperial Japanese Government, to be entrusted to convert and temporarily utilize this arsenal, and we are in receipt of the official information issued under the date of December 8th, 1945 by the Imperial Japanese Government, in which the above-mentioned is contained. (see annexed copies.)

4) Last year we planned to manufacture important peace-time chemical products which are demanded urgently and keenly at present, owing to the overwhelming shortage of them, and on December 13th of last year, submitted to the Commanding General, G.HQ. 6th Army, the application for reconversion of the arsenal, by utilising the lands and buildings, including the machineries and equipments of the arsenal.

5) At the biginning of this year, we heard the rumour that the Occupational Forces had an intention to blow up the factory buildings after removing the machineries and equipments for reparation. Immediately after that, on February 2nd of this year, we submitted to the I Corps Military Government, the petition for giving up destruction of them.

Incl 3

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(On 21 March, we were kindly informed by Major Coleman, the Kyoto Military Government Office, and could rest assured that this plant would not be destryed.)

6) Since the machineries and equipments of the factory, which were intended to be utilized by our original plan, were announced by SCAP to be put for reparation, we modified the original plan and formed a new plan of utilizing only the lands and buildings of the arsenal after they would be taken away, and on February 18, we submitted to the I Corps Military Government, through 31st Military Government, the petition for utilization of the lands and buildings of the Second Tokyo Military Arsenal.

7) In accordance with the kind suggestions of the I Corps Military Government, we submitted application for operation of and report on industrial facilities to Commanding General, I Corps (Thru Commanding Officer, the Kyoto Office of 31st Military Government) on March 9th. It was, however, kept by Major Coleman, being told that the answer to our petition (mentioned in item 6), whether acceptable or not by SCAP, had not yet reached down him, and that soon after the result would be made clear, the application should be sent forward.

8) On the 15th March, we were requested to be at the Kyoto Office of the 31st Military Government, and asked by Major Coleman eight questions concerning our plan of reconversion.

9) To the above-mentioned (item 8) questions we submitted the answers on 30th March.

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Above is the development of our plan of reconversion from the end of the last year to today.

Being aware that Japan's present main difficulties to be quickly overcome lies in the remarkable unbalance between small production and overwhelming demand for every line of commodities, we have an ardent desire to serve the general public to their utmost along the line in which they are perfectly talented and experienced, by starting the production as soon as possible after the permission is granted for which we are anxiously waiting.

We should be much obliged if you would recognize our sincere hope and ardent desire about the plan of reconversion as mentioned above, and we will beg for your kind consideration.

Kazuhiro Mayeda

Director, Temporary Office of
the Uji Factory, Nippon Nitro-
genous Fertilizer Mfg.Co., Ltd.

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 775 013

ANNEX I

Koku No. 166
8th December, 1945.

From
To: President, Nippon Nitrogenous Fertilizer Mfg. Co., Ltd.
Subject: Concerning the temporary reconversion of lands and equipments.

As to the subject matter, it was decided through the consideration of the Contral Committee for the Disposal of Properties returned back from the Allied Forces (Tokushubukken Shori Iinkai) to entrust your company with the reconversion and temporary usage of the equipments in the annexed paper on the following conditions, on the details of which your consultation with the Osaka Financial Bureau (Osaka Zaimukyoku) is requested.

Chief, State Property Bureau,
Finance Ministry.

Conditions

1) The decision is only to entrust you temporarily with the usage of land, buildings, instruments and equipments, and the final disposition is reserved undecided.

Consequently, some other qualified personnel may be selected after thorough investigation with considerations paid to the results of your utilization of these assets hereafter.

2) The decision is only for the outline of the usage, on the details of which it should be decided as suited to the actual conditions of the place.

3) In view of the emergency conditions of pressing food supply or of the relief of war victims, no objection should be filed from your side if the land or buildings are used for agricultural purpose or for housing those war victims during winter if there is room to spare.

4) This decision may be cancelled or partly changed pending to circumstances on the part of the Allied Forces.

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 715013

ANNEX

NAMES	LOCATION	MATTERS USED & QUANTITY	%	PURPOSE	PERIOD OF USAGE	WITH OR WITHOUT PAYMENT	PERSONNEL ENTRUSTED
Ex-Uji Factory of the Tokyo Second Military Arsenal	Higashi-Uji-cho, Uji- Gun, Kyoto Prefecture	Part of Land, Buildings, & Equipments		Manufacture of Raw Materials			Nippon Nitrogenous Fertilizer Mfg. Co.,Ltd.

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 775 013

(23)

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ANSWERS

A) What would happen to the machines now at Uji Arsenal if the permit is granted?

When the permit is granted, we should like to behave ourselves according to the following items.

1. Under our plan, we intend to keep the machines intact at first, when we start running the factory. The reason is that those buildings which we expect to use at first are those where none of machines are existing, as is shown in the annexed chart. Concerning the machines with which ~~we~~ our company intend to equip the buildings and the sort of the products expected to be manufactured there, we request you to refer to the answer to the question D.

2. As regards the buildings where machines are existing, in our part, we have an ardent desire that you would decide the range of the machines to be taken away for reparation, in each building where they are equipped with. And after your decision, you would be cordially requested to separate them distinctly from the remaining machines by your or SCAP's checking each one of them.

3. We should be pleased if you would let us put marks on the machines clearly in order to prevent confusions which might be brought about by bringing here some of machines from our other factories.

4. We should willingly take the whole responsibility for the storage of the machines in the best condition and their repair, by paying the greatest care to them.

If all or some parts of machines would be decided to be taken away for reparation, they would be, upon your permission, gathered and stored in some of the warehouses of this arsenal, and some of them, namely large tanks, boilers, generators, etc., which are so difficult to remove that they would be necessary to be broken up or disjointed, would be kept on the spot.

But from the view-points of chemical and mechanical engineering, and from our ~~factory~~ forty years' long experience in this field of industry, we are definitely convinced that the continuous and moderate operation of the machines is really the best way to keep them in good condition, especially in acid using plant, such as the branch plant of this arsenal.

Encl 1 to 3rd Ind

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 775 013

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5. If some parts of the machines would be returned back to the Japanese Government, we should like to utilize all of them for our production.

B) Who would move the machines if they are moved? Where they would be moved to?

When the machines would be moved,

1. The Japanese Government, or our company by the trust from the Japanese Government, would be in charge of their removal by order of the Occupation Forces.

2. We would move them to the warehouses in this factory lots as is suggested in next answer.

C) What facilities are there available for the storage of these machines if moved?

Inside the factory lots, there are enough warehouses available for the storage of them. But at present, in some of them, some quantity of returned-back substances are stored, and they are being brought out rapidly, so in near future they will be empty. Then the machines in its neighbouring factory buildings will be brought easily in each warehouses, and kept carefully in good order and put in custody in the best condition. (see the annexed drawing).

D) What type of machines would be moved into the Arsenal buildings if any?

See the annexed Table I.

E) Who are the owners of these machines that might be moved in?

The owner is Nippon Nitrogenous Fertilizer Mfg. Co., Ltd.

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F) If there are several companies, are they to consolidate their interests or form in a new company?

We would run this factory by ourselves alone. As we are fully convinced that our experience and technique along these lines of business together with many talented engineers will promise us a complete success of this plan.

Last year it was decided by the Japanese Government to entrust our company with the reconversion and temporary usage of the Arsenal. (see annexed papers).

G) Check should be made financial structure. Give me a financial break-down, name of the stockholders, their present capacity and relation to the Japanese Government, if any. Whether or not they are former employees of the arsenals?

1. Capital

Authorized	¥ 450,000,000
Paid up	¥ 350,000,000

2. Ownership

Independent

3. Balance sheet and statement of profit and loss as in annex No.6.

4. Number of stockholders

30,036

5. Names of Leading Stockholders.

	Name	Number of shares	Percentage
a.	Nitchitsu Shoken Kabushiki Kaisha (Nitchitsu Bill Co., Ltd.)	686,539	8 %
b.	Senji Kinyu Kinko (War-time Bank)	261,156	3 %
c.	Fukoku Seimeihoken Sogokaisha (Fukoku Life Mutual Insurance Co.)	213,272	2 %

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d.	Chosen Kinyukumiai Rengokai (The Union of Banking Associations of Korea)	198,193	2 %
e.	Hiroshi Noguchi	181,000	2 %
f.	Noguchi Kenkyusho (Noguchi Lavoratory)	138,675	2 %
g.	Nippon Seimei Hoken Kabushiki Kaisha (Japan Life Insurance Co., Ltd.)	114,197	1 %
h.	Chiyoda Seimei Hoken Sogokaisha (Chiyoda Life Mutual Insurance Co.)	110,000	1 %
i.	Nippon Toshishintaku Kabushiki Kaisha (Japan Investment Trust Co., Ltd.)	101,360	1 %
j..	Yasuda Chochiku Ginko (Yasuda Savings Bank)	98,000	1 %
k.	Chosen Shogakukai Ijizaidan (The Foundation for the Society of Scholarships of Korea)	88,750	1 %
l.	Nisaburo Hiromi	87,600	1 %

6. All of the above mentioned persons have no relation to the Japanese Government, and neither are they the former employees of the Arsenal.

H) Do they intend to purchase the buildings and land, or Rent them, and the price the same?

We intend to purchase the buildings and land of the Arsenal. The purchasing price will be decided by the Japanese Government, so it is unknown to us now.

Remark: If some of the machines would be returned back to the Japanese Government, we intend to purchase them, too.

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 775 013

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INDEX OF
THE ANNEXED PAPERS

1. The chart (in which the vacant buildings are to be seen) (cf. Question A)

2. Table I (cf. Question E)

3. (I) The copy of the official document from the Finance Ministry (cf. Question F)

4. (II) The copy of the official document from the Home Ministry (cf. Question F)

5. The chart (in which the warehouses for the storage of the machines are to be seen) (cf. Question C)

6. Balance-sheet and statements of profit and loss

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TABLE I

The type of machines which would be moved in the Arsenal

1. Sulphaguanidine Plant.

Sulphaguanidine is an excellent remedy for intesteness disease. Under the present circumstances, it is afraid that typhoid fever, dysentry and some other diseases will without doubt rage in all parts of Japan in next summer. Such being the case, we would comply with eager wishes of the people for an effective preventive.

Above is the reason why we have come to intend to manufacture this kind of medicine, immediately after the permit is granted, and contribute to the precautionary measure of these diseases.

name	quantity
Extractor	2
Conveyer	1
Filter	5
Tank	8
Detillation Apparatus	2
Gear Pump	1
Crystallizer	18
Drier	4
Blower	4
Melting Furnace	4
Reaction Vessel	14
Suction Filter	4
Vacuum Flask	4
Filter Press	2
Wing Pump	3
Refrigerator	2
Electric Motor	26

2. Chiantol Plant (Dimathyldiphenylene Disulphide)

On account of the national uncleanness, skin-diseases are prevailing in Japan at present. This Chiantol is the excellent remedy for all sorts of skin-diseases caused by microbes, which is most scarece at present.

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name	quantity
Reaction Vessel	2
Washer	1
Gear Pump	1
Destillation Apparatus	1
Vacuum Pump	1
Electric Motor	4

3. Mercurochrome Plant (Sodium Salt of Dibroxymercurifluoresceine)
(2 % solution)

name	quantity
Flask	10
Buchner's Funnel	5
Suction Flask	10
Vacuum Pump	2
Water Bath	10
Electric Motor	2

4. Medicine for Malnutrition Plant.

The present shortage of food is causing the malnutrition of the nation. This medicine, made from glue, is extremely efficient for recovering malnutrition.

name	quantity
Extractor	1
Magnetic Separator	1
Pulverizer	1
Lixiviation Tank	1
Saponification Vessel	1
Filter	1

5. Saccharine Plant.

The shortage of sugar is causing us to ask for the saccharine, which is most effective, as sweet seasoning essential to our daily life. By manufacturing it, we are going to meet an increasing demand for it.

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name	quantity
Toluen Tank	2
Reaction Vessel	10
Ice-water Vessel	2
Centrifugal Machine	9
Refrigerator	2
Amidation Tank	2
Sedimentation Vessel	2
Oxidator	12
Filter Press	1
Destillation Apparatus	2
Crystallizer	2
Buchner's Funnel	3
Vacuum Pump	1
Gear Pump	2
Turbine Pump	2
Exhauster	2
Ice-machine	1

6. Chlorsulphonic Acid Plant.

This kind of acid is a raw material of drugs and all other chemicals.

name	quantity
Sulphur Burner	1
Preheater	2
Reaction Vessel	1
Gas Cooling Tower	1
Mist-separator	2
Absorbing Tower	3
Drier	2
Sulphuric Acid Tank	1
Mixer	1
Blower	2
Pump	3
Electric Motor	3
Drying Tower	2
Tank	2

7. Acetoacetic Ester Plant.

Acetoacetic ester id the raw material of drugs etc.

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name	quantity
Tank	1
Reaction Vessel	3
Destillation Apparatus	5
Agitator	4
Evaporator	3
Centrifugar	1
Filter	1
Vacuum Pump	2
Electric Motor	5

8. Oleum Plant.

Oleum is the raw material of drugs, chemicals, etc.

name	quantity
Sulphur Burner	1
Cooling Tower	3
Absorbing Tower	2
Air Filter	1
Air Drier	1
Filter	1
Oxidator	2
Tank	3
Pump	4
Blower	22

9. Kuhtin Plant.

Kuhtin is a kind of the anti-rheumatic drugs which contains salicylicacidmethylester and so on.

name	quantity
Sulphuric Acid Tank	1
Methylalcohole Tank	1
Methylation Vessel	2
Centrifugar	1
Drier	1
Pulverizer	1
Kneader	1

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10. Acetyl Cellulose Plant.

Acetyl Cellulose is a raw material for moulding compound, staple-fibre, lacquer, etc.

name	quantity
Bleaching Vessel	1
Hydro-Extractor	2
Drier	2
Pretreater	2
Acetylator	3
Ripening Vessel	18
Precipitator	4
Centrifugal Machine	2
Destillation Apparatus	2
Refrigerator	1

11. Vinylchloride Plant.

Vinylchloride is the raw material for fibre, lacquer, electric insulator, plastic, etc.

name	quantity
Sulphuric Acid Tank	1
Hydrochloric Acid Tank	1
Hydrochloric-acid-gas Generator	1
Acetylene Tank	1
Mixer	2
Preheater	2
Reaction Tower	2
Condenser	2
Destillation Apparatus	1
Purifier	1
Polimerization Vessel	1
Precipitator	1
Centrifugal Machine	1
Drier	1
Pulverizer	1
Disolution Tank	2

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12. Organic Rubber Chemicals Plant.

These chemicals are used for production of accelerators, and antioxidants.

name	quantity
Butylaldehyde Tank	1
Acetic Acid Tank	1
Condesator	2
Washer	1
Drier	5
Acetoaldehyde Tank	2
Filter	1
Refrigerator	1
Acetone Tank	1
Pulverizer	1
Centrifugal Machine	1

13. Seasoning (solid, liquid) Plant.

name	quantity
Pulverizer	4
Mixer	1
Decomposing Vessel	1
Neutralizer	1

Remarks: By the air-bombing during the war, though the greater parts of the buildings of Minamata Factory of our company were damaged and our operation was made somewhat difficult, yet most of the machineries were little damaged, because they were kept safe and sheltered from bombing in other areas from far apart from the factory lots. Therefore, by removing these machines rapidly into the Arsenal, we would begin our production as soon as possible.

The machines which we have already purchsed from Shionogi Pharmaceutical Mfg.Co.,Ltd., are completely ready to be moved in at any time.

(END)

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ANNEXING PAPERS (cf. Answer F)

(I) Copy of the official document from the State Property Bureau

Koku No. 166

8th December, 1945.

Subject: Concerning the temporary reconversion of lands and equipments.

To : President, Nippon Nitrogenous Fertilizer Mfg.Co.,Ltd.

As to the subject matter, it was decided through the consideration of the Central Committee for disposal of Properties returned back from the Allied Forces (Tokushubukken Shori Iinkai) to entrust your company with the reconversion and temporary utilization of the equipments in the annexed paper on the following conditions, on the details of which you are requested to consult with Osaka Financial Bureau (Osaka Zaimukyoku).

Chief, State Property Bureau,
Finance Ministry.

Conditions

1) The decision is only to entrust you temporarily with the usage of lands, buildings, instruments and equipments, and the final disposition is reserved undecided.

Consequently, some other qualified personnel may be selected after through investigation with considerations paid to the results of your utilization of these assets hereafter.

2) The decision is only for these outline of the usage, on the details of which it should be decided as suited to the actual conditions of the place.

3) In view of the emergency conditions of pressing food supply or of the relief of war victims, no objection should be taken against us from your side if the land or buildings would be used

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for agricultural purpose or for housing of those war victims during winter if there is room to spare.

4) This decision may be cancelled or partly changed pending to circumstances on the part of the Allied Forces.

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 715 015

NIPPON CHISSO HIRYO K. K.
(NIPPON NITROGENOUS FERTILIZER MFG. CO., LTD.)

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ANNEX

Name	Location	Matters used & Quantity	Purpose	Period of Usage	With or Without Payment	Personnel Entrusted
Uji Factory of the Second Tokyo Military Arsenal	Higashi-Uji-Cho, Kyoto Prefecture.	Part of Land, Buildings & Equipments.	Manufacture of Raw Materials			Nippon Nitrogenous Fertilizer Mfg. Co., Ltd.

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 775 013

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(II) Copy of the official document from the Home Ministry.

Naimusho-Hatsu-Cho No.188 25th Nov., 1945.

Subject: Directions concerning the decision of the disposal of Uji Factory of the Tokyo Second Military Arsenal, made by the Japanese Government.

To : Governor of Kyoto Prefecture.

As it was decided by the Central Committee for the Disposal of Properties returned back from the Allied Forces (Tokushubukken Shori Iinkai) to lease the following arsenal situated in your prefecture, you are cordially requested to transfer it to the following personnel soon after it is returned back from the Allied Forces.

Name	Location	Personnel to be transferred to
Uji Factory of the Tokyo Second Military Arsenal	Higashi Uji-cho, Uji-gun, Kyoto Prefecture	Nippon Nitrogenous Fertilizer Mfg. Co., Ltd.

Chief, The Investigation Office,
The Home Ministry.

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 775 013

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BALANCE SHEET

(as of 31st Mar., 1946.)
(by thousand yen)

(Debtor)

Assets

Capital Unpaid	100,000
Power Generation & Transmission Equipments	45,505
Factory Equipments	216,056
Mining Assets	7,827
Implements & Buildings	2,988
Temporary Account for Business in the South	38,118
Securities	507,422
Loans	196,029
Inventories	81,543
Finished Goods	28,293
Sales Credit	23,501
Temporary Payment	62,634
Money Receivable	16,515
Deposit of Retiring Allowance Reserve	1,761
Cash & Deposit	29,886
Total	1,358,078

(Creditor)

Capital & Liabilities

Capital	450,000
Legal Reserve	28,730
Special Reserve	42,800
Enlargement Reserve	18,200
Fund of Retiring Allowance Reserve	5,195
Retiring Allowance Reserve	1,761
Debentures	350,525
Loans	384,901
Bills Payable	490
Money Entrusted	18,286
Temporary Receipt	10,491
Money Payable	23,857
Dividends Payable	236
Carried Forward Profit	1,881
Current Term Profit	20,725
Total	1,358,078

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STATEMENTS OF PROFIT AND LOSS

from 1st Oct., 1944.
to 31st Mar., 1945.

(by thousand yen)

(Income)

Sales Income	96,101
Electricity Fee Received	667
Securities Income	11,201
Interests Received	4,777
Sundry Income	3,484
Total	116,230

(Expense)

Cost of Products	64,930
Business Expenditure	12,565
Interest Paid	13,510
Expense of Depreciation	4,500
Net Profit	20,725
Total	116,230

Remarks: B/S and P/L indicated above, though as at the end of March, 1945, are as of the latest date, because our company has never settled the account since the above date complying with the suggestion of the Japanese Government.

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 775 013

23

Basic: Petition for Lands and Buildings of the ex "Uji Factory of the Second Tokyo Military Arsenal".

3rd Ind.

31st Mil Gov't Hq & Hq Co., APO 660 (Kyoto Office) 1 Apr 46.

To: 94th Hq & Hq Det Mil Gov't Gp, APO 660

1. The basic communication and Annex 1 are resubmitted for your consideration for approval.

2. You will find answers to the questions raised in 2nd Ind, your headquarters, given in Annex 1 of basic.

JAMES W. COLEMAN
Major, Infantry,
Commanding.

2 Incls:
1. Annex 1 - 5 copies
2. Charts - 4

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 775 013

Basic: Petition for the utilization of Lands and Buildings of the ex "Uji Factory of the Second Tokyo Military Arsenal".

1st Ind.

31st Mil Gov't Hq & Hq Co., APO 660, (Kyoto Office) 25 Feb 46.

To: Commanding Officer, 107th Mil Gov't Hq & Hq Co., APO 660.

1. The establishment covered in the basic communication is listed among the Arsenal on the list contained in Operational Directive No. 5, Hq Eighth Army, dated 18 January 1946.

2. It is the understanding of this office that such applications are to be forwarded through channels for action by SCAP, therefore, is forwarding the basic for such action as your headquarters may desire to take.

Incls: 5 copies

JAMES W. COLEMAN
Major, Infantry,
Commanding.

2nd Ind

Hq, 107th Mil Govt Hq & Hq Co, APO 660 (Osaka, Japan), 1 Mar 46

TO: CO, 31st Mil Govt Hq & Hq Co, APO 660 (Kobe)

1. Reference subject matter. As this matter has been rejected previously and as you are now in receipt of the new directive of operation and instructions on matters pertaining to this nature, therefore before this Headquarters can forward said application to higher authority, it is recommended that a thorough investigation of this case be made by your Headquarters and the following matters investigated:

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 775 013

Hq, 107th Mil Govt Hq & Hq Co, APO 660 (Osaka, Japan),
1 Mar 46 2nd Ind

TO: CO, 31st Mil Govt Hq & Hq Co, APO 660 (Kobe)

a. what would happen to the machinery now at Uji Arsenal?

b. who would move the machines if they are to be moved and where would they be moved to?

c. what facilities are there available for the storage of these machines?

d. what type of machinery would be moved into the Arsenal buildings?

e. who are the owners of these machines?

f. if they are several companies, are they to consolidate their interests and form a new company?

g. check should be made of the financial structure of the company; who the stockholders are, their present capacity and relationship to the government, and whether or not they were former employees of the Arsenal.

h. do they intend to purchase the buildings and land or rent them, and price of same.

By order of Lieutenant Colonel ATWOOD:

1 Incl
n/c

BEN LOCKE
Maj, AC
Resources & Ind.Officer

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 775 013

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SLS No.5

Tokyo,
March 27, 1946.

Major Colemann,
The 31st Military Government Company.

Dear Sir,

In compliance with your request, we have the honour to submit to you our answer to your question on Uji Arsenal, which you asked our company on March 15, 1946, as enclosed herewith.

As to the further details of the items therein, A,B, and others, we wish you would kindly take steps, if circumstances permit, to attend at the said factory and talk over the above matters with the members of our company there and give them your proper instructions.

Yours truly,

Muneki Shiraishi

Muneki Shiraishi,
Managing Director,
Nippon Chisso Hiryo K.K.

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 775 013

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ANNEX 1

TOKYO OFFICE:
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ANSWERS

A) What would happen to the machines now at Uji Arsenal if the permit is granted ?

When the permit is granted, we should like to behave ourselves according to the following items.

1. Under our plan, we intend to keep the machines intact at first, when we start running the factory. The reason is that those buildings which we expect to use at first are those where none of machines are existing, as is shown in the annexed chart. Concerning the machines with which our company intend to equip the buildings and the sort of the products expected to be manufactured there, we request you to refer to the answer to the question D.

2. As regards the buildings where machines are existing, in our part, we have an ardent desire that you would decide the range of the machines to be taken away for reparation, in each building where they are equipped with. And after your decision, you would be cordially requested to separate them distinctly from the remaining machines by your or SCAP's checking each one of them.

3. We should be pleased if you would let us put marks on the machines clearly in order to prevent confusions which might be brought about by bringing here some of machines from our other factories.

4. We should willingly take the whole resposibility for the storage of the machines in the best condition and their repair, by paying the greatest care to them.

If all or some parts of machines would be decided to be taken away for reparation, they would be, upon your permission, gathered and stored in some of the warehouses of this arsenal, and some of them, namely large tanks, boilers, generators, etc., which are so difficult to remove that they would be necessary to be broken up or disjointed, would be kept on the spot.

But from the view-points of chemical and mechanical engineering, and from our forty years' long experience in this field of industry, we are definitely convinced that the continuous and moderate operation of the machines is really the best way to keep them in good condition, especially in acid using plant, such as the branch plant of this arsenal.

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5. If some parts of the machines would be returned back to the Japanese Government, we should like to utilize all of them for our production.

B) Who would move the machines if they are moved? Where they would be moved to?

When the machines would be moved,

1. The Japanese Government, or our company by the trust from the Japanese Government, would be in charge of their removal by order of the Occupation Forces.

2. We would move them to the warehouses in this factory lots as is suggested in next answer.

C) What facilities are there available for the storage of these machines if moved?

Inside the factory lots, there are enough warehouses available for the storage of them. But at present, in some of them, some quantity of returned-back substances are stored, and they are being brought out rapidly, so in near future they will be empty. Then the machines in its neighbouring factory buildings will be brought easily in each warehouses, and kept carefully in good order and put in custody in the best condition. (see the annexed drawing).

D) What type of machines would be moved into the Arsenal buildings if any?

See the annexed Table I.

E) Who are the owners of these machines that might be moved in?

The owner is Nippon Nitrogenous Fertilizer Mfg. Co.,Ltd.

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F) If there are several companies, are they to consolidate their interests or form in a new company?

We would run this factory by ouselves alone, As we are fully convinced that our experience and technique along these lines of business together with many talented engineers will promise us a complete success of this plan.

Last year it was decided by the Japanese Government to entrust our company with the reconversion and temporary usage of the Arsenal. (see annexed papers).

G) Check should be made financial structure. Give me a financial break-down, name of the stockholders, their present capacity and relation to the Japanese Government, if any. Whether or not they are former employees of the arsenals?

1. Capital

Authorized	¥ 450,000,000
Paid up	¥ 350,000,000

2. Ownership

Independent

3. Balance sheet and statement of profit and loss as in annex No.6.

4. Number of stockholders

30,036

5. Names of Leading Stockholders.

	Name	Number of shares	Percentage
a.	Nitchitsu Shoken Kabushiki Kaisha (Nitchitsu Bill Co.,Ltd.)	686,539	8 %
b.	Senji Kinyu Kinko (War-time Bank)	261,156	3 %
c.	Fukoku Seimeihoken Sogokaisha (Fukoku Life Mutual Insurance Co.,)	213,272	2 %
d.	Chosen Kinyukumiai Rengokai (The Union of Banking Associations of Korea)	198,193	2 %

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e.	Hiroshi Noguchi	181,000	2 %
f.	Noguchi Kenkyusho (Noguchi Lavoratory)	138,675	2 %
g.	Nippon Seimei Hoken Kabushiki Kaisha (Japan Life Insurance Co., Ltd.)	114,197	1 %
h.	Chiyoda Seimei Hoken Sogokaisha (Chiyoda Life Mutual Insurance Co.)	110,000	1 %
i.	Nippon Toshishitaku Kabushiki Kaisha (Japan Investment Trust Co., Ltd.)	101,360	1 %
j.	Yasuda Chochiku Ginko (Yasuda Savings Bank)	98,000	1 %
k.	Chosen Shogakukai Ijizaidan (The Foundation for the Society of Scholarships of Korea)	88,750	1 %
l.	Nisaburo Hiromi	87,600	1 %

6. All of the above mentioned persons have no relations to the Japanese Government, and neither are they the former employees of the Arsenal.

H) Do they intend to purchase the buildings and the land, or rent them, and the price the same?

We intend to purchase the buildings and land of the Arsenal. The purchasing price will be decided by the Japanese Government, so it is unknown to us now,

Remark: If some of the machines would be returned back to the Japanese Government, we intend to purchase them, too.

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 775 013

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INDEX OF THE ANNEXED PAPERS

1. The chart (in which the vacant buildings are to be seen) (cf. Question A)
2. Table I (cf. Question E)
3. (I) The copy of the official document from the Finance Ministry (cf. Question F)
4. (II) The copy of the official document from the Home Ministry (cf. Question F)
5. The chart (in which the warehouses for the storage of the machines are to be seen) (cf. Question C)
6. Balance-sheet and statements of profit and loss

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TABLE I

The type of machines which would be moved in the Arsenal

1. Sulphaguanidine Plant.

Sulphaguanidine is an excellent remedy for intesteness disease. Under the present circumstances, it is afraid that typhoid fever, dysentery and some other diseases will without doubt rage in all parts of Japan in next summer. Such being the case, we would comply with eager wishes of the people for an effective preventive.

Above is the reason why we have come to intend to manufacture this kind of medicine, immediately after the permit is granted, and contribute to the precautionary measure of these diseases.

name	quantity
Extractor	2
Conveyer	1
Filter	5
Tank	8
Detillation Apparatus	2
Gear Pump	1
Crystallizer	18
Drier	4
Blower	4
Melting Furnace	4
Reaction Vessel	14
Suction Filter	4
Vacuum Flask	4
Filter Press	2
Wing Pump	3
Refrigenator	2
Electric Motor	26

2. Chiantol Plant (Dimathyldiphenylene Disulphide)

On account of the national uncleanness, skin-diseases are prevailing in Japan at present. This Chiantol is the excellent remedy for all sorts of skin-diseases caused by microbes, which is most scarece at present.

name	quantity

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Reaction Vessel	2
Washer	1
Gear Pump	1
Destillation Apparatus	1
Vacuum Pump	1
Electric Motor	4

3. Mercurochrome Plant (Sodium Salt of Dibroxymercurifluoresceine)
(2 % solution)

name	quantity
Flask	10
Buchner's Funnel	5
Suction Flask	10
Vacuum Pump	2
Water Bath	10
Electric Motor	2

4. Medicine for Malnutrition Plant.

The present shartage of food is causing the malnutrition of the nation. This medicine, made from glue, is etremely efficient for recovering malnutrition.

name	quantity
Extractor	1
Magnetic Separator	1
Pulverizer	1
Lixiviation Tank	1
Saponification Vessel	1
Filter	1

5, Saccharine Plant.

The shortage of sugar is causing us to ask for the saccharine, which is most effective, as sweet seasoning essential to our daily life. By manufacturing it , we are going to meet an increasing demand for it.

name	quantity
Toluen Tank	2

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Reaction Vessel	10
Ice-water Vessel	2
Centrifugal Machine	9
Refrigerator	2
Amidation Tank	2
Sedimentation Tank Vessel	2
Oxidator	12
Filter Press	1
Destillation Apparatus	2
Crystallizer	2
Buchner's Funnel	3
Vacuum Pump	1
Gear Pump	2
Turbine Pump	2
Exhauster	2
Ice-machine	1

6. Chlorsulphonic Acid Plant.

This kind of acid is a raw material of drugs and all other chemicals.

name	quantity
Sulphur Burner	1
Preheater	2
Reaction Vessel	1
Gas Cooling Tower	1
Mist-separator	2
Absorbing Tower	3
Drier	2
Sulphuric Acid Tank	1
Mixer	1
Blower	2
Pump	5
Electric Motor	3
Drying Tower	2
Tank	2

7. Acetoacetic Ester Plant.

Acetoacetic ester is the raw material of drugs etc.

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name	quantity
Tank	1
Reaction Vessel	3
Destillation Apparatus	5
Agitator	4
Evaporator	3
Centrifugar	1
Filter	1
Vacuum Pump	2
Electric Motor	5

8. Oleum Plant.

Oleum is the raw material of drugs, chemicals, etc.

name	quantity
Sulphur Burner	1
Cooling Tower	3
Absorbing Tower	2
Air Filter	1
Air Dryer	1
Filter	1
Oxidator	2
Tank	3
Pump	4
Blower	2

9. Kuhtin Plant.

Kuhtin is a kind of the anti-rheumatic drugs which contains salicylicacidmethylester and so on.

name	quantity
Sulphuric Acid Tank	1
Methylalcohole Tank	1
Methylation Vessel	2
Centrifuger	1
Dryer	1
Pulverizer	1
Kneader	1

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10. Acetyl Cellulose Plant.

Acetyl Cellulose is a raw material for moulding compound, staple-fibre, lacquer, etc.

name	quantity
Bleaching Vessel	1
Hydro-Extractor	2
Drier	2
Pretreater	2
Acetylator	3
Ripening Vessel	18
Precipitator	4
Centrifugal Machine	2
Destillation Apparatus	2
Refrigerator	1

11. Vinylchloride Plant.

Vinylchloride is the raw material for fibre, lacquer, electric insulator, plastics, etc.

name	quantity
Sulphuric Acid Tank	1
Hydrochloric Acid Tank	1
Hydrochloric-acid-gas Generator	1
Acetylene Tank	1
Mixer	2
Preheater	2
Reaction Tower	2
Condenser	2
Destillation Apparatus	1
Purifier	1
Polymerization Vessel	1
Precipitator	1
Centrifugal Machine	1
Drier	1
Pulverizer	1
Disolution Tank	2

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 775 013

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12. Organic Rubber Chemicals Plant.

These Chemicals are used for production of accelerators, and antioxidants.

name	quantity
Butylaldehyde Tank	1
Acetic Acid Tank	1
Condesator	2
Washer	1
Drier	5
Acetoaldehyde Tank	2
Filter	1
Regrigenrator	1
Acetone Tank	1
Pulverizer	1
Centrifugal Machine	1

13. Seasoning (solid, liquid) Plant.

name	quantity
Pulverizer	4
Mixer	1
Decomposihg Vessel	1
Neutralizer	1

Remarks: By the air-bombing during the war, though the greater parts of the buildings of Minamata Factory of our company were damaged and our operation was made somewhat difficult, yet most of the machineries were little damaged, because they were kept safe and sheltered from bombing in other areas far apart from the factory lots. Therefore, by removing these machines rapidly into the Arsenal, we would begin our production as soon as possible.

The machines which we have already purchased from Shionogi Pharmaceutical Mfg.Co.,Ltd., are completely ready to be moved in at any time.

(END)

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 775 013

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ANNEXING PAPERS (cf. Answers F)

(I) Copy of the official document from the State Property Bureau

Koku No. 166

8th December, 1945.

Subject: Concerning the temporary reconversion of lands and equipments.

To : President, Nippon Nitrogenous Fertilizer Mfg.Co.,Ltd.

As to the subject matter, it was decided through the consideration of the Central Committee for disposal of Properties returned back from the Allied Forces (Tokushubukken Shori Iinkai) to entrust your company with the reconversion and temporary utilization of the equipments in the annexed paper on the following conditions, on the details of which you are requested to consult with Osaka Financial Bureau (Osaka Zaimukyoku).

Chief, State Property Bureau,
Finance Ministry.

Conditions

1) The decision is only to entrust you temporarily with the usage of lands, buildings, instruments and equipments, and the final disposition is reserved undecided.

Consequently, some other qualified personnel may be selected after through investigation with considerations paid to the results of your utilization of these assts hereafter.

2) The decision is only for these outline of the usage, on the details of which it should be decided as suited to the actual conditions of the place.

3) In view of the emergency conditions of pressing food supply or of the relief of war victims, no objection should be taken against us from your side if the land or buildings would be used

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 775 013

NIPPON CHISSO HIRYO K. K.

(NIPPON NITROGENOUS FERTILIZER MFG. CO., LTD.)

HEAD OFFICE:
1 Soze-cho, Kita-ku, Osaka.
Tel. Tosabori 3250

TOKYO OFFICE:
3, 1 Uchisaiwai-cho 2-chome,
Kojimachi-ku, Tokyo.
Tel. Ginza (57) 8141

for agricultural purpose or for housing of those war victims during winter if there is room to spare.

4) This decision may be cancelled or partly changed pending to circumstances on the part of the Allied Forces.

ANNEX

Name	Location	Matters used & Quantity	Purpose	Period of Usage	With or Without Payment	Personnel Entrusted
Uji Factory of the Second Tokyo Military Arsenal.	Higashi-Uji-Cho, Uji-Gun, Kyoto Prefecture.	Part of Land, Buildings & Equipments.	Manufacture of Raw Materials			Nippon Nitrogenous Fertilizer Mfg.Co., Ltd.

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 715013

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 775 013

NIPPON CHISSO HIRYO K. K.

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Kojimachi-ku, Tokyo.
Tel. Ginza (57) 8141

(II) Copy of the official document from the Home Ministry.

Naimusho-Hatsu-Cho No.188 25th Nov., 1945.

Subject: Directions concerning the decision of the dipposal of Uji Factory of the Tokyo Second Military Arsenal, made by the Japanese Government.

To : Governor of Kyoto Prefecture.

As it was decided by the Central Committee for the Disposal of Properties returned back from the Allied Forces (Tokushubukken Shori Iinkai) to lease the following arsenal situated in your prefecture, you are cordially requested to transfer it to the following persomnel soon after it is returned back from the Allied Forces.

Name	Location	Personnel to be transferred to
Uji Factory of the Tokyo Second Military Arsenal	Higashi Uji-cho, Uji-gun, Kyoto Prefecture	Nippon Nitrogenous Fertilizer Mfg.Co., Ltd.

Chief, The Investigation Office
The Home Ministry.

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 775 013

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Tel. Ginza (57) 8141

BALANCE SHEET

(as of 31st Mar., 1945)
(by thousand yem)

(Debtor)

Assets

Capital Unpaid	100,000
Power Generation & Transmission Equipments	45,505
Factory Equipments	216,056
Mining Assets	7,827
Implements & Buildings	2,988
Temporary Account for Business in the South	38,118
Securities	507,422
Loans	196,029
Inventories	81,543
Finished Goods	28,293
Sales Credit	23,501
Temporary Payment	62,634
Money Receivable	16,515
Deposit of Retiring Allowance Reserve	1,761
Cash & Deposit	29,886
Total	1,358,078

(Creditor)

Capital & Liabilities

Capital	450,000
Legal Reserve	28,730
Special Reserve	42,800
Enlargement Reserve	18,200
Fund of Retiring Allowance Reserve	5,195
Retiring Allowance Reserve	1,761
Debentures	350,525
Loans	384,901
Bills Payable	490
Money entrusted	18,286
Temporary Receipt	10,491
Money Payable	23,857
Dividends Payable	236
Carried Forward Profit	1,881
Current Term Profit	20,725
Total	1,358,078

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 775 013

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STATEMENTS OF PROFIT AND LOSS

from 1st Oct., 1944.
to 31st Mar., 1945

(by thousand yen)

(Income)

Sales Income	96,101
Electricity Fee Received	667
Securities Income	11,201
Interests Received	4,777
Sundry Income	3,484
Total	116,230

(Expense)

Cost of Products	64,930
Business Expenditure	12,565
Interest Paid	13,510
Expense of Depreciation	4,500
Net Profit	20,725
Total	116,230

Remarks: B/S and P/L indicated above, though as at the end of March, 1945, are as of the latest date, because our company has never settled the account since the above date complying with the suggestion of the Japanese Government.

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 775 013

Basic: Petition for the utilization of Lands and Buildings of the ex "Uji Factory of the Second Tokyo Military Arsenal".

1st Ind.

31st Mil Gov't Hq & Hq Co., APO 660, (Kyoto Office) 25 Feb 46.

To: Commanding Officer, 107th Mil Gov't Hq & Hq Co., APO 660.

1. The establishment covered in the basic communication is listed among the Arsenal on the list contained in Operational Directive No. 5, Hq Eighth Army, dated 18 January 1946.

2. It is the understanding of this office that such applications are to be forwarded through channels for action by SCAP, therefore, is forwarding the basic for such action as your headquarters may desire to take.

JAMES W. COLEMAN
Major, Infantry,
Commanding.

Incls: 5 copies

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 775 013

NIPPON NITROGENOUS FERTILIZER CO.,LTD.

NUC - 4

18 Feb., 1946

Subject: Petition for the utiligation of the lands and buildings of the ex - "Uji Factory of the Second Tokyo Military Arsenal".

To: Commanding General, I Corps.

Dear sir,

We applied to the Commanding General, I Corps for the permission of the reconversion of the ex - "Uji Factory of the Second Tokyo Military Arsenal into the factory of manufacturing the essential peace-time consumers' commodities, but this application of ours would be rejected, because the machineries and equipments of this factory are decided to be taken away for reparation.

But it is our sincere hope that we should utilize only the remaining factory lots and buildings, and beside them bring here the surplus machineries and equipments of our other factories, thereby making efforts to produce the essential peace-time chemicals which are demanded urgently at present, and to make the best use of our preeminent and precious technical skill and experience in the chemical industry in Japan.

While, on the other hand, with the end of the War, we are to lose the main factories in Korea, which have more than 80 per cent of our whole productive power. Such being the case, we are forming the above explained plans to re-employ employees in the factories in Korea and to secure their lives. Therefore, it is a vital problem to us whether the utilization of this factory would be permitted or not.

The above is the reason why we should submit this petition for your kind consideration.

As for the names of manufactured goods and the plans of the utilization of lands and buildings, the Annexing papers should be referred, and as this is planed supposing the case the machineries of the factory will be taken away for reparation, the plan in the application which we submitted to you is slightly modified.

We remain yours faithfully,

Muneki Shiraishi

Muneki Shiraishi
Managing Director of Nippon
Nitrogenous Fertilizer Co.,Ltd.

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 775 013

Annex 1

The plan of utilization of buildings of the "Uji" factory after the removal of machinery:

In case the machinery willbe taken away, we should change our former plan and begin manufacturing by making three periods.

I The plan of the first period:

During this period, we shall start manufacturing according to the following items.

1) Goods which are most urgently demanded by essential consumers.
2) Goods which are most easily set about manufacturing.
3) Goods which would be manufactured by bringing and utilizing the excess machinery and equipments from our other factories suchas Minamata factory, Nobeoka factory, Kanzaki medical plant and so on.

The commodities manufactured according to the above items are as follows.

Name of commodities	Annual quantity of production	Notes
Saccharine	240 tons	Chemically seet foodstuff.
Chlorsulphonic acid	2,500 tons	raw material for saccharine and other medicines.
Oleum sulphonic acid (small scale for own use)	3,600 tons	ibid.
Seasoning (solid)	25 tons	
Acetoacetic ester	22 tons	raw material for vitamin and other medicines.
Medicine for malnutritions	120 tons	name is undecided,but it is namufactured in our laboratory.
Merculi chrom	6 tons	disinfectant.
Sulphaguanidine	24 tons	Medicine for an intestinal disease.
Chiantol	36 tons	Medicine for a skin disease.
Kuhtin	100 tons	ibid
Seasoning (liquid)	50 tons	
Acetyl staple fibre & silk) Vinyl chlorid fibre	60 tons	

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Name of commodities	Annual quantity of production	Notes
Acetyl cellulose molding	60 tons	
Rubber chemicals	120 tons	rubber improving material.

II The plan of the second period.

Name of Commodities	Annual quantity of production	Notes
Synthetic corundum (jewel)	12 million carat	For export
Celluloid	3,600 tons	For articles of daily use
Soap	360 tons	
Arc-carbon	720 tons	electrode
Carbon brush	21,160,000 C.C.	
Plastics	1,200 tons	For articles of daily use
Polyvinyl alcohol derivertives	200 tons	For articles of daily use and safety glass.
Plasticizer	120 tons	Additional materials for plastics.
Salicirlc acid	240 tons	raw material for medicines and an antifebrile.
Ether(Small scale for own use)	240 tons	raw material for medicines and solvent.
Aspirin	240 tons	an antifebrile
Salol	24 tons	An anodyne and antifebrile.
Antipirin	36 tons	ibid
Sulpirin	18 tons	ibid
Phebrin	90 tons	ibid
Sulphamin	60 tons	Medicine for suppurative diseases.
Oxypropionic acid	36 tons	Medicine
Antachizin	50 tons	Medicine
Acetic acid monochlorid	36 tons	raw material for medicine
Agricultural chemical	240 tons	Medicine for agriculture
Lime nitrogene	1,200 tons	Fertilizer

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III The plan of the third period.

Name of commodities	Annual quantity of production	Notes
Brom acethl urea	undecided	Medicine
Caffeine	ibid	Stimulating material
Hormone	ibid	Medicine
Vitamin	ibid	ibid
Ammonia water	ibid	ibid
Caustic soda	ibid	ibid
Other medicines	ibid	ibid
Tar intermediates	ibid	material for dystuff
Dystuff	ibid	dystuff
Artificial leather	ibid	erzats of leather

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 775 013

Annex 2

The plan of utilizing buildings and of transferring machinery from our other factories.

(Annexing map should be referred.)

I The plan of the first period.

Name of commodities	Name of buildings to be utilized	Number	Name of factories from where the machinery shall be transferred
	(collateral)		
Saccharine	(collateral factory) Hexogen nitration plant	(1)	Shiono, Yodogawa
Cholorsulphonic acid	(2nd factory) Nitric acid & separation plant	(2)	J.N.F., Minamata
Oleum sulphonic acid (small scale for own use)	(c.f.) Oleum sulphonic acid plant	(3)	ibid
Seasoning solid	(c.f.) Picric acid plant	(4)	Shiono, Kanzakigawa
Acetoacetic ester	(c.f.) smokeless powder plant	(5)	J.N.F., Minamata
Medicine for malnutrition	(c.f.) T.N.T. plant	(4)	Shiono, Kuise
Merculi chrom	(c.f.) T.N.T. plant	(4)	Shiono, Yodogawa
Chiantol	(c.f.) T.N.T. plant	(4)	Shiono, Yodogawa
Sulphaguanidin	(c.f.) T.N.T. purifying plant	(6)	Shiono, Kanzakigawa
Kuhtin	(c.f.) T.N.T. plant	(6)	Shiono, Kuise
Seasoning(liquid)	(c.f.) T.N.T. plant	(6)	Shiono, Kuise
Acetyl staple fibre & silk / Vinyl chlorid fibre	(1 factory) smokeless powder plant	(7)	J.N.F., Minamata

II The plan of the second period

Synthetic corundumm	(2F) Black powder zone	(10)	J.N.F. Amagasaki
Celluloid for export	(1F) Smokeless powder plant	(11)	J.N.F. Nobeoka

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 775 013

Name of commodities	Name of buildings to be utilized	Number	Name of factories from where the machinery shall be transferred
Soap	(1 F) ibid		
Arc carbon	(2 F) West end	(13)	J.N.F. Minamata
Carbon brush	(2 F) ibid	(13)	ibid
Polyvinyl alcohol derivatives	(1 F) Esther plant	(15)	ibid
Plasticer	(c.f.) Hexogen purify plant	(16)	J.N.F. Nobeoka
Saliciric acid	(c.f.) Picric acid plant	(17)	Shiono Kuise
Ether (small scale for own use)	(1 F) Ether plant	(18)	J.N.F. Minamata
Aspirin	(c.f.) Picric acid plant	(4)	Shiono, Kuise
Salol	(c.f.) ibid	(4)	ibid
Antipirin	(c.f.) Trinitrophenol	(17)	Shiono, Kanzakigawa
Sulpirin	(c.f.) Trinitrophenetol plant	(17)	Shiono, Kuise
Phebrin	(c.f.) ibid	(17)	ibid
Sulphamin	(c.f.) ibid	(17)	ibid
Oxypropionic acid	(c.f.) ibid	(17)	Shiono, Asaka
Antachizin	(c.f.) ibid	(17)	Shiono, Yodogawa
Acetic acid mons chlorid	(c.f.) ibid	(17)	J.N.F., Minamata
Agricultural chemicals	(c.f.) ibid	(17)	J.N.F., Nobeoka
Lime nitrogene	(2 F) South part	(22)	Newly made
III The plan of the third period			
Brom acetyl urea	(c.f.) South east part	(19)	Newly made
Caffrine	(c.f.) South east part	(19)	ibid
Hormone	(c.f.) ibid	(19)	ibid
Vitamine	(c.f.) ibid	(19)	ibid
Ammonia water	(c.f.) south east part	(19)	Newly made
Caustic soda	(c.f.) ibid	(19)	ibid
Other medicines	(c.f.) ibid	(19)	ibid
Tar Intermediates	(c.f.) ibid	(19)	ibid
Dystuff	(c.f.) middle part	(20)	ibid
Artificial leather	(2 F) Coal mine explosive plant	(21)	J.N.F. Minamata

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KYOTO-FU-CHO

To: Major James W. Coleman,
Commanding Officer,
31st M. G. Kyoto.

Subject: Permission for the utilization of vacant lot in Uji-plant

Honourable Commander, 28th Mar 1946

I beg you to acknowledge an application attached rendered by Mayor of Uji-Cho, taking an advantage of our present status of food condition, it should be unanimousely emergent that sooner the above vacant lot be reconverted for the increment of food production.

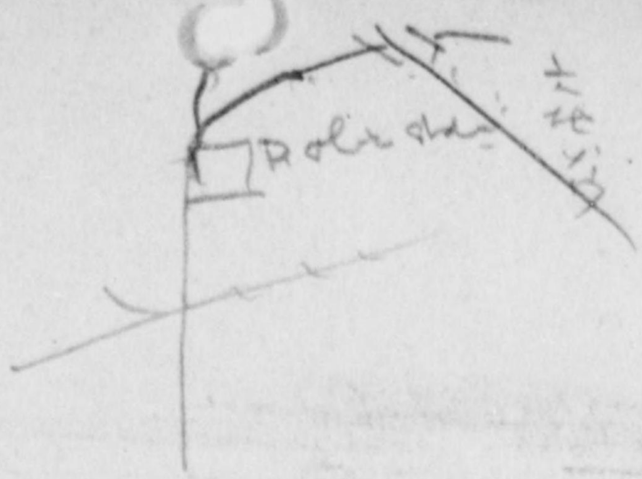
I hope you would permit to utilize the vacant lot for Uji-Cho under the condition of being the above vacant lot must be released to preferential factory permitted to use the plant by your forces.

Your favourable reply in return be waited acknowledging Mayor's petition.

Your obedient servant

Masao Morimoto
for Atsushi Kimura
Governor, Kyoto-Fu

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 775 013



Kyoto, March 2nd, 1946.

Subject: Temporal utilization of the land in Uji Arsenal for Agricultural purposes.

To the Governor of Kyoto Prefecture.

As there are more than 2000 unemployed people in the town, including discharged of the said arsenal, seeking their daily livings to whom the relief is urgently needed.

To meet with the present situation at this very time, considering from the reconversion of Uji factory of Tokyo 2nd Arsenal may take for some time to come to the final decision, we wish to utilize temporally the vacant land of the said factory for producing food stuffs such as rice, wheat, potatoes, grains of all kinds and vegetables; raising chickens and fowls and feeding cattles etc.

We, herein, submit the application for your permission.

P.S. As the seeding season is near at hand, we wish your speedy consideration for permiting us the above application.

Kujiro Yamada

Kujiro Yamada,
Mayer, Higashi Uji-Cho,
Uji County, Kyoto Prefecture.

General area, 356,893 Tsub.
(one Tsubo = 6 ft. sq.)

Arable lands is estimated 70,000 Tsubo
(One Tsubo = 6 ft. sq.)

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A. Production equipment
Main factory
Collateral factory

B. Auxiliary equipment
Main factory
Collateral factory

C. Testing equipment

D Apparatus & Machinery in the stock
Main factory
Collateral factory
Outside of the factory

大阪財務局
21.5.27
京都管財支所

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 715 013

①

January 10th, 1946

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factory
the factory

Signature Major General K. Iida
Iji Powder Plant

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 715 013

Uji Powder Factory East-Uji-Machi, Uji-gun, Kyoto

Name of Machine	Type of Machinary	Capacity of Machinaries	Year of Manufacture	Made in Japan
Nitrocellose Purification set				
Beater		500 kg charge	1907	
"	White type	250 kg charge	"	
Motor		75 H.P.	1916	3
"		50 H.P.	1938	1
Centrifugel Pump	motor driver 50. H.P C.I.		1942	1
Beater	White type	250 kg charge	1907	4
Washing Machine	M.S.	500 "	"	
Vacuum filter	Oliver type		1936	
" pump	motor driver 20 H.P Nash type		"	2
Water Seperation	Centrifugel	100 kg charge	1938(3) 1907(7)	10
Motor	3 phase	50 H.P	1906	
"	"	60 H.P	1908	1
Screwing Machine	Cylinder type		1942	2
"	wet machine "		"	1
Vacuum filter	Oliver "		1945	1
Tank	M.S.	3,000 l	1942	5
Motor		10 K.W.	"	1
"		20 "	"	1
Feed Pump	Washington type ~~Washington type~~		1937	
Centrifugel Pump	motor driver C.I. 5 H.P		1938	1
Mixer	Concentration 15 H.P.	500 charge	1941	2
Agitator	3 H.P. motor		1938	1

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(Main)

-machi, Uji-gun, Kyoto Major General Iida

t ry	Capacity of Machinaries	Year of Manufacture	Made in Japan	Made in abroad	Total	Bomb-ing	Production capacity of machine	others
							130 Tons	
	500 kg charge	1907		1	1	0	18 "	
ype	250 kg charge	"		3	3	0	12.5 "	Building #14
	75 H.P.	1916	3		3	0		
	50 H.P.	1938	1		1	0		
iver C.I.		1942	1		1	0		
ype	250 kg charge	1907	4		4	0	12.5 Tons	
	500 "	"		16	16	0	12.5 "	
type		1936		3	3	0		
er 20 H.P		"	2		2	0		Building #10
ype		1938(3)						
gel	100 kg charge	1907(7)	10		10	0		
ase	50 H.P	1906		1	1	0		
	60 H.P	1908	1	4	5	0		
type		1942	2		2	0	12.5 Tons	
"		"	1		1	0	" "	Building #68
"		1945	1		1	0		
	3,000 l	1942	5		5	0		
	10 K-W-	"	1		1	0		
	20 " "	"	1		1	0		"
Type ~~Type~~		1937		2	2	0		#68
iver H.P		1938	1		1	0		"
ation H.P-	5 Ton charge	1944	2		2	0	12.5 Tons	#68
tor		1938	1		1	0		

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Electric Centrifugal Pump	7.5 Kw		1938	2	
Dehydrating Press	Champinial type	22.5 kg charge	"	2	
Hydraulic pump	motor driver 3 cylinder	motor 7.5 kw	1939	3	
" "		30 kw	1942	1	
Hydraulic accumulator	50 tons		1939	3	
Dehydrating Press	Champinial Type			1	
"	Single cylinder		1915		3
Pump	plunger		1904		1
Electric driven hydraulic pump	Vertical 4 cylinder		"	2	
Hydraulic accumulator			1934	2	
Water Separator	Centrifuged	100 kg charge	1907		4

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(3)

	1938	2		2	0	62.5 Tons	Building #68
22.5 kg charge	"	2		2	0		
motor 7.5 kw	1939	3		3	0		
30 kw	1942	1		1	0		
	1939	3		3	0		
		1		1	0	62.5 Tons	
	1905		3	3	0		Building #
	1904		1	1	0		
	"	2		2	0		
	1934	2		2	0		
100 kg charge	1907		4	4	0		Building #130

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Ether Manufacturing set	Cu collonen tower				
Distilator			1916		4
Air Compresser			"		1
Compressed air reservoir			"	1	
Etherification vessel			"	2	
Tank	M-S-	3.000 l	"	3	
"		2.000 l	1911	2	
Distillator	Eylot type		1916		
Condenser			(1939)	1	
Tank			"	1	
Etherificator			"	1	
Alkohol heater			"	1	
Compressed air reservoir			"	1	
Air Compresser			"	1	
Tank	M-S.	3.000 l	"	4	
Distillator			1907		2
Tank	M-S.	3.000 l	1899	4	
Distillator	collumer tower		1895		1
Air Compresser			"		1
Compressed air reservoir			"		1
Tank	M-S-	200 l	1911		1
Etherificator vessel	M.S- Pb lined		1935	1	
Warshington Pump			1907		1
Tank			1911	4	
Rife Powder Manufacturing set					
Rolling Mill	Roller dia 26 cm		1941	1	

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						150 tons	
	1916		4	4	0		
	"		1	1	0		
	"	1		1	0	50 tons	Building #80
	"	2		2	0		
3,000 l	"	3		3	0		
2,000 l	1911	2		2	0		
	1916			2	0		
	(1939)	1		1	0		
	"	1		1	0		
	"	1		1	0	100 tons	
	"	1		1	0		Building #79
	"	1		1	0		
	"	1		1	0		
3,000 l	"	4		4	0		
	1907		2	2	0		"
3,000 l	1899	4		4	0		#66
	1895		1	1	0		
	"		1	1	0		
	"		1	1	0		
200 l	1911		1	1	0	not	"
	1935	1		1	0	complete	
	1907		1	1	0		#39
	1911	4		4	0		
	1941	1		1	0	12.5 Tons	Building #31

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Leaf cutting machine	gillotin type		1941	2	
Motor	"Hitachi"	15 H.P	1938	1	
glaging drum	Copper	250 kg charge	1941	6	
Motor	5 H.P. Reduction gear		"	6	
Water cooling plant	"Okamoto" motor 10 H.P.	10.5 cal	1938	1	
Electric Vacuum pump	motor 5 H.P		1936	1	
Condenser	vertical		1941	2	
Electric flower	Sirocco ~~type~~ motor 3 H.P	156 m³/min	1939	3	
Air heater	euphine type		1939	3	
Stripe powder (Roll) Manufacturing Set					
Kneading Machine	Welner type		1938	1	
"	"		1917		1
Motor	"Yasukawa" 7.5 KW		1938	2	
Kneading machine	Welner type		1909	1	
"	"		1938		1
Motor	"Yasukawa" 7.5 KW		"	1	
"	Welner type		1940	1	
kneading machine	"Mitsubishi" 7.5 KW		1916(2) 1940(1)	3	
Motor	"Hitachi" 15 H.P.		1940	2	
"			"	1	
Rolling Mill	Roller dia 58 cm		"	1	
"	"		1908		1
motor	"Chuo" 20 KW		1940	1	
Rolling Mill	Roller dia 26 cm		1908		3
Leaf cutting machine			1907		2
motor	"Fuji" 25 H.P		1939	1	

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(5)

	1941	2			0		Building #31
15 H.P	1938	1		1	0		
g charge	1941	6		6	0	5 Tons	
	"	6		6	0		"
15 cal	1938	1		1	0		#404
	1936	1		1	0		
	1941	2		2	0		
m^3/min	1939	3		3	0		" #336
	1939	3		3	0		"
						Strike No. 1 25 Tons	
	1938	1		1	0	7.5 Tons	
	1917		1	1	0		#138
	1938	2		2	0		
	1909	1		1	0	7.5 Tons	
	1938		1	1	0	"	#139
	"	1		1	0		
	1940	1		1	0		
	1916(2) 1940(1)	3		3	0	22.5 Tons	#140
	1940	2		2	0		
	"	1		1	0		
	"	1		1	0	12.5 tons	#35
	1908		1	1	0	25 Tons	
	1940	1		1	0		
	1908		3	3	0	11 Tons	#396
	1907		2	2	0	"	
	1939	1		1	0		

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Rolling mill	roller dia 26cm(2) 30cm(2)		1908(3) 1901(1)		4	4
Leaf cutting machine			1908		4	4
motor	"Fuji"		1938	1		1
Rolling mill	roller dia 30cm		1908(1) 1896(2)		3	3
Hydraulic press	up pressure		1942		1	1
Hydraulic pressure pump	vertical motor 3 Cylinder 10 KW		"		1	1
Motor	"Hidachi" 15 H.P		1938	1		1
Electric brower	"Kusunoki" 3 H.P.		"	1		1
"	" 7.5 H.P		"	1		1
Steam air heater	euphine type		"	1		1
Electric blower	"Kusunoki"		1937	2		2
Steam air heater	euphine type		"	2		2
Electric blower	"Kusunoki"	motor 3 H.P.	"	2		2
Steam air heater	euphine type		"	2		2
Washing machine	old feater	1.600 kg	1895	6		6
"	"	2450 "	1905	1		1
flake powder manufacturing set						
kneading machine	welner motor 15 H.P.	100 kg charge	1940	1		1
"	" 7.5 KW	"	"	1		1
"	" "	"	1916	1		1
Motor	2.5 KW		1934	1		1
kneading machine	welner motor 7.5 KW	100 kg charge	"	1		1
"		"	1916	1		1

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	1908(3) 1901(1)		4	4	0	15 tons	#390
	1908		4	4	0	"	
	1938	1		1	0		
	1908(1) 1896(2)		3	3	0	11 tons	
	1942		1	1	0		#415
	"		1	1	0		
	1938	1		1	0		
	"	1		1	0		#392
	"	1		1	0		
	"	1		1	0		
	1937	2		2	0		#60
	"	2		2	0		
for 3 H.P.	"	2		2	0		#61
	"	2		2	0		
1.600 kg	1895	6		6	0		#42
2450 "	1905	1		1	0		
						50 tons	
g charge	1940	1		1	0	7.5 "	#74
"	"	1		1	0	"	
"	1916	1		1	0	"	
	1934	1		1	0		
g charge	"	1		1	0	7.5 tons	
"	1916	1		1	0		

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motor	7.5 KW		1920	1	
~~tea~~ kneading machine	Welner motor 7.5 KW	100 kg charge	1934	1	
"	"	"	1916	1	
rolling mill	roller dia 58 cm	centiniss	1908		1
leaf cutting machine	"	"	1898		3
motor	"Osakadenki" 40 H.P		1916	1	
rolling mill	roller dia 58 cm	centiniss	1905		2
leaf cutting machine	"	"	1907		5
motor	"Osakadenki" 40 H.P		1916	1	
motor	7.5 KW		1936	1	
glazing machine	cr-ni steel	150 kg charge	1940	4	
motor	"Rikagaku"	5 H.P	"	4	
refrigrator	"Okamoto"	10000 Kcal	"	1	
electric centrifugel pump	hand a pump 2 H.P		"	2	
electric vacuum pump	7.5 KW		"	1	
tank	M.S. horizontal	2000 l	"	1	
Condencer	vertical type		"	2	
glazing machine	cr-ni-steel	150 kg charge	"	3	
motor a reduction gear	"Yasukawa" 3.75 KW.		"	3	
refrigerator	"Sankikogyo"	10.000 Kcal	"	1	
electric centrifugl pump	hand a pump 2 H.P.		"	2	
Tank	M.S. horizontal	2.000 l	"	1	
Condencer	vertical type		"	2	
electric vacuum pump	with motor 10 H.P		"	1	
mixing machine	vertical type	360 kg charge	1942	1	
hydraulic hoist			"	1	

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	1920	1		1	0		Building #75
100 kg charge	1934	1		1	0	7.5 tons	" #76
"	1916	1		1	0		
centimiss	1908		1	1	0	25 tons	" #337
"	1898		3	3	0	"	
	1916	1		1	0		
centimiss	1905		2	2	0	50 tons	#336
"	1907		5	5	0	"	
	1916	1		1	0		
	1936	1		1	0		
150 kg charge	1940	4		4	0	30 tons	#402
5 H.P	"	4		4	0		
10000 Kcal	"	1		1	0		
	"	2		2	0		
	"	1		1	0		
2000 l	"	1		1	0		
	"	2		2	0		
150 kg charge	"	3		3	0	22.5 tons	" #391
	"	3		3	0		
10.000 Kcal	"	1		1	0		
	"	2		2	0		
2.000 l	"	1		1	0		
	"	2		2	0		
	"	1		1	0		
360 kg charge	1942	1		1	0		#72
	"	1		1			

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electric centrifugal pump	"Minra" 175 cubic feet	motor 7.5 H.W	1932	1	
mixing machine	al vertical	360 kg charge	1942	1	
hydraulic hoist			"	1	
stripe powder (press) manufacturing set					
kneading machine	welner type	100 kg charge	1941	2	
motor	"Mitsubishi"	7.5 KW	1940	2	
kneading machine	welner motor "Tsukishima"	7.5 KW 100 kg charge	1939	2	
"	welner motor "Hidachi"	15 HP "	1940	2	
refrigerator	"Okamato" 10000 K. cal		1943	1	
kneading machine	"Tsukishima"	100 kg charge	1939	2	
	Welner "Yasukawa" motor	7.5 KW			
powder press	"Osaka Tekko"	20 kg charge	"	2	
electric driver by draulic pump	"Nippon Suiatsuki" oil pump 350 kg/m²		1936	1	
"	"Tsukishima" 40 HP pranger pump	350 kg/m²	1939	2	
leaf cutting machine	Uji Type		1937	4	
powder press	"Osaka Tekko"	20 kg charge	1939	2	
electric by draulic pump	"Nippon Suiatsu" oil pump 350 kg/m²		1940	1	
"	"Tsukishima" 40 HP pranger pump	350 kg/m²	1939	2	
leaf cutting machine	Uji Type		"	4	
powder press	"Osaka Tekko"	20 kg charge	1939	2	
electric by draulic pump	"Nippon Suiatsu" oil pump		1942	1	
"	"Tsukishima" 40 HP pranger pump	350 kg charge	1932	2	
leaf cutting machine	Uji Type		1938	4	
steam vacuum drying machine	Krapp square type	100 kg charge	1933		3
"	Iwayareizo square Type		1942	4	
"	Uji cylinder		1943	1	

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7.5 H.W	1932	1		1	0		Building #72
g charge	1942	1		1	0		" #99
	"	1		1	0		" "
						75 tons (Press capacity)	
charge	1941	2		2	0	15 tons	#306
5 KW	1940	2		2	0	"	
KW 100 kg charge	1939	2		2	0	15 tons	#305
0 "	1940	2		2	0	"	#437
	1943	1		1	0		
0 kg charge KW	1939	2		2	0	15 tons	#395
kg charge	"	2		2	0	25 tons	#393
	1936	1		1	0		
m²	1939	2		2	0		
	1937	4		4	0		
g charge	1939	2		2	0	25 tons	#422
	1940	1		1	0		
2	1939	2		2	0		
	"	4		4	0		
g charge	1939	2		2	0	25 tons	#49
	1942	1		1	0		
g charge	1932	2		2	0		
	1938	4		4	0		
g charge	1933		3	3	0		#423
	1942	4		4	0		
	1943	1		1	0		

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centrifugal pump	motor 10 HP		1938	1
"	" 2 HP		1937	2
vacuum pump	Kubota motor 7.5 kW		1939	1
"	Kusunoki motor 15 HP		1938	1
heating tank	cylinder type	2,000 l	1941	2
refrigrator	" Okamoto 10000 Kcal	10,000 Kcal	"	4
Condenser	" Kusunoki vertical		"	1
powder press	~~Shiba cylinder~~ Nippon Sumitomo oil pump		1938	1
hydraulic pump			1941	1
"	Shiba 3 cylinder pranger pump	350 kg/cm²	1942	1
electric blower	Sirocco type motor 2 HP	120 m³/min	1936	2
steam air heater	euphine type	"	"	2
electric blower	Sirocco motor 3 HP	"	1937	2
steam air heater	Euphine type	"	"	2
electric blower	"	"	1936	1
steam air heater	"	"	"	1
electric blower	"	"	"	1
steam air heater	"	"	"	1
electric blower	"	"	"	2
steam air heater	"	"	"	2
electric blower	Sirocco type motor 5 HP	156 m³/min	1940	3
steam air heater	Euphine type	"	"	3
mixing machine	rotary motor 3 HP	"	1941	1
plank manoeuver powder manufacturing set				
rolling mill	~~roll rotary motor 3~~	roller dia 58 cm	1939	1
cutting machine				

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	1938	1		1	0		#423
	1937	2		2	0		
	1939	1		1	0		#423
	1938	1		1	0		
ool	1941	2		2	0		
or Kal	"	4		4	0		
	"	1		1	0		
ump	1938	1		1	0	not p complete	#394
	1941	1		1	0		
/m²	1942	1		1	0		
m³/min	1936	2		2	0		#46
"	"	2		2	0		
"	1937	2		2	0		#16
"	"	2		2	0		
"	1936	1		1	0		#52
"	"	1		1	0		
"	"	1		1	0		#53
"	"	1		1	0		
"	"	2		2	0		#60
"	"	2		2	0		
m³/min	1940	3		3	0		#423
"	"	3		3	0		
"	1941	1		1	0		#107
						Tons 12.5	
Dia 8cm	1897		1	1	0		#236

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[illegible]		20HP	1944		
[illegible] drum	Cu drum	150 kg charge	(1944)	2	
motor & reduction gear		7.5 HP	1941	1	
blower	Sirocco type	120 m³/min	1942	2	
motor		3.75 KW	"	2	
steam air heater	Euphine	"	"	2	
Sporting powder manufacturing set					
kneading machine	welser	50 kg charge	1942		1
motor		7.5 KW	1940	1	
reduction gear	vertical 75/1800		"	1	
granulating machine	with motor 15 KW	50 kg charge	1939	1	
screening machine	pendling type		1937	1	
motor	with reduction gear	2.75 HP	"	1	
dehydrating press	single cylinder		1907		3
hydraulic pressure pump	vertical 3 cylinder		1906		2
glazing machine	wood drum	150 kg charge	1914	2	
motor	"Okumura" 30HP		"	1	
Solvent recovery set					
blower	Sirocco type		1945	2	
tank	M.S.	4.000 l	"	2	
absorber	"	active carbon 500 g	"	2	
condenser	"		"	2	
distillator	Cu colonnari vertical type		"	1	
motor		35 HP	"	1	

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	20HP	1944		1	1	0		
	150 kg charge	(1944)	2		2	0	12.5 tons	#466
	7.5 HP	1941	1		1	0		
e	120 m³/min	1942	2		2			#463
	3.75 KW	"	2		2			
	"	"	2		2			
							5 tons	
	50 kg charge	1942		1	1	0	5 tons	
	7.5 KW	1940	1		1	0		
1800		"	1		1	0		#44
w	50 kg charge	1939	1		1	0	5 tons	
e		1937	1		1	0	"	
on	2.75 HP	"	1		1	0		
der		1907		3	3	0		#14
nder		1906		2	2	0		
	150 kg charge	1914	2		2	0		#20
HP		"	1		1	0		
e		1945	2		2	0		
	4.000 l	"	2		2	0		
	active carbon 500 g	"	2		2	0	not complete	#13
		"	2		2	0		
		"	1		1	0		
	35 HP	"	1		1	0		

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motor		550 hp	1,945	1
Solvent Recovery set				
air filter			1,942	2
gas filter				
flower	electric driven motor 50 hp		"	6
steam air heater			"	6
absorber	active carbon 2 tons		"	12
refrigerator		10,000 kcal	"	1
distillator	w. collonnen tower		"	1
feed pump	Worthing ton type		"	2
tank	mild iron	4,000 l	"	4 6
coal-mine explosives prolating set (ammonium iterate base)				
motor		40 hp	1,916	1
"		15 hp	1,942	1
edge runner mill			1,915	9
			1,930	
crusher	comb type			1
motor				1
speed reducer			1,935	1
			(1,910)	
motor		40 hp	1,941	1
"		15 hp	1,940	1
edge runner mill			1,916	7
			1,919	
screwing machine				2
filling machine				8
flower	motor			

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	5504	1,945	1		1	0	not complete	Building #13
		1,942	2		2	0		
driven		"	6		6	0		
5504		"	6		6	0		Building #377
		"	6		6	0		
carbon		"	12		12	0		
tons	10,000 kal	"	1		1	0		
blowmen		"	2		2	0		Building #28
ower		"	4		4	0		
ing ton		"	4		4	0		
type								
iron	4,000 l	"	6		6	0		
							90 tons	
	40 hp	1,916	1		1	0		
	15 hp	1,942	1		1	0		Building
		1,915	9		9	0		#157
		1,930						
type			1		1	0		
			1		1	0		
		1,935	1		1	0		
		(1,910)						
	40 hp	1,940	1		1	0		
	15 hp	1,940	1		1	0		
		1,916	7		7	0		Building
		1,919						#83
			2		2	0		
			8		8	0		
					1	0		
					1	0		

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motor				1
refrigerator	filter cylinder	5 hp	1938	1
centrifugal pump	electric driven 5 hp			2
"	" 3 hp		1941	1
blower	motor driven 3 hp			
motor	Westing house			
mixer	aluminium int. d. 700			
"	c-mi int. d. 700			
ammonium explosives producing set				
mixer	cr-mi int. d. 700			1
motor	"chno" type	10. K.W.		1
crusher	"nara" type			2
cargo elevator			1941 (1931)	1
reaction vessel				3
mixer				6
melting kettle	aluminium int. d. 700		1940	2
Drying set				
blower	motor driven 3 hp		1937	1
dryer	wood		1939	10
blower	motor driven 5 hp Sirocco type #7		1938	3
steam heater			~~1939~~	3
			1	
motor explosives loading getset				
hydraulic press pump	motor driven 3.75 hp		1938	1

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	5-4p	1,938	1		1	0		Building #164
			1		1	0		
			2		2	0		
		1,941	1		1	0		
							4 tons	
			1		1	0		Building #45
	10. K.W.		1		1	0		
			2		2	0		
		1941						
		(1,931)	1		1	0		Building #279
			3		3	0		
			6		6	0		
		1,940	2		2	0		
							12 tons	
		1,937	1		1	0		Building #219
		1,939	10		10	0		
		1,938	3		3	0		Building #220
		~~1,939~~	3		3	0		
		1,938	1		1	0	5 tons	

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mixing machine	"Shikawa" 5hp			1
hydraulic press				1
melting kettle	aluminium int. d. 700			3
"	aluminium lining M.S. int. d. 700			1
mixer	aluminium int. d. 500			1
Explosives powder set				
paper cutter	motor driven		1937	1
printing press	"			1
waxer			1,950	1
motor			1907	1
waxer				1
blower	motor driven 5hp		1937	1
paper cutter	hand driven		(1923)	1
granulating machine	rotary			
screw press	large size		1937	
"	med size		1908	
"	small size			
paper cylinder cutting machine				
press			1937	
motor	"Yasukawa" with reduction gear	5hp	1938	

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			1	1	0		Building #322	13
			1	1	0			
			3	3	0		Building #232	
			1	1	0			
			1	1	0		Building #224	
						90 tons		
		1937	1	1	0		Building #280	
			1	1	0			
		1930 1907	1	1	0			
			1	1	0		Building #281	
			1	1	0			
		1937	1	1	0			
		(1923)	1	1	0		Building #233	
		1937 1908						
		1937 1938					Building #294	

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Name of machine	Type	Reduction machinery	capacity of machineries	year of manufacture	Equipments made in Japan	made in abroad
Saponification process of picric acid						
Saponification acid tank	longitudinal cylinder mild steel	dia 3m height 6m				12
	longitudinal cylinder chrom nikel	dia 1m height 1.2m				8
washing machine	longitudinal cylinder wood	dia 2.2m height 1.4m				8
motor	open type	10KW P.P.H. 1145				3
reduction gear		10Kw reduction ratio 1/6				3
motor coupled with reduction gear		7.5Kw reduction ratio 1/6				1
Line shafting arangement				1934		4
centrifugal water extractor	centrifugal type	inner dia 1.0m				8
motor		10Kw P.P.M 250				2
reduction gear		10Kw reduction ratio 1/6				2
Line shafting arrangement				~~1934~~		2
wooden tank		upper dia 2.2m lower dia 2.1m height 1.4m				6
"		upper dia 2.2m lower dia 2.1m height 1.4m				1
electric centrifugal pump	Fero-silicon	dia 50 m/m head 20m 5.5Kw				
"	"	dia 50 m/m head 20m 5.5Kw				
dissolving tank	rectangle type mild steel	1.095×1.025×0.7m				4
"	"	0.74×1.52×1.63m				3
liquid supplier	cylinder type	dia 0.74 length 1.2				2
electric centrifugal pump	cast iron	dia 50 m/m head 20m 3.7Kw				2
		dia 50 m/m head 20m 7.5Kw				2
nitration plant of picric acid	"					
nitrator	cylinder	dia 1.25m length 2.0m				12

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Production capacity of machineries	Equipments (collateral) year of manufacture	made in Japan	made in abroad	Total	Bomb damage	Production capacity of machine	Remarks (at) others
inder.							
dia 3m height 1.8m inder		12		12	0	wet Dinitro-phenol 70tons	116
dia 1m height 1.25m		8		8	0	"	116
dia 2.2m height 1.4m		8		8	0	"	116
10KW P.P.H. 1465 10KW.		3		3	0		with switch box 116
reduction ratio 1/6 7.5KW		3		3	0		116
reduction ratio 1/6		1		1	0		with switch box 116
	1934	4		4	0		116
inner dia 1.0m		8		8	0		with switch box.
10KW P.P.M 250 10KW		2		2	0		116
reduction ratio 1/6		2		2	0		116
upper dia 2.2m ~~1934~~		2		2	0		116
lower dia 2.1m height 1.4m		6		6	0		116
upper dia 2.2m lower dia 2.1m height 1.4m		1		1	0		116
dia 50 m/m head 20m 5.5KW							with switch box 116
dia 50 m/m head 20m 5.5KW							with switch box 116
1.095×1.025×0.7m		4		4	0		138
0.74×1.52×1.63m		3		3	0		138
dia 0.74 length 1.52		2		2	0		138
dia 50 m/m head 20m 3.7KW		2		2	0		with switch box 138
dia 50 m/m head 20m 7.5KW		2		2	0		with switch box
dia 1.25m length 2.0m		12	0	12	0		with agitator and water pipe 115

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motor	~~10Kw. R.P.M. 1,165~~	10Kw. R.P.M 1,165		3	
reduction gear		10Kw. reduction ratio 1/6		2	
"		"		1	
motor compiled with reduction gear		7.5Kw. R.P.M. 1,200 reduction ratio 1/6		1	
line shafting apparatus				4	
"				4	
acid tank	rectangular type chrome nickel steel	0.8×1.95×0.58 m		2	
washing machine	cylintrical type chrome nickel	dia 1.45 m height 1.25 m		10	
acid tank	rectangular type chrome nickel	2.0×2.0×1.0 m		4	
wooden tank	wood	upper dia 1.65 m lower " 1.65 m height 1.3 m		4	
ntrifugal water extractor	centrifugal type aluminium			6	
"	centrifugal type chrome nickel			1	
ine shafting arrangement				2	
motor		10Kw. R.P.H. 1,150		2	0
reduction gear		10Kw. reduction ratio 1/6		2	0
alminum tank	cylindrical type aluminium	dia 0.81 height 1.0 m		3	0
"	"	dia 0.62 height 1.0 m		2	0
"	"	dia 0.70 height 1.0 m		1	0
"	"	dia 1.0 height 1.5 m	1,934	2	0
Iron tank	cylindrical type mild steel	dia 1.9 height 1.45 m		3	0
Electric blower	Sirocos type chrome nickel	5Kw. R.P.M. 1748		2	0
" hoist		2Kw. 17 m/min		1	0
Electric centrifugal pump	chrome nikel open type	dia 50 m/m head 20 m 5Kw		1	0
"	"	dia 40 m/m. head 20 m 5Kw		1	0
		" 20 m 1.5Kw		2	0

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						15
.P.P.M 1.165		3		3	0	with switch box 115
reduction ratio		2		2	0	"
		1		1	0	"
v. P.P.M.		1		1	0	"
reduction						
ro 1/6						
		4		4	0	"
		4		4	0	"
						"
		2		2	0	
×1.95×0.58 m						
1.45 m		10		10	0	"
ght 1.25 m						
		4		4	0	"
× 2.0 × 1.0 m						
ber dia 1.65 m		4		4	0	"
ver " 1.65 m						
ight 1.3 m						
		6		6	0	"
		1		1	0	"
		2		2	0	"
W. R.P.H. 1.150		2	0	2	0	"
		2	0	2	0	"
10 KW.						
duction ratio 1/6		2	0	2	0	"
dia 0.81		3	0	3	0	"
eight 1.0 m						
ia 0.62		2	0	2	0	"
eight 1.0 m						
ia 0.70		1	0	1	0	"
eight 1.0 m						
ia 1.0	1,934	2	0	2	0	"
eight 1.5 m						
dia 1.9		3	0	3	0	"
eight 1.45 m						
KW R.P.M. 1740		2	0	2	0	"
		1	0	1	0	"
KW. 177 min						
ia 50 m/m		1	0	1	0	"
head 20 m 5 KW		1	0	1	0	"
ia 40 m/m. head 20 m 5 KW		1	0	1	0	"
" 12 m 1.5 KW		2	0	2	0	"

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Electric centrifugal pump	ferrosilicon	dia 50 m/m head 20 m/m		1
"	open type	"	" 3.75 Kw	1
Tank " car	"	dia 40 m/m head 12 m	1.5 Kw	2
iron tank	cr. – ni	0.6 × 1.0 × 0.85 m		8
	cylindrical type	m.s. dia 1.95 m	height 6.1 m	3
acid " tank	"	dia 1.65 m	height 6.15 m	1
	cylindrical type	d 1.65 m		1
	cr- ni	h. 5.8 m		1
aluminum tank	cylindrical type	d. 1.6 m		1
	alminum	h. 6.1 m		
"		d. 1.28 m		1
	"	h. 1.75 m		1
acid tank	cylindrical type	d. 1.6 m		2
	cr- ni	h. 4.15 m		
"		d. 1.95 m		1
	"	h. 7.1 m		
line shafting arrangement				
motor		7.5 Kw		
		R.P.M. 1440	1750	1
		15 hp		
reduction gear		reduction ratio	1/6	1
Electric centrifugal pump	ferrosilicon	d. 50 m/m		
		head 20 m/m	1.5 Kw	1
"	"	d. 50 m/m		
		head 12 m	5.5 Kw	2
"	"	d. 40 m/m		
		head 12 m	3.3 Kw	4
tank car	cylindrical type	d 1.0 m		
	cr- ni	h 1.0 m		1
absorption tower	fire proof stone	d. 4.2 m		
	type	h. 8.0 m		2
"	cr- ni	d. 0.9 m		
		h. 7.2 m		3
"	cr- ni	d. 1.5 m		
		h 5.5 m		1
Electric blower	Turbo type	20 Kw. 300 m³/min		
	cr- ni	press 2000 m/m		2
"	"	15 hp		1
~~absorption tower~~				
Electric centrifugal pump	open type	d. 40 m/m		
	cr- ni	h 12 m 2 Kw		15
acid tank	rectangular type	70 × 20 × 10 m		1
	cr- ni			

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con.	dia 50 m/m head 21 m 3.75 Kw	1	0	1	0	with switch box "
pe	" " 3.75 Kw	1	0	1	0	"
	dia 40 m/m head 12 m 1.5 Kw	2	0	2	0	"
	0.6 × 1.0 × 0.85 m	8	0	8	0	"
type	m.s. dia 1.95 m height 6.1 m	3	0	5	0	"
	dia 1.65 m height 6.15 m	1	0	1	0	"
type	d. 1.65 m					
	h. 5.8 m	1	0	1	0	"
type	d. 1.6 m					
e	h. 6.1 m	1	0	1	0.	"
	d. 1.28 m					
	h. 1.75 m	1	0	1	0	"
type	d. 1.6 m					
	h. 4.15 m	2	0	2	0	"
	d. 1.95 m					
	h. 7.1 m	1	0	1	0	"
	7.5 Kw					
	R.P.M. 1,440 1/7.0	1	0	1	0	"
	15 HP					
	reduction ratio 1/6	1	0	1	0	"
	d. 50 m/m					
ion	head 20 m/m 1.5 Kw	1	0	1	0	"
	d. 50 m/m					
	head 12 m 5.5 Kw	2	0	2	0	"
	d. 40 m/m					
	head 12 m 3.3 Kw	4	0	4	0	"
type	d 1.0 m					
	h 1.0 m	1	0	1	0	"
stone	d. 4.2 m					
	h. 8.0 m	2	0	2	0	absorption tower
	d. 0.9 m					
	h. 7.2 m	3	0	3	0	"
	d. 1.5 m					
	h 5.5 m	1	0	1	0	"
se	20 Kw. 300 m³/min					
	press 2000 1/20	2	0	2	0	"
	15 HP	1	0	1	0	"
se	d. 40 m/m					
	h 12 m 2 Kw	15	0	15	0	absorption tower
type	7.0 × 2.0 × 1.0 m	1	0	1	0	"

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Picric acid manufacturing plant

saponificator	cylindrical type mild steel	d. 2.2m h. 1.85m		2
nitrator	cr-ni	d. 1.36m h. 2.5m		4
washing machine	wooden vat	upper dia 2.67m		2
"	cylindrical type cr-ni	h. 2.6m d. 1.03m		3
"		h. 2.3m d. 1.03m		2
"	c.t. ferrosilicon	d. 1.54m h. 1.0m		2
"	c.t. mild steel steel lining	cr-ni lining		2
Centrifugal water extractor	aluminum box	dia 1.0m		3
"	steel lead lining	d. 1.0m		3
motor	air tightly type	15 HP		2
motor coupled with reduction gear	"	R.P.M 1.740 3KW reduction ratio 1/10		2
"	"	2.27 KW. R.P.M 1720 reduction ratio 1/10		2
motor	"	7.5 KW R.P.M 1200		3
dissolving tank	rectangular type mild steel	1.5×1.04×1.23m	1954	2
"	"	1.5×0.74×1.23m		2
air reservoir	mild steel	d. 0.96m length 1.78m		2
acid tank	rectangular type cr-ni	2.0×2.0×1.0m		2
"	"	"		1
"	"	2.0×1.0×0.65m		2
wooden tank	wood	d 3.8m h 1.46m		2
acid tank	cr-ni	d 1.74m h. 3.1m		1
"	rectangular type cr-ni	2.0×1.0×0.65m		5
wooden tank	Ellipse type wood	long dia 1.68m short dia 1.30m height 1.5m		3
lead tank	cylindrical type lead	dia 1.0m h 1.3m		2
iron tank	mild steel	d 1.3m h 1.1m d 1.5m		1
				1

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...ed							
d. 2.2m h. 1.75m		Z	Z	0	wet dinitrophenol 35 tons		with agitator &
d. 1.36m h. 2.5m		4	4	0	wet picric acid 25 tons		cooler, pipe
upper dia 2.67m		Z	Z	0	wet dinitrophenol 35 tons		with agitator 18
d. 2.6m h. 1.03m		3	3	0	wet picric acid 25 tons		"
h. 2.3m d. 1.83m		2	2	0	"		"
...m d. 1.54m h. 1.3m		2	2	0	"		"
...cr-ni lining		2	2	0	"	50 tons	jacketed and wi agitator 185
dia 1.0m		3	3	0	picric acid 75 ton		"
d. 1.0m		3	3	0	"		"
15 HP		Z	Z	0			with switch 185
R.P.M 1.740 3KW		Z	Z	0			"
reduction ratio 1/10		Z	Z	0			"
2.27 KW. R.P.M 1720		Z	Z	0			"
reduction ratio 1/10							
7.5 KW		3	3	0			"
R.P.M 1200		Z	Z	0			185
6.5×1.04×1.23m	1954	Z	Z	0			"
1.5×0.74×1.23m		Z	Z	0			"
d. 0.96m		Z	Z	0			"
length 1.75m		Z	Z	0			"
2.0×2.0×1.0m		1	1	0			"
"		Z	Z	0			"
2.0×1.0×0.65m		Z	Z	0			"
d 3.8m		Z	Z	0			"
h 1.46m		1	1	0			"
d 1.74m		5	5	0			"
h. 3.1m		3	3	0			"
2.0×1.0×0.65m		Z	Z	0			"
long dia 1.68m		1	1	0			"
short dia 1.30m		1	1	0			"
height 1.5m							
dia 1.0m							
h 1.3m							
d 1.3m							
h 1.1m							
d 1.5m							

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Iron Tank	mild steel	dia 1.5 m height 1.55 m	1
Acid Seperator	Ferrosilicon Fire stone lining	dia 0.8 m height 2.5 m	1
Iron Tank	mild steel lead lining	dia 1.84 m height 4.6 m	2
"	"	dia 1.46 m height 4.35 m	2
Motor coupled with reduction gear (air tight type) ~~air tight type~~		12.75 K.W. R.P.M. 1720 reduction ratio 1/10	2
Aluminium Tank ~~Acid tank~~	cylindrical type Aluminium	dia 2.0 m height 2. m	1
Acid Tank	cylindrical type chrom nickel	dia 1.6 m length 4.0 m	1
"	"	dia 0.74 m height 1.1 m	2
"	"	dia 0.92 m height 0.70 m	1
Iron Tank	cylindrical type mild steel	dia 2.1 m length 1.85 m	2
"	"	dia 1.94 m length 9.06 m	2
Electric Centrifugal Pump	Ferrosilicon	9.75 K.W. head 16 m dia 50 m/m R.P.M. 2000	2
"	"	dia 50 m/m 5 K.W. head 20 m.	1
Acid Tank	cylindrical type chrom nickel	dia 1.5 m height 1.37 m	2
Electric Centrifugal Pump	Ferrosilicon	dia 40 m/m 3.7 K.W. head 16 m	2

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							(18)
	dia 1.5m height 1.55m	1	0	1	0		185
ng	dia 0.8m height 2.5m	1	0	1	0		"
	dia 1.84m height 4.6m	2	0	2	0		"
	dia 1.46m height 4.35m	2	0	2	0		" with switch box
ght	type) 12.75 K.W. R.P.M. 1720	2	0	2	0		185
	reduction ratio 1/10						185
pe	dia 2.0m height 2.[illegible]m	1	0	1	0		"
ype	dia 1.6m length 4.0m	1	0	1	0		"
	dia 0.74m height 1.1m	2	0	2	0		"
	dia 0.92m height 0.70m	1	0	1	0		"
e	dia 2.1m length 1.85m	2	0	2	0		"
	dia 1.94m length 9.06m	2	0	2	0		" with switch box
	9.75 K.W. head 16m dia 50m/m R.P.M. 2,000	2	0	2	0		185
	dia 50m/m 5 K.W. head 20m.	1	0	1	0		"
e	dia 1.5m height 1.37m	2	0	2	0		185 with switch box
	dia 40m/m 3.7 K.W. head 16m	7	0	7	0		185

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Nitration Plant of T.N.T			
nitrator	cylindrical type mild steel	d. 1.54m length 3.7m	9
inter. mixing machine	"	d. 1.8m height 2.0m	3
iron tank	"	d. 1.37m " 2.35m	1
		d. 0.92m	
"	"	h. 1.45m	2
		d. 1.41m	
"	"	h. 1.8m	1
		d. 1.8m	
"	"	h. 2.74m	1
		d. 1.38m	
"	"	h 1.77m	1
		d. 0.9m	
"	"	h. 1.4m	3
		d. 1.42m	
"	"	h. 1.74m	3
		d. 1.18m	
"	"	h. 2.6m	1
		d. 1.5m	
"	"	h. 2.85m	3
		d. 0.71m	
"	"	h. 1.41m	1
		d. 2.0m	
washing machine	wood	h. 1.80m	5
		d. 1.65m	
"	"	h. 1.4m	2
		d. 1.6m	
wooden tank	"	h. 1.45m	3
electric centrifugal pump	air tightly type ferrosilicon	2.2Kw. R.P.M. 1740 dia 2inch head 20m	1
	"	3.7Kw. R.P.M. 1740	
"		dia 2inch head 20m	1
"	air tightly ~~type~~ pump cast. iron	1.5Kw R.P.M. 1750	
"		dia 1inch head 20m	2
"	"	3.7Kw. R.P.M. 1770	3
		dia 2inch head 20m	
aluminum tank	cylindrical type aluminum	d. 0.9m	2
		h. 1.2m	
"	"	d. 1.23m	1
		h. 1.97m	
"	"	d. 1.32m	1
		h. 1.72m	
motor coupled with reduction gear	air tightly	3Hp	2
	"	2.7Kw	2

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+1 19

al type steel	d. 1.54m length 3.7m	9		9	0	T.N.T. 100 ton	with agitator	49
	d. 1.8m height 2.6m	3		3	0	dinitro toluol 100 ton	"	
	d. 1.37m " 2.35m	1		1	0		49	
	d. 0.92m						"	
	h. 1.45m	2		2	0		" "	
	d. 1.41m	1		1	0		"	
	h. 1.8m							
	d. 1.8m	1		1	0		"	
	h. 2.74m							
	d. 1.38m	1		1	0		"	
	h. 1.77m							
	d. 0.9m	3		3	0		"	
	h. 1.4m							
	d. 1.42m	3		3	0		"	
	h. 1.74m							
	d. 1.18m	1		1	0			
	h. 2.6m							
	d. 1.5m	3		3	0			
	h. 2.85m							
	d. 0.71m	1		1	0			
	h. 1.41m							
ood	d. 2.0m	5		5.	0		with agitator	
	h. 1.80m						49	
"	d. 1.65m	2		2	0		49	
	h. 1.4m							
	d. 1.6m	3		3	0		"	
"	h. 1.45m							
tightly type	2.2Kw. R.P.M. 1740	1		1	0		"	
ilion	dia 2 inch head 20m							
	3.7Kw. R.P.M. 1740	1		1	0		"	
	dia 2 inch head 20m							
ghtly ~~type~~	1.5Kw R.P.M. 1740	2		2	0		with agitator	
t. 2.1m	dia 1 inch head 20m						49	
	3.7Kw. R.P.M. 1740	3		3	0		"	
	dia 2 inch head 20m							
ical type	d. 0.9m	2		2	0		"	
inum	h. 1.2m							
	d. 1.23m	1		1	0		"	
	h. 1.97m							
	d. 1.32m	1		1	0		"	
	h. 1.72m							
ightly	3Hp	2		2	0		"	
	2.7Kw	2		2	0		"	

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Line shafting arrangement		3 inch		3
acid tank	cyl. type m. s	ϕ 1.4 m. ℓ 2.85		1
Chrom Nickel tank	cyl.	ϕ 1.35		1
Pump		h 1.45		1
		dia 4 inch head 30 m		1
Iron tank	rectangular type m. s	1.63 × 1.2 × 1 m		1
Motor	open type	40 KW		1
Iron tank	cylinderical type m. s	ϕ 1.44 height 2.80 m		1
"	"	dia 1.0 m length 1.6 m		1
"	"	dia 0.9 length 2.7		1
Chrom Nickel tank	cylindrical type Cr-Ni	ϕ 0.95 ℓ 0.72		1
Iron tank	" m. s	ϕ 1.0 ℓ 6.8		1
"	"	ϕ 0.8 ℓ 9.0		3
"	"	d 0.85 ℓ 6.95		1
"	"	d 0.85 ℓ 5.8		1
Tank car	Chrom nickel	d 0.8 ℓ 1.47		1
Iron tank	rectangular type	0.6 × 1 × 0.5		1
Absorption tower		ϕ 0.95 × 7.0		4
Absorption tower	Cr-Ni	ϕ 0.8 × 7.0		3
"	Earthen ware	ϕ 1.5 inch 3 HP head 20 m		3
Electric centrifugal pump	Chrom nickel	75 KW		1
Electric blower	Sirroco type Cr-Ni	5 HP		1
"	"			1
Nitration Plant of T.N.T.				
Nitrator	cylinder type m.s	d 1.5 ℓ 3.7 m		4
Intermixing machine	"	d 1.4 ℓ 4.1		2
Iron [illegible]	"	d 1.5 ℓ 1.8		2

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3 inch	3	0	3	0	with agitator 49
ϕ 1.4 m. ℓ 2.75	1	0	1	0	"
ϕ 1.35 h 1.45	1	0	1	0	"
dia 4 inch head 30 m	1	0	1	0	"
1.63 × 1.2 × 1 m	1	0	1	0	49 no motor
40 KW	1	0	1	0	"
d 1.44 height 2.80 m	1	0	1	0	"
dia 1.0 m length 1.6 m	1	0	1	0	"
dia 0.9 length 2.7	1	0	1	0	"
ϕ 0.95 ℓ 0.72	1	0	1	0	"
ϕ 1.0 ℓ 6.8	1	0	1	0	"
ϕ 0.8 ℓ 9.0	3	0	3	0	"
d 0.85 ℓ 6.95	1	0	1	0	"
d 0.85 ℓ 5.8	1	0	1	0	"
d 0.8 ℓ 1.47	1	0	1	0	"
0.6 × 1 × 0.5	1	0	1	0	"
ϕ 0.95 × 7.0	4	0	4	0	Absorption tower
ϕ 0.8 × 7.0	3	0	3	0	"
ϕ 1.5 inch 3 HP m head 20	3	0	3	0	"
75 KW	1	0	1	0	"
5 HP	1	0	1	0	"
d 1.5. ℓ 3.7 m	4	0	4	0	with agitator 75
d 1.4 ℓ 4.1	2	0	2	0	"
d 1.5 ℓ 1.8	2	0	2		

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Iron Tank	cylindrical type mild steel	dia 0.75 m height 1.4 m	2
"	rectangular type mild steel	2 × 1 × 1 m	1
Aluminium Tank	cylindrical type	dia 0.85 m height 1.4 m	1
"	"	dia 1.0 m height 1.2 m	1
Iron Tank	"	dia 1.4 m length 2.8 m	2
"	"	dia 1.1 m length 1.5 m	1
Washing Machine	wood	dia 2.0 m height 1.8 m	1
Wooden Tank		dia 2.4 m height 2.3 m	2
Electric Centrifugal Pump	cast iron	dia 2 inch head 20 m 5 HP	1
"	chrom nickel	dia 1.5 inch head 20 m 3 HP	1
"	Ferro silicon	dia 2 inch head 20 m 5 HP	1
motor	open type	45 K.W.	1
Motor coupled with reduction gear	air tight type	3 HP	1
Line shafting aggrangment		dia 2 inch	2
Centrifugal Water Extractor	Aluminium	dia 1.1 m R.P.M. 800	1
Purification Plant of T.N.T.			
Realing Machine	wood & iron plate	length 9 m	4
Electric Blower	Sirocco type cast iron	5 HP	1
motor	air tight type	3 Hp	1
Iron tank	cylindrical type mild steel	dia 1.3 m height 1.5 m	2
Electric Hoist	steel	2 K.W. Weight 1 T	1
Washing Machine	wood	dia 1.8 m height 1.2 m	6
Centrifugal Water Extracto	centrifugal type copper case		1
Line shafting arrangement			1
motor	open type	5 HP	1
Washing machine	cylindrical type	2.5 HP dia 1.1 m height 0.5 m	1

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0.75 m						with agitator
ght 1.4 m	2	0	2	0		75
1 × 1 m	1	0	1	0		"
0.85 m						
ght 1.4 m	1	0	1	0		"
1.0 m						
ght 1.2 m	1	0	1	0		"
1.4 m						
gth 2.8 m	2	0	2	0		"
1.1 m						
gth 1.5 m	1	0	1	0		"
2.0 m						with agitator
ght 1.8 m	1	0	1	0		75
2.4 m						
ht 2.3 m	2	0	2	0		75
2 inch						
20 m 5HP	1	0	1	0		"
1.5 inch						
20 m 3HP	1	0	1	0		"
2 inch						
20 m 5HP	1	0	1	0		"
5 K.W.						
	1	0	1	0		"
3 HP	1	0	1	0		
3 inch	2	0	2	0		
1.1 m						
H. 800	1	0	1	0		
ngth 9 m	4	0	4	0	T.N.T. 150#	51
5 HP	1	0	1	0		"
3 Hp	1	0	1	0		"
1.3 m						
ht 1.5 m	2	0	2	0		"
Weight 1T	1	0	1	0		with agitator
1.8 m height 1.2 m	6	0	6	0		54
	1	0	1	0		54
	1	0	1	0		"
	1	0	1	0		"
HP	1	0	1	0		"
5 HP	1	0	1	0		"
m height 0.5 m	1	0	1	0		"

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Acid mixing Plant				
Aluminium Tank	log nitadinal cyl.	ϕ 0.9 × 1.7		1
Iron Tank	"	0.9 × 1.5		2
"	"	1.1 × 1.5		1
Electric Centrifugal pump	Ferrosilicon	ϕ 2" 1.5 K.W. head 20 m		1
"	cast iron	"		1
"	chrome nickel	ϕ 2" 2 K.W.		1
"	Ferrosilicon	ϕ 2" 3 K.W. 20 m		4
"	chrome nickel	"		2
"	cast iron	ϕ 2" 7.5 K.W. head 20 m		2
"	chrome nickel	ϕ 2" 3.75 K.W. head 20 m		1
"	"	ϕ 2" 7.5 K.W. head 20 m		1
"	cast iron	ϕ 2" 5.5 K.W. head 20 m		1
Electric vacuum pump	Nash Type Ferrosilicon	ϕ 2" 7.5 K.W.		2
ϕ Motor	open Type	7.5 K.W.		1
"	"	5.5 K.W.		1
Iron Tank	lateral cyl. mild steel	ϕ 2.2 × 10.4		8
"	"	ϕ 2.0 × 6.1		8
Aluminium Tank	cyl. lateral	ϕ 1.65 × 1.28 m		3
Vacuum Tank	Aluminium	ϕ 1.6 × 4.3		1
"	lateral cyl. mild steel	ϕ 1.18 × 3.6		1
"	"	ϕ 1.38 × 4.1		1
"	lateral cyl. Aluminium	"		1
Acid Tank	longitudical cyl. Aluminium	ϕ 1.9 × 2.0		5
"	longitudical cyl. mild steel	ϕ 1.4 × 2.9		8
"		ϕ 1.5 × 2.4		3