DECLASSIFIED E.O. 11652 SECTION 3 (E)(2), NARS DATE 12-18-78

Electrolytic Plants

1946)

on	Ratio against total production of the area	Ration against total production of all Japan	Registered capacity Tons per year	Persentage of actual prodaction against capacity
	%	%		
4	44.95	4.78	12.520	8.2
2	13,30	1.41	3.600	8.4
4	33.08	3.52	12.600	6.0
0	0	0	2.160	0
1	8.67	0,98	1.080	19.0
0	100.00	10.63		
4	40.92	7.71	6.480	25.6
9	25.60	4.82		
9	39.47	5.73	10,800	11.4
0	3.01	0.57	288	42.4
7	100.00	18.83		
7	31.74	10.53	36.000	6.3
6	1.89	0.63	11.880	1.1
1	3.24	1.07	9.360	2.5
1	21.26	7.05	16.200	9.4
5	9.22	3.06	3.360	19.6
9	9.01	3.02	-	-
7	17.10	5.66	6.120	19.4
3	6.54	2.17	7.920	5.9
0	0	0	1.320	0
3	100.00	33.19		
2	37.51	2.45	2/AB 1.440	45.7
2	14.78	0.96	2.880	7.2
0	0	0	5.040	0
0	0	0	600	0
0	0	0	2.880	0
0	0	0	6.120	0
8	47.71	3.12	3.120	21.5
0	0	0	3.120	0
3	100.00	6.53		
4	1.51	0.09	900	2.4
2	98.49	6.47	1.920	73.0
6	100.00	6.56	9.000	10.9
2	100.00	4.55	-	-
0	0	0	900	0
0	0	0		
2	100.00	4.55	10.080	13.1
9	31.24	6.16	7.200	10.4
7	17.63	3.47	19.080	9.1
1	32.01	6.31	18.720	4.3
2	19.12	3.77		
9	100.00	19.71		
4		100.00		

Actual Production of Synthetic Hydrochloric Acid

(All Japan - Jan./Dec. 1946)

35% as cl_2

Area	Company	Plant	Actual production	Ratio against total production of the area	Ratio against total production of all Japan
			ton	%	%
Tohoku (North-eastern)	Nisshin Denka	Sakata	177 323	16.81	1.02
	Tekkosha	"	228 645	21.67	1.32
	Kureha Kagaku	Nishiki	442 032	41.89	2.55
	Hodogaya Kagaku	Koriyama	0	0	0
	Showa Denko	Hirota	207 153	19.63	1.20
	total		1.055 153	100.00	6.09
Chubu (Central)	Nihon Soda	Takaoka	464 987	20.14	2.68
	Toa Gosei	"	111 681	4.84	0.64
	"	Nagoya	1.474 837	63.91	8.51
	Nissan Kagaku	Toyama	256 258	11.11	1.48
	total		2.307 763	100.00	13.31
Kanto (Tokyo area)	Nihon Soda	Nihongi	1.478 005	21.81	8.53
	Kanto Denka	Shibukawa	359 192	5.30	2.07
	Nissan Kagaku	Ohji	492 176	7.26	2.84
	Asahi Denka	Ogu	1.722 570	25.41	9.94
	Hodogaya Kagaku	Hodogaya	50 026	0.74	0.31
	Tsurumi Soda	Tsurumi	1.013 778	14.96	5.85
	Showa Denko	Yokohama	1.211 363	17.88	6.98
	Ajinomoto	Kawasaki	449 710	6.64	2.58
	Kaisuiriyo Kogyo	Nagai	0	0	0
	total		6.776 820	100.00	39.10
Kinki (Osaka area)	Mitsubishi Kasei	Yodogawa	798 968	45.40	4.61
	Naniwa Gosei	Osaka	12 560	0.71	0.07
	Toa Koko	Osaka	0	0	0
	Yamatogawa Senko	Sakai	0	0	0
	Yura Kagaku	Amagasaki	0	0	0
	Osaka Soda	"	0	0	0
	Kanegafuchi Boseki	Takasago	948 180	53.89	5.47
	Nankai Kagaku	Wakayama	0	0	0
	total		1.759 708	100.00	10.15
			ton	%	%
Chugoku (Western Honshu)	Nisshin Kagaku	Okayama	0	0	0
	Toyo Soda	Tonda	1.714 039	100.00	9.88
	total		1.714 039	100.00	9.88
Shikoku	Toa Gosei	Sakaide	1.006 080	100.00	5.80

Area	Company	Plant	Actual production	Ratio against total production of the area	Ratio against total production of all Japan
			ton	%	%
Tohoku (North-eastern)	Nisshin Denka	Sakata	177 323	16.81	1.02
	Tekkosha	"	228 645	21.67	1.32
	Kureha Kagaku	Nishiki	442 032	41.89	2.55
	Hodogaya Kagaku	Koriyama	0	0	0
	Showa Denko	Hirota	207 153	19.63	1.20
	total		1.055 153	100.00	6.09
Chubu (Central)	Nihon Soda	Takaoka	464 987	20.14	2.68
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	Naniwa Gosei	Osaka	12 560	0.71	0.07
	Toa Koko	Osaka	0	0	0
	Yamatogawa Senko	Sakai	0	0	0
	Yura Kagaku	Amagasaki	0	0	0
	Osaka Soda	"	0	0	0
	Kanegafuchi Boseki	Takasago	948 180	53.89	5.47
	Nankai Kagaku	Wakayama	0	0	0
	total		1.759 708	100.00	10.15
			ton	%	%
Chugoku (Western Honshu)	Nisshin Kagaku	Okayama	0	0	0
	Toyo Soda	Tonda	1.714 039	100.00	9.88
	total		1.714 039	100.00	9.88
Shikoku	Toa Gosei	Sakaide	1.006 070	100.00	5.80
	Nankai Kagaku	Tosa	0	0	0
	Nisshin Kagaku	Niihama	0	0	0
	total		1.006 070	100.00	5.80
Kyushu	Osaka Soda	Kokura	1.235 480	45.49	7.12
	Mitsubishi Kasei	Kurosaki	354 861	13.07	2.04
	Mitsui Kagaku	Miike	446 825	16.46	2.57
	Asahi Kasei	Nobeoka	678 355	24.98	3.91
	total		2.716 021	100.00	15.67
	Grand total		17.335 534		100.00

DECLASSIFIED: E.O. 12958, Sec. 3.5

DATE?

45-11
I.C.

Report On Laboratory

(1) Name: Toyo Soda Kogyo Kabusiki Kaisha.

(2) Location: 4560, Tonda, Tokuyama, Yamaguchi Prefecture.

(3) Owner: Tominosuke Imai (President)

(4) Object: To analyse factory's product, ie. Caustic Soda, Soda Ash, Bromine, Hydrochloric Acid, Sodium Silicate, raw matrials and fuel.

(5) Number of Staff: Nine (9)

(6) Important works done during the period from Jan. 1, 1940 to Sept. 1, 1945.

1 Research works regarding to production of aluminium Hydroxide from Aluminous clinker by Lime Soda process.

2 Analytical works on various kinds of clay with hopes of finding the most suitable kind for extracting aluminium hydroxide (Result of this activity is shown on the list here-to attached)

T. Kakimura

Analysis of clays

Sample	Ignition Loss	SiO_2 %	Al_2O_3 %	Fe_2O_3 %	CaO %	MgO %
Kazahaya Clay No.1						
Hiroshima Pref.		65.68	29.01	4.94		
" No.2		58.82	31.18	7.02		
" No.3		58.30	36.19	3.46		
" No.4	7.50	60.18	27.03	4.47	1.17	1.18
" No.5	11.00	44.90	38.00	3.00	3.17	1.00
Iwanaga Clay No.A						
Mine Yamaguchi Pref.	22.34	28.86	45.56	9.44	0.79	
Kazahaya Clay No.6						
Hiroshima Pref.	12.90	45.29	37.22	4.48	0.14	
Kurayoshi Clay No.1						
Tottori Pref.	10.47	39.94	34.40	7.90	5.28	1.73
" No.2	13.69	37.40	36.01	7.86	4.45	2.12
" No.3	12.90	37.42	35.81	8.40	5.20	1.95
" No.5	9.45	47.45	32.57	7.49	2.72	1.15
Sakakiyama Clay No.1						
Mitsu Hiroshima Pref.	3.34	83.68	9.52	1.28		
" No.2	6.60	70.92	16.76	4.34		
Mixed	4.30	78.92	11.55	2.65		
No.3	9.27	62.81	24.02	3.52	0.68	0.11
No.4	7.66	68.74	20.58	3.28	0.57	0.07
No.5	8.71	65.52	22.84	2.96	0.50	0.14
No.6	8.16	68.48	22.22	2.08	0.42	0.18
Kazahaya Clay No.7						
Hiroshima Pref.	5.73	75.54	13.76	4.24	0.47	0.10
" No.8	7.84	68.86	20.96	3.04	0.45	0.21
" No.9	11.77	51.08	35.00	2.88	0.16	Trace
" No.10	6.69	72.48	21.41	1.40	Trace	"
" No.11	12.51	47.36	37.96	2.14	0.22	"
" No.12	5.97	72.68	19.00	1.56	0.18	"
" No.13	5.68	75.00	16.61	2.59	Trace	0.36
" No.14	5.97	73.04	18.77	2.13	"	0.18
Hiba Clay	9.93	52.84	27.44	5.23	3.30	
Taisen Clay No.1						
Tottori Pref.	14.92	39.04	32.75	7.2	3.82	
" No.2	13.96	40.18	31.20	7.6	4.11	
" No3	15.72	37.60	31.65	7.0	3.17	
" No.4	16.29	40.14	30.25	7.2		
" No.5	16.14	36.50	32.60	7.2		
" No.6	16.48	38.86	31.05	7.8		
" No.7	44.28	35.88	13.25	2.6		

DECLASSIFIED E.O. 12065 SECTION 3 NLJ/RAC NO.

Sample	Ignition Loss	SiO_2 %	Al_2O_3 %	Fe_2O_3 %	CaO %	MgO %
Iwanaga Clay No2 Yamaguchi Pref.	26.20	26.92	39.80	6.20	0.50	1.01
Hirata Clay	4.75	75.86	14.76	2.80		
Iwakuni No.1	5.89	73.64	14.72	4.50		
" No.2						
Shinsho Clay No.1	3.67	68.00	17.52	2.88		
Yamaguchi Pref.	3.21	72.16	11.98	2.67		
" No.2	4.50	72.20	19.85	1.15		
" No.3	9.99	55.56	31.69	2.01		
" No.4						
Kurashiki Clay No.1	10.58	49.74	37.10	2.4	0.41	0.62
Okayama Pref.	9.94	51.00	35.05	3.0	0.56	0.74
" No.2						
Fukugawa Clay Yamaguchi Pref.	10.51	54.50	22.85	7.23		
Yamaguchi Clay No.1	5.51	62.90	20.25	6.51		
Yamaguchi Pref.	8.97	59.76	29.50	1.30		
" No.2	9.90	60.58	26.10	4.30	Trace	
" (burned)					"	
Kawakami Clay No.1	11.70	49.14	36.50	3.6		
Hiroshima Pref.	5.37	71.42	18.42	2.68		
" No.2	10.27	51.69	25.80	8.80		
" No.3	18.51	44.46	30.12	6.38		
" No.4	13.78	50.82	32.21	3.09		
Ino Clay Ube No.1	5.96	61.90	25.25	1.85		
" No.2	8.20	61.06	21.61	8.44		
" NO.3						
Asa Clay No.1	2.08	76.17	15.17	1.85		
Yamaguchi Pref.	5.01	65.16	18.18	5.15		
" No.2						
Ezaki Clay Abu	12.17	45.77	29.39	11.01	0.42	
Yamaguchi Pref.						
Hikawa Clay No.1	11.67	43.37	27.35	15.00	0.21	
Shimane Pref.	12.29	58.00	20.61	4.74		
" No.2	10.96	62.79	18.79	5.66		
" No.3	11.82	59.76	19.97	5.35		
" No.4						

DECLASSIFIED E.O. 12065 SECTION 3 (b)(1)(2) NSC

DATE	SUBJECT	ISSUING HEADQUARTERS & INDORSEMENTS

DECLASSIFIED E.O. 12065 SECTION 3 (E)(2) MISC NO.

DATE	SUBJECT	ISSUING HEADQUARTERS & INDORSEMENTS

DECLASSIFIED - E.O. 12065 SECTION 3 (b)(1) NND

DATE	SUBJECT	ISSUING HEADQUARTERS & INDORSEMENTS

DATE	SUBJECT	ISSUING HEADQUARTERS & INDORSEMENTS
14 NOV. 1945	AUTHORIZATION TO OPERATE (TOYO SODA)	H.Q., 37TH MIL. GOV'T. DETACHMENT, YAMAGUCHI. BASIC
23 OCT. 1946	TOYO SODA KOGYO K.K., AUTHORIZATION TO CONTINUE OPERATION TEMPORARILY.	C.M.G.T. 1ST IND.
19 JUL. 1948	PETITION TO RESUME OPERATIONS	Y.M.G.T. BASIC
3 AUG. 1948	APPLICATION FOR PERMISSION FOR THE USE OF DESIGNATED BUILDING IN THE SOLVAY PLANT.	TOYO SODA MFG. CO. LTD. TONDA PLANT. BASIC.
7 SEP. 1948	PETITION TO RESUME OPERATIONS	C.M.G.T. 3RD IND.
2 FEB. 1949	PETITION ON BEHALF OF AMMONIA-PROCESS SODA ASH PLANT OF TOYO SODA MFG. CO.	TOYO SODA TRADE UNION BASIC
- FEB. 1949	PETITION FOR A SPECIAL CONSIDERATION TO BE GIVEN TO THE CAUSE OF THE PREFECTURE'S	GOVERNOR, YAMAGUCHI PREF. BASIC
	ADMINISTRATION AND ITS INDUSTRIES. (UBE, TOKUYAMA & TOYO SODA PLANT) - TO E.S.S., G.H.Q.	
22 MAR. 1949	PETITION ON BEHALF OF TOYO SODA AMMONIA-PROCESS SODA ASH PLANT.	TOYO SODA MFG. CO. LTD. BASIC
4 MAY. 1949	LETTER TOY.M.G.T.	" " " "
24 MAY. 1949	PETITION FOR AUTHORIZATION TO OPERATE SODA ASH PLANT OF TOYO SODA MFG. CO.	" " " "
31 MAY. 1949	REQUEST FOR RESUMPTION OF OPERATION OF THE SOLVAY PLANT OF TOYO SODA INDUSTRY COMPANY	" " " "
3 JAN. 1950	RECONVERSION PERMIT FOR REPARATIONS PLANT	G.H.Q., SCAP. BASIC.
25 Jan. 1950	Reparations Data	Tonda Plant, Toyo Soda Kogyo K.K.
8 Feb. 1950	Report on Use of Reparations Installations	Toyo Soda Kogyo Kabushikikaisha
April 1950	Products Manufactured and General Information about Company	Toyo Soda Mfg. Co. Ltd.
26 Feb. 51	Application for Conversion of Designated Reparations Plants to Increase Authorized Quantity of Production	Toyo Soda Mfg. Co., Ltd.
26 Feb. 51	Application for Conversion of Designated Reparations Plant	Toyo Soda Mfg. Co., Ltd.

II

II.- USE OF INSTALLATION AND/OR EQUIPMENT.

Brine

HEAD OFFICE & FACTORY.
4560 TONDA-CHO,
YAMAGUCHI-KEN,
JAPAN.

TOYO SODA MFG. COMPANY, LTD.

TOKYO BRANCH.
SAKURADA-KAN, 2-CHOME, SHIBA,
TAMURA-CHO, MINATO-KU,
OSAKA BRANCH.
NISSAN SEIMEI-KAN, KITAHAMA,
HIGASHI-KU, OSAKA.

26 February 1951

TO: Governor,
Yamaguchi Prefecture.

FROM: Nobuyoshi Yamaguchi,
Managing Director,
Toyo Soda Kogyo K.K.
Address: 4560 Tonda-cho, Tsuno-gun, Yamaguchi-ken.

Subject:- Application for Conversion of Designated Reparations Plant.

Sir,

Attached herewith is an application for permission to convert a part of designated reparations equipment which had been authorized to use. The application is submitted in accordance with provisions of SHOKO-No.208 and 25-KI-No.5644 and we beg for your kind consideration and approval.

Respectfully yours,

NOBUYOSHI YAMAGUCHI,
Managing Director,
Toyo Soda Kogyo K.K.

Incls:
1 Application for Conversion of Designated Reparations Plant
2 Copy of Reconversion Permit for Tonda Plant 45-16.
3 Copy of Authorization to Continue Operation of Tonda Plant 45-11.
4 Copy of Permit for Making Repair and Improvements on Vacuum Evaporators.

MANUFACTURING AND INDUSTRY
FILE 45-11
Sec II

DECLASSIFIED - NOT RESTRICTED

HEAD OFFICE & FACTORY.
4560 TONDA-CHO,
YAMAGUCHI-KEN,
JAPAN.

TOYO SODA MFG. COMPANY, LTD.

TOKYO BRANCH,
SAKURADA-KAN, 2-CHOME, SHIBA,
TAMURA-CHO, MINATO-KU,
OSAKA BRANCH,
NISSAN SEIMEI-KAN, KITAHAMA,
HIGASHI-KU, OSAKA.

26 February 1951

TO: Minister,
International Trade and Industry.

FROM: Keisuke Sadanaga, President,
Toyo Soda Kogyo K.K.
Address: 4560 Tonda-cho, Tsuno-gun, Yamaguchi-ken.

Subject:- Application for Conversion of Designated Reparations Plant.

1. Name of Plant(Code No.)

Japanese: Tonda Kojo, Toyo Soda Kogyo K.K.

English: Tonda Plant, Toyo Soda Manufacturing Co.,Ltd.

Code No. 45-16

2. Location of Plant:

4560 Tonda-cho, Tsuno-gun, Yamaguchi-ken.

3. Category:

Chemical Division(Soda Ash)

4. Name of Item Whose Production is Planned:

Item		Quantity
Brine(4.5° Bè)	Presently	0
Brine(4.5° Bè)	Planned	30,000 cubic metres (Sodium Chloride content 1,350 MT)

Notes:

1) Manufacturing Process of Brine.

Sea water preheated in the Solvay process plant is conducted into a vacuum evaporator to be condensed by evaporating water by exhaust steam from the thermal power plant of the Solvay process unit to produce Brine 4.5° Bè.

2) Duration for Which Production Planned.

From Date of Authorization till reparations removal.

5. Additonal Reparations Items Needed for the Above Production:

None

Remarks: Reparations items to be used for the conversion are part of the vacuum evaporators located within the Plant 45-16 which had been granted Reconversion Permit dated 3 January 1950.

6. Necessity for Conversion:

1) To raise the ratio of yield to per ton of salt of Soda Ash, Caustic Soda and their by-products by using the brine so produced in dissolving crude salt for the Solvay unit(45-16) and the Electrolytic unit(45-11) instead of untreated sea water or fresh water.

2) To increase production of various affiliated items through increased generation of power which will be made possible by utilizing the exhaust steam of the back-pressure thermal power installations of the Soda Ash plant(45-16). Approximately 1,200,000 KWH of power at maximum will be generated when the exhaust steam of the thermal power plant of the plant 45-16 is used to produce the brine.

Notes:

1) Effects of the Conversion on Production of the Other Authorized Items:

There will be no adverse effect on the operative capacity of the facilities for the authorized item, Caustic Soda.

The Caustic Soda production capacity of the Solvay process plant of Toyo Soda(Plant 45-16) at the time of its reconversion authorization was:

	Caustic Soda
Designed Capacity	320 MT per day
Actual Capacity	175 MT per day

Since then, however, repairs and improvements on 21 vacuum

evaporators having been made with authorization granted by Hq. Chugoku Civil Affairs Region under date 29 Dec. 1950, the use of a part of vacuum evaporators sets for production of brine up to the quantity requested herewith will not interfere with the production of the authorized quantity of Caustic Soda at Toyo Soda.

2) Experiences in the Production of Brine:

Toyo Soda had been producing brine using vacuum evaporators and there is no uncertainity with regard to their technical ability. Records of brine production at Toyo Soda show:

Month/Year	Production (as NaCl) (MT)
Sept. 1945	77.820
Oct. "	277.045
Nov. "	59.934
Mar. 1946	278.652
Apr. "	131.479
May "	125.173
June "	16.743
July "	138.517
Aug. "	219.581
Sept. "	(Discontinued)

3) Raw Materials Required for Brine Production:

The chief raw materials required for the brine production are sea water and coal for boilers for steam generation and allocations of either of them are not necessary. Toyo Soda has abundant coal supply sorces close to the plant at Ube, Yamaguchi Prefecture, where coal can be obtained at comparatively lower cost. Thermal power installations at Toyo Soda plant are, moreover, equipped with special appliances to burn low-calorie coal for boilers.

For President, Toyo Soda Kogyo K.K.

NOBUYOSHI YAMAGUCHI,
Managing Director,
Toyo Soda Kogyo K.K.

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

3 January 1950

387.6(3 Jan 50) ESS/IND

INFORMAL MEMORANDUM FOR: Reparations Agency, Tokyo.

SUBJECT : Transmittal of Reconversion Permit.

1. Reference is R.B.R.No.68(MS), dated 6 October 1949, subject: Supplementary Reconversion Application of the Tonda Plant, Toyo Soda Kogyo K.K.(45-16).

2. The attached Reconversion Permit for the Tonda Plant, Toyo Soda Kogyo K.K. is transmitted for your action.

3. 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 ACIENTIFIC SECTION:

MAURICE M. GLASS
Chief, Industry Division.

1 incl: Reconversion Permit.

C O P Y

DECLASSIFIED E.O. 12065 SECTION 3 402/NARS NSC

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

3 January 1950

SUBJECT: Reconversion Permit for Reparations Plant.

TO : Toyo Soda Kogyo K.K.

1. In accordance with Memorandum from the Supreme Commander for the Allied Powers to the Japanese Government, dated 22 November 1946(SCAP IN-1355), the Toyo Soda Kogyo K.K. is permitted to produce at their Tonda Factory located at 4560 Tonda, Tokuyama-shi, Yamaguchi the following items:

	Item	Maximum Quantity
1.	Crude Soda Ash	310 MT per day
2.	Soda Ash	100 MT per day
3.	Caustic Soda	175 MT per day

(Nothing Follows)

2. The temporary use of the following additional reparations machinery is authorized:

See attached list of 876 items.

3. A program will be immediately initiated to substitute non-reparations machinery for reparations machinery in temporary use.

4. The acquisition of material, parts and sub-assemblies as well as the disposition of finished products and the establishment of sales prices will be in accordance with the regulations of the Japanese Government.

5. 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 by current directives and instructions.

FOR THE CHIEF, ECONOMIC AND SCIENTIFIC SECTION:

MAURICE M. GLASS
Chief, Industry Division

U O Y X

DECLASSIFIED E.O. 12065 SECTION 3 NLE, Date 6-5-81

HEADQUARTERS EIGHTH ARMY
United States Army
Office of the Commanding General
APO 343

19 Oct. 1946

AG 004.04(MG)

SUBJECT: Toyo Soda Kogyo K.K., Authorization to continue operation temporarily.

TO: Commanding Officer, Chugoku Military Government Region, APO 317

1. Reference is made to the telephone conversation Captain Valentine, this Headquarters, and Major Mance, Chugoku Military Government Region.

2. The Japanese Government has issued orders to the Toyo Soda Kogyo K.K., Tokuyama, Yamaguchi-ken, to close their plant 20 October 1946.

3. It is authorized that this installation be permitted to continue its present operation and production temporarily for the production of consumer goods until such time as instructions are issued by this Headquarters for its complete shut down.

BY COMMAND OF LIEUTENANT GENERAL EICHELBERGER:

/s/ R. Schafer
R. SCHAFER
Lt. Col., AGD
Asst. Adjutant General

COPY

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

HEADQUARTERS
CHUGOKU CIVIL AFFAIRS REGION
APO 182

D/RPT/ ftk

29 December 1950

CCAR 386.3

MEMORANDUM FOR: Hiroshima International Trade and Industry Bureau

THROUGH : Chugoku Liaison and Coordination Office

SUBJECT : Repair of Reparations Equipment

1. Reference is application of Toyo Soda Manufacturing Company,Ltd., subject: "Application for Permission to Make Repairs and Improvements on Reparations Equipment", 11 December 1950 as transmitted by letter Hiroshima International Trade and Industry Bureau, 26 December 1950.

2. Approval is granted for repair and improvement of reparations equipment specified in referenced application.

3. All costs incidental to specified repair will be borne by the applicant and will not be charged to any reparations account.

FOR THE CHIEF:

WILLIAM M. KLAHR
Lt Col. FA
Deputy Chief

COPY

DECLASSIFIED E.O. 12065 Section 3 (b)(1) NND 760

Application for Permission to Make Repairs and Improvements on Designated Equipment at Reparations Plant

11 December 1950

1. Name of Designated Plant: Tonda Kojo, Toyo Soda Kogyo K.K.
(Tonda Plant, Toyo Soda Mfg. Co.,Ltd.)
Plant Code No.45-16.

2. Location of Plant: 4560 Tonda-cho,Tsuno-gun,Yamaguchi-Ken.

3. Equipment Whose Repairs and Improvements are Desired:

a) Nomenclature: Evaporator, Vacuum

b) Designed capacity of each: Each set of 3 evaporators- 25 MT per day

d) No.of evaporators involved: 1-A-9-1-No.7
1-A-9-1-No.13
from 1-A-9-1-No.17 thru No.27
1-A-9-1-No.33
1-A-9-1-No.35
from 1-A-9-1-No.56 thru No.61 Total 21

4. Details of Repairs and Improvements Projected:

a) Worn-out parts of 6 evaporators(1-A-9-1-Nos.56-61) are to be replaced with corresponding and better parts of the evaporators Nos.2,6,8,12,16 and 30 in order to restore the efficiency of the six above listed evaporators.

b) Heating tubes and their accessories of the above listed 21 evaporators are to be replaced and refitted.

c) The six evaporators Nos.7,13,17,18,33 and 35 are to be made into two sets after each of them completely refitted.

5. Reasons Why Repairs and Improvements are Projected:

The projected repairs and improvements are expected to bring about the following:-

a) To cut down steam consumption required for evaporation of caustic soda liquid and to lower the production cost, and

b) To restore fully the designed capacity of 7 sets of triple-effect evaporators.

6. All the expenses incidental to the above repairs and improvements shall be borne by the applicant.

COPY

苛性曹打 1件
Caustic Soda

HEAD OFFICE & FACTORY.
4560 TONDA-CHO,
YAMAGUCHI-KEN.
JAPAN.

TOYO SODA MFG. COMPANY, LTD.

TOKYO BRANCH.
SAKURADA-KAN, 2-CHOME, SHIBA,
TAMURA-CHO, MINATO-KU,
OSAKA BRANCH.
NISSAN SEIMEI-KAN, KITAHAMA,
HIGASHI-KU, OSAKA.

26 February 1951

TO: Governor,
Yamaguchi Prefecture.

FROM: Nobuyoshi Yamaguchi,
Managing Director,
Toyo Soda Kogyo K.K.
Address: 4560 Tonda-cho, Tsuno-gun, Yamaguchi-ken.

Subject:- Application for Conversion of Designated Reparations Plant to Increase Authorized Quantity of Production.

Sir,

Attached herewith is our application for conversion of designated reparations plant to increase authorized quantity of production. Installation of additional 64 electrolytic cells to our electrolytic caustic soda plant(Code No.45-11) is desired in order to increase the output of the plant. The application is submitted in accordance with provisions of SHOKO-No.208 and 25-KI-No.5644 and we beg for your kind consideration and approval.

Respectfully yours,

NOBUYOSHI YAMAGUCHI,
Managing Director,
Toyo Soda Kogyo K.K.

Incls:
1 Application for Conversion of Designated Reparations Plant
2 Copy of Authorization to Continue Operation of Tonda Plant 45-11
3 Copy of Reconversion Permit for Tonda Plant 45-16
4 Copy of Permit for Repair and Improvement of 2 Turbines
5 Copy of Permit for Repair and Improvement of Vacuum Evaporators

MANUFACTURES AND INDUSTRY
FILE 45-11
Sec II

DECLASSIFIED E.O. 12065 SECTION 3 (E)(1)(D) NLE

HEAD OFFICE & FACTORY.
4560 TONDA-CHO,
YAMAGUCHI-KEN,
JAPAN.

TOYO SODA MFG. COMPANY, LTD.

TOKYO BRANCH,
SAKURADA-KAN, 2-CHOME, SHIBA,
TAMURA-CHO, MINATO-KU,
OSAKA BRANCH,
NISSAN SEIMEI-KAN, KITAHAMA,
HIGASHI-KU, OSAKA.

26 February 1951

TO: Minister,
International Trade and Industry.

FROM: Keisuke Sadanaga, President,
Toyo Soda Kogyo K.K.
Address: 4560 Tonda-cho, Tsuno-gun, Yamaguchi-ken.

Subject:- Application for Conversion of Designated Reparations Plant.

1. Name of Plant(Code No.):

Japanese: Tonda Kojo, Toyo Soda Kogyo K.K.

English: Tonda Plant, Toyo Soda Manufacturing Co.,Ltd.

Code No: 45-11

2. Location of Plant:

4560 Tonda-cho, Tsuno-gun, Yamaguchi-ken.

3. Category:

Chemical Division(Caustic Soda)

4. Name and Quantity of Item Whose Production is planned:

Item		Monthly Production (MT)
Caustic Soda	Presently	416(Max. Capacity 540)
Caustic Soda	Planned	624(Max. Capacity 810)

5. Additional Reparations Items Needed for the Above Production:

None

Remarks: Following equipment are to be used for the above planned production:-

1) All the equipment and facilities of the Electrolytic Caustic Soda Plant (45-11) which are presently under authorized use.

DECLASSIFIED E.O. 12065 SECTION 3 (b), MAR 83

2) Sixty-four(64) additional electrolytic cells, which are to be installed at the expenses of the applicant and the non-reparations equipment for the manufacture of Chlorine derivatives.

6. Necessity for Conversion(Increasing the Quantity of Output):

1) Increased demands for Caustic Soda, Chlorine and Chlorine Derivatives in the Chugoku Area and existing deficiency of supply.

Generally reactivated chemical industries in Japan calls for an increased supply of soda products and chlorine. Particularly true is the situation in the Chugoku area, where there are numerous rayon plants which are stepping up their production and plans for large-scale increased production of pulp. Against this actual and anticipated demands there are only two electrolytic caustic soda plants, including Toyo Soda, able to supply chlorine and various chlorine derivatives. There is no plant at present in the area producing liquid chlorine required for disifecting service water. Expansion of Electrolytic plant of Toyo Soda to raise its production level, therefore, is strongly desired by the consumers.

2) Toyo Soda's strength to meet short-supplies of raw materials, particularly salt and power.

Since Toyo Soda operates their electrolytic plant in conjunction with a Solvay-process plant they are in position to utilize a part of idle equipment of their Solvay-process unit(45-16) to produce the raw material, sodium chloride, for their electrolytic unit when authorized to do so.

DECLASSIFIED E.O. 12065 SECTION 3 (E)(1)(D) NO. [illegible]

For instance, the Solvay-process unit of Toyo Soda is equipped with 9 Babcock & Wilcox Boilers(evaporation 245 MT per hour each), 8 power generators(including back-pressure turbo-generators 32,000 KW and bleeding condensing turbo-generators 2,200 KW) and 61 vacuum evaporators(caustic soda condensing capacity 320 MT a day each). At present only about 30 per cent of these equipment are being operated.

When a situation wherein it is difficult to obtain the chief raw materials, salt and power, arises in future Toyo Soda is able to undertake self-supply of these items by utilizing now idle equipment of their Solvay unit. About 600 tons of Sodium Chloride(equivalent to 360 tons of Caustic Soda) per month can be produced in this way. Concurrently 1,200,000 KWH of power will be generated in the manufacturing process. Furthermore, the equipment of the Solvay process unit of Toyo Soda are well maintained in accordance with the maintenance directives of the Japanese Government(Shko-Honbu Shorei No.1) and ,therefore, readily available for operation.

3) Materials required for enlarging the capacity of the electrolytic plant by 50 per cent are readily available to the plant.

For the expansion of their electrolytic plant, Toyo Soda needs to procure 64 electrolytic cells and equipment for manufacture of chlorine derivatives only. These materials are easily procurable domestically and no official allocations are required. Part of the required materials

DECLASSIFIED E.O. 12065 SECTION 3 (E)(5) MAR 1978

can be drawn from the company's own stockpiles. Electric equipment, transformers, converters etc. which are difficult to procure within the country readily and involving considerable outlays of capital are not required for the 64 additional cells to be installed for the existing equipment at the plant are able to take care of them.

Notes:

1) 2 turbo-generators, 1,500 KW each, were made into bleeding and condensing type of 2,200 KW each. (Repair and improvement for this purpose were authorized by Hq. Chugoku Civil Affairs Region under date of 21 Jan. 1950 and 13 April 1950)

2) 21 vacuum evaporators have been repaired and improved with permission granted by Hq. Chugoku Civil Affairs Region dated 29 December 1950.

7. All the expenses incidental to the installation of 64 additional cells shall be borne by the applicant.

8. No list of reparations items is attached herewith since use of additional reparations equipment is not necessary.

For President, Toyo Soda Kogyo K.K.

NOBUYOSHI YAMAGUCHI,
Managing Director,
Toyo Soda Kogyo K.K.

DECLASSIFIED E.O. 11652 SECTION 3 NLJ/NND 63

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

5 January 1950

SUBJECT: Reconversion Permit for Reparations Plant.

TO : Toyo Soda Kogyo K.K.

1. In accordance with Memorandum from the Supreme Commander for the Allied Powers to the Japanese Government, dated 22 November 1946(SCAPIN-1385), the Toyo Soda Kogyo K.K. is permitted to produce at their Tonda Factory located at 4560 Tonda,Tokuyama-shi, Yamaguchi the following items:

	Item	Maximum Quantity
1.	Crude Soda Ash	310 MT per day
2.	Soda Ash	100 MT per day
3.	Caustic Soda	175 MT per day

(Nothing Follows)

2. The temporary use of the following additional reparations machinery is authorized:

See attached list of 576 items.

3. A program will be immediately initiated to substitute non-reparations machinery for reparations machinery in temporary use.

4. The acquisition of material, parts and sub-assemblies as well as the disposition of finished products and the establishment of sales prices will be in accordance with the regulations of the Japanese Government.

5. 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 by current directives and instructions.

FOR THE CHIEF, ECONOMIC AND SCIENTIFIC SECTION:

MAURICE N. GLASS
Chief, Industry Division

C O P Y

DECLASSIFIED E.O. 12065 SECTION 3 (E)(2) NARS DATE

HEADQUARTERS EIGHTH ARMY
United States Army
Office of the Commanding General
APO 343

19 Oct. 1946

AG 004.04(MG)

SUBJECT: Toyo Soda Kogyo K.K., Authorization to continue operation temporarily.

TO : Commanding Officer, Chugoku Military Government Region, APO 317

1. Reference is made to the telephone conversation Captain Valentine, this Headquarters, and Major Nance, Chugoku Military Government Region.

2. The Japanese Government has issued orders to the Toyo Soda Kogyo K.K., Tokuyama, Yamaguchi-ken, to close their plant 20 October 1946.

3. It is authorized that this installation be permitted to continue its present operation and production temporarily for the production of consumer goods until such time as instructions are issued by this Headquarters for its complete shut down.

BY COMMAND OF LIEUTENANT GENERAL EICHELBERGER:

/s/ R. Schafer

/t/ R. SCHAFER
Lt. Col., AGD
Asst. Adjutant General

C O P Y

HEADQUARTERS
CHUGOKU CIVIL AFFAIRS REGION
APO 248 (Kure, Honshu)

CCAR 386.3

13 April 1950

MEMORANDUM FOR: Governor, Yamaguchi Prefecture

THROUGH: Chugoku Liaison and Coordination Office

SUBJECT: Repair of Reparations Equipment

1. Reference is inclosed application of Toyo Soda Manufacturing Compant Ltd. 1 April 1950, subject: "Application for Permission for Making Repairs and Improvements on Equipment in Designated Plant."

2. Approval is granted for the repair of one turbine(111-A-2-4) as specified in referenced application. However, all cost of transportation to and from Mitsubishi Jukogyo K.K., Hiroshima City and all cost incidental to repair will be borne by the applicant and will not be charged to any reparations account.

FRANK KOWALSKI, JR
Colonel, Inf
Chief

1 Incl
As indicated

HEADQUARTERS
CHUGOKU CIVIL AFFAIRS REGION
APO 182

D/ECT/ ftk

29 December 1950

CGAR 336.3

MEMORANDUM FOR: Hiroshima International Trade and Industry Bureau

THROUGH : Chugoku Liaison and Coordination Office

SUBJECT : Repair of Reparations Equipment

1. Reference is application of Toyo Soda Manufacturing Company, Ltd., subject: "Application for Permission to Make Repairs and Improvements on Reparations Equipment", 11 December 1950 as transmitted by letter Hiroshima International Trade and Industry Bureau, 26 December 1950.

2. Approval is granted for repair and improvement of reparations equipment specified in referenced application.

3. All costs incidental to specified repair will be borne by the applicant and will not be charged to any reparations account.

FOR THE CHIEF:

WILLIAM M. PEACE
Lt Col. FA
Deputy Chief

X 7 3 2

DECLASSIFIED E.O. 12065 SECRET Restrictions

Application for Permission to Make Repairs and
Improvements on Designated Equipment
at Reparations Plant

11 December 1950

1. Name of Designated Plant: Tonda Kojo, Toyo Soda Kogyo K.K.
(Tonda Plant, Toyo Soda Mfg. Co.,Ltd.)
Plant Code No.46-16.

2. Location of Plant: 4560 Tonda-cho,Tsuno-gun,Yamaguchi-ken.

3. Equipment Whose Repairs and Improvements are Desired:

a) Nomenclature: Evaporator, Vacuum

b) Designed capacity of each: Each set of 3 evaporators- 25 MT per day

d) No.of evaporators involves: 1-A-9-1-No.7
1-A-9-1-No.13
from 1-A-9-1-No.17 thru No.27
1-A-9-1-No.33
1-A-9-1-No.35
from 1-A-9-1-No.56 thru No.61 Total 21

4. Details of Repairs and Improvements Projected:

a) Worn-out parts of 6 evaporators(1-A-9-1-Nos.56-61) are to be replaced with corresponding new better parts of the evaporators Nos.2,6,8,12,16 and 30 in order to restore the efficiency of the six above listed evaporators.

b) Heating tubes and their accessories of the above listed 21 evaporators are to be replaced and refitted.

c) The six evaporators Nos.7,13,17,18,33 and 35 are to be made into two sets after each of them completely refitted.

5. Reasons Why Repairs and Improvements are Projected:

The projected repairs and improvements are expected to bring about the following:-

a) To cut down steam consumption required for evaporation of caustic soda liquid and to lower the production cost, and

b) To restore fully the designed capacity of 7 sets of triple-effect evaporators.

6. All the expenses incidental to the above repairs and improvements shall be borne by the applicant.

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DECLASSIFIED E.O. 12065 SECTION 3 (E)(1)(D) NND 760030

File Toyo Soda Mfg Co. Yamaguchi Pref.
Subj: Products manufactured and General Information about Co.
45-11 Sec. II

C O N T E N T S

		Page
1.	Plant Facilities and Production Capacities----------	1.
2.	Table Showing Actual and Planned Output of Various Products of Toyo Soda ----------	2.
3.	Power Allocation to Toyo Soda Plant ----------	3.
4.	Employment Situation ----------	4.
	Number of employed Average pay Working hours Rate of worker's turnout for work Classification of Workers by age group	
5.	Labor Union of Toyo Soda----------	5.
6.	Miscellaneous Information ----------	6.

April 1950

Toyo Soda Manufacturing Company Ltd.
Tonda-cho, Yamaguchi-Ken

Founded February 11, 1935
Capital Yen 60,000,000.

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

1. Plant Facilities and Production Capacites:

Product		Capacity (ton per month)
Solvay process:		
Crude ash	Designed	16,800
	Authorized	9,300
Soda ash	Designed	7,500
	Authorized	3,000
Caustic Soda	Designed	9,600
	Authorized	5,250
Electrolytic process:		
Caustic soda		390
Hydrochloric acid		810
Chlorsulphonic acid		90
Sodium silicate		1,236
Zine chloride		30
Bromine		60
Ethyl bromide		8
Methyl chloride		1
Benzyl chloride		6
B.H.C.		5
Bleaching powder		108
Phenyl acetate		2

DECLASSIFIED E.O. 12065 SECTION 3 (b), NARS DATE

Table Showing Actual/Planned Output of Various Products
Toyo Soda Manufacturing Co., Ltd.

Products	January '50 (ton)	February (ton)	March (ton)	April (ton)
Solvay process				
Crude soda	-	-	-	-
Electrolytic				
Caustic soda	168,900	208.900	172.200	270.000
Hydrochloric acid	342,132	518.471	521.003	540,000
Bleaching powder	25.000	25.500	29,800	50.000
Chlorsulphonic scid	37.000	40.300	35.400	60.000
Ethyl bromide	1.000	3.000	-	5.000
Bromine	3.000	3.000	11.500	10.000
Sodium silicate	150.000	180.460	-	-
B.H.C.	2.700	2.500	2.570	4.000
Phenyl acetate	0.900	1.000	1.015	1.300
Benzyl chloride	1.800	2.200	2.320	3.000
Zinc scetate	0.900	1.000	1.015	1.300
Benzyl chloride	1.800	2.200	2.320	3.000
Zinc chloride	5.500	-	-	-

Power Allocation to Toyo Soda Plant Jan- Apr. '50

January	February	March	April
875,000 KWH	880,000 KWH	1,156,000 KWH	1,466,000 KWH
# 117,285 KWH	#104,000 KWH	# 42,000 KWH	# 19,000 KWH
		# 61,122 KWH	# 133,686 KWH
	224,300 KWH (Self-supply)	272,449 KWH (Self-supplt)	-

Notes: # Special or additional allocation

(Self-supply) - power generated by the plant own power plant.

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II. Employment Situation:

1. Number of workers employed ---------- 1,113

Composed of ---------- Male 1,032
Female 81

(No. of workers includes 45 employed at Tokyo office and 26 at Osaka office).

2. Average pay:

Average monthly basic pay for Mar. 1950 ----- 10,099 Yen

Extra basic pay for March 1950 ---------- 2,049 Yen

Basic pay includes allowances for dependent family, ages, efficiency and continued service, and computed on the following bases:

Efficiency pay	51%
Age	32.9%
Continued service	3.7%
Family depedents	11.9%
	100%

Minimum pay for March 1950 4,500 Yen

Maximum pay for March 1950 24,168 Yen

3. Working hours:

7 hours a day excluding 1 hour of rest at lunch time and rest periods.

4. Rate of worker's turnout for work: 97.9%

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5. Classification of workers by age group:

Age group	Sex	Number	Total
20 & below	M	114	
	F	25	139
21 -25	M	242	
	F	33	275
26 - 30	M	173	
	F	6	179
31 - 35	M	162	
	F	3	165
36 - 40	M	155	
	F	2	157
41 - 45	M	110	
	F	6	116
46 - 50	M	51	
	F	4	55
50 & Over	M	25	
	F	2	27

III. Labor Union of Toyo Soda:

1. Formed on Feb. 20, 1946.

2. Affilication Independent and no affiliation politically.

3. Labor contract: Concluded on Jan. 26, 1948 to expire on Aug. 26, 1950.

Labor Union of Toyo Soda, which follows the open shop system, is a moderate org nization. There is no dispute pending between the Union and the management.

DECLASSIFIED - E.O. 11652 - SECTION 3 (E)(1)(D) and 5(C)(3)

IV. Miscellaneous Information on Toyo Soda Plant:

1. Plant occupies a site of 350,000Tsubo or approximately 234 acres including the sea bottom to be reclaimed. The plant buildings occupies 20,000 Tsubo or about 13 acres.

2. Ammonia-soda process plant:

The plant was reopened on April 1, 1950 after four years of idleness. Authorization to resume the plant operation was granted on Jan. 3, 1950 (387.6 E.S.S./Ind)

Finished Caustic Soda is scheduled to come out May 7, and Soda Ash May 17.

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

Report on Use of Reparations Installations

Name of plant: Tonda Kojo, Toyo Soda Kogyo Kabushikikaisha

Cord No. : 45 - 11 / 45 - 16 SEC II

Address : Tonda-cho, Tsuno-gun

Date : Feb. 8, 1950

1. Copy of conversion or reconversion permit

As shown in the attached sheet.

2. List of items inactual production

Caustic soda Bleaching powder Hydrochloric acid
Zin Chloride

3. A copy of application, giving date of submission, if an application for a new or change of present conversion or reconversion permit is pending approval from the Supreme Commander for the Allied Powers.

None

4. List, by code number and name, of reparations items in authorized use, giving date and issuing headquarters of letter of authorization.

All the reparations items of this plant are in authorized use. (See the attached sheet)

5. List, by code number and name, of reparations items in use without permission for authorized use.

None

6. List, by code number and name, of reparations items on application for authorized use permission, giving date of submission of application to the Supreme Commander for the Allied Powers.

None

DECLASSIFIED E.O. 12065 SECTION 3 (E)(4)(B) or (D)

C O P Y

HEADQUARTERS EIGHTH ARMY
United States Army
Office of the Commanding General
APO 343

19 Oct 1946

AG 004.04 (MG)

SUBJECT: Toyo Soda Kogyo K.K., authorization to continue operation temporarily.

TO: Commanding Officer, Chugoku Military Government Region, APO 317

1. Reference is made to the telephone conversation Captain Valentine, this Headquarters and Major Nance, Chugoku Military Government Region.

2. The Japanese Government has issued orders to the Toyo Soda Kogyo K.K., Tokuyama, Yamaguchi-Ken, to close their plant 20 October 1946.

3. It is authorized that this installation be permitted to continue its present operation and production temporarily for the production of consumer goods until such time as instructions are issued by this headquarters for its complete shut down.

BY COMMAND OF LIEUTENANT GENERAL EICHELBERGER:

/s/ R. Schafer
/t/ R. SCHAFER
Lt. Col., AGD
Asst. Adjutant General

C O P Y

DECLASSIFIED E.O. 12065 SECTION 3 102/MRS NO.

COPY

Application to Convert or Reconvert A Plant
(A Designated Reparations Plant)

TO: Commander Eighth Army

FROM: G. Hashimoto, P.P. Toyo Soda
Kogyo Kaisha, Ltd. 4560 Tonda,
Tokuyama, Yamaguchi-ken

March 19th 1947

(1) Name of plant : Toyo Soda Kogyo Kaisha, Ltd.
(2) Location of Plant: 4560 Tonda, Tokuyama, Yamaguchi-ken.
(A former Caustic Soda Finishing Section of the Solvay process Soda Ash plant)
(3) Name of product planned: Zinc Chloride
(4) Experience of the production planned: Indirectly experienced through an coperating company.

(5) 1939 - 1945 production:
This particular building is one of the four Caustic Soda Finishing Sections of the Solvay Process Soda Ash Plant, and has never been used since 1942. The total production of Caustic Soda of the whole Solvay plant to shown below:

1939	76,913	tons	1943	16,880	tons
1940	73,943	"	1944	2,000	"
1941	51,512	"	1945	0	
1942	20,444	"			

(6) Scale of production planned by month for period on this application:
25 tons per month.
(7) Period of desired permission.

(8) Plan and location to continue the production after reparations removal:
To continue on the same spot, replancing a new building over the zinc chloride equipment, in case the present building was removed.
(9) Scale of proposed changes in physical facilities:
None except removal of remains of completely tirnout hearthes. The Caustic Soda Finishing Pots hnd been removed elsewhere in and immedeately after 1942.
(10) Intended expense for conversion or reconversion:
¥213,000.

DECLASSIFIED E.O. 11652 SECTION 3 (E)(1) MAR 6 1973

(11) Name or location to which product is to be delivered:
Pattery manufactures, Textile mills. Activated
Carbon manufactures, zinc gilders, etc. in Osaka
Kobe, Kyoto, Nagoya, Tokyo, Otaru, Fukuoka etc.

Signed C. Hashimoto
Managing Director,
Toyo Soda Kogyo
Kaisha, Ltd.

---

29 Mar. 47

Authorization is granted for manufacture of above named product, and for use of above listed bldg. Auth: Verbal orders Chugoku MG HQ 8th Army.

Signed Francis L. Justice,
Major, CE

DECLASSIFIED E.O. 11652 SECTION 3 (E)(1) NND 963

TOYO SODA MANUFACTURING CO. LTD.
TONDA, TOKUYAMA SHI

July 22, 1948.

Major Frederick C. Wiggins,
Commerce and Industry Section,
Yamaguchi Mil. Gov't Team.

Subject: - Operation of the Remaining 32 Cells of Toyo Soda Electrolytic Caustic Soda Plant

Sir,

We beg to request for your kind approval to fit up and to resume operation of the last remaining 32 cells of our electrolytic caustic soda plant. Toyo Soda electrolytic plant is currently operated with 96 working cells, and with the remaining 32 cells brought into operation, the plant will have 128 cells working to produce caustic soda.

You are already well aware, sir, that these 32 cells have been under preparation for resuming operation for some time. We need your written approval for the operation of the 32 cells now in order to apply for a Government loan to meet some expensitures required to complete the work of fitting up the cells for working. The loan will be obtainable from the Reconstruction Finance Fund of the Japanese Government upon your approval.

We shall indeed be much obliged to you, sir, for your kind consideration of our humble request, we remain, sir.

Yours most respectfully,

Jinzo Furuuchi,
Director i/c Gen. Affrs.
Toyo Soda Mfg. Co. Ltd.

July 23, 1948
Approved

F.C. Wiggins (Signed)
Major, CMD
RC & S Officer

DECLASSIFIED E.O. 11652 SECTION 3 (E)(1)(2)(3) or (4)

TOYO SODA MANUFACTURING CO. LTD.
TONDA, TOKUYAMA-SHI

August 3, 1948

Major Frederick C. Wiggins,
Commerce and Industry Section,
Yamaguchi Mil. Gov'nt Team.

Subject:- Application for Permission for the Use of Designated Building in the Solvay Plant.

Sir,

We beg to request your permisson for utilizing by us the unused portion ofthe undermentioned building located in our Solvay soda plant for the manufacture of bleaching powder.

The building, which is one of the four structures formerly used for caustic soda finishing processes and marked for reparations, is at present partly used by us for the manufacture of zinc chloride by virtue of authorization granted by the Yamaguchi Military Gov'nt Authorities under date Mar. 29, 1947. Only one-half of the building is being used for the zinc chloride manufacture with the other half remaining unused. We wish to utilize this romaining one-half portion of the structure for bleaching powder manufacture.

We are being motivated to undertake the bleaching powder making to find a way out to diminish damage to rice plants in the paddy fields in the immediate neighbourhood of our electrolytic plant by chlorine gas produced by it during the caustic soda manufacturing processes. The bulk of the gas will be utilized and absorbed in the manufacture of bleaching powder, and we expect that the chlorine gas damage to the rice plants would be greatly diminished, if not climinated completely. The company has been receiving complaints from affected farmers regarding the chlorine gas damage. We are planning to produce 78 tons of bleaching powder a month when authorized.

We shall be deeply grateful to you, sir, for your kind consideration, we remain, sir,

Yours most respectfully,

Signed J. Furunchi,
Jinzo Furunchi,
Director i/c Gen. Affrs.

6 Aug. 48
Approved
Signed Frederick C. Wiggins

C-O-P-Y

DECLASSIFIED E.O. 11905 SECTION 3 (E)(1)(iii) NND

C O P Y

BASIC: Ltr, Hqs, Yamaguchi Mil Govt Team, APO 317, Serial No. 1143-B, subj: "Petition to Resume Operations", dated 11 August 1948.

AGMGN 004 2nd Ind

HEADQUARTERS, EIGHTH ARMY, APO 434, 31 August 1948

TO: Commanding Officer, Chugoku Military Government Region, APO 317

1. The application of the Toyo Soda Company to operate their Soda Ash Plant in Tokuyama-shi, Yamaguchi Ken pending reparations removal is approved.

2. This approval isnot to be used as a basis for obtaining allocation of supplies and materials. These will be secured through normal Japanese allocation channels.

BY ORDER OF MAJOR GENERAL RYDER:

/s/ R. Schafer
F. SCHAFER
Lt. Col., AGD
Asst. Adjutant General

1 Incl:
n/c

C O P Y

DECLASSIFIED E.O. 11652 SECTION 3 (E)(2), MAR 10, 1978

Refitting Work to be Done on Soda Ash Plant of Toyo Soda Mfg. Company at Tonda

The refitting work on the Soda Ash plant to be undertaken by Toyo Soda Company for resuming operations comprises of interchange of some of the parts of Ammonia Stills, Decomposers of Fixed Ammonia, Ammonia Absorbers and Gas Washers. All of these installations are built in sections, being in the form of tower and each of the section are easily taken off or added. The work includes also to reduce such sections in some and making additions in others. The work does not involve conversion of the installations in any way. All the equipment and accessories will remain unaltered and will be dept absolutely intact. The work is to be undertaken to improve the efficiency of the facilities.

The following table shows the individual installation affected by the refitting work and the extent of the work:

Equipment	Inventory No.	Existing Weight (kg)	Existing Dimensions	After Refitting Weight (kg)	After Refitting Dimensions
Ammonia Still	I-A-4-1 No.1	132,050	Dia.2.5 m Ht 23.2 m	113,068	Dia. 2.5 m Ht 24.2 m
Ammonia Still	I-A-4-1 No.2	132,050	Dia.2.5 m Ht 23.2 m	113,068	Dia. 2.5 m Ht 24.27 m
(-1) Gas Washer	I-A-5-2 No.4	82,146	Dia.2.5 m Ht 14 m	89,546	Dia 2.5 m Ht 15.65 m
(-1) Gas Washer	I-A-5-2 No.9	"	"	89,546	"
(-2) Gas Washer	I-A-5-2 No.10	"	"	76,808	Dia 2.5 m Ht 14.23 m
(-1) Ammonia Absorber	I-A-3-1 No.1	113,526	Dia. 2.5 m Ht 19 m	118,750	Dia. 2.5 m Ht 21.505 m
(-1) Ammonia Absorber	I-A-3-1 No.2	"	"	"	"
(-1) Ammonia Absorber	I-A-3-1 No.4	"	"	52,138	Dia. 2.5 m Ht 9.84 m
(-8) Ammonia Absorber	i-A-3-1 No.5	"	"	52,138	"
(Sections taken off for storage)-				140,830	
Total		964,642 kgs		964,642 kgs	

Note: the figures in brackets show sections taken off or added.

27 Nov. 48
Approved

F.C. Wiggins
Major, Omp
Economics Officer
Y.M.G.T.

--C-O-P-Y--

REPARATIONS DATA

Name: Tonda Plant, Toyo Soda Kogyo K.K.

Code No. 45 - 11

Date: 25 Jan. '50

1.	Total No. of Reparations Machines.	213
2.	Total No. in Dead Storage.	0
3.	Total No. of "AU" Items.	213
4.	Total No. in Use.	213
5.	Inventory Code No. of Machines on Application for "AU".* Date of Application. *	None
6.	Date of Operating Permit.	19 Oct. '46
7.	Items Permitted to Produce.	Caustic - soda Hydro chloric acid.
8.	Items in Actual Production.	Same as above.
9.	Items for which Application has been made to SCAP for Permission to Produce. Date of Application.	None

* See reverse side.

8 copy.

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

3 January 1950

SUBJECT: Reconversion Permit for Reparations Plant.

TO : Toyo Soda Kogyo K.K.

1. In accordance with Memorandum from the Supreme Commander for the Allied Powers to the Japanese Government, dated 22 November 1946 (SCAPIN-1355), the Toyo Soda Kogyo K.K. is permitted to produce at their Tonda Factory located at 4560 Tonda Tokuyama-shi, Yamaguchi the following additional items:

	Item	Maximum Quantity
1.	Grude SodaAsh.	310 Mt Per day
2.	Soda Ash.	100 Mt per day
3.	Caustic Soda.	175 Mt per day.

(Nothing Follows)

2. The temporary use of the following additional reparations machinery is authorized:

See attached list of 876 Items.

3. A program will be immediately initiated to substitute non-reparations machinery for reparations machinery in temporary use.

4. The acquisition of material, parts and sub-assemblies as well as the disposition of finished products and the establishment of sales prices will be in accordance with the regulations of the Japanese Government.

5. 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 insutructions.

FOR THE CHIEF, ECONOMIC AND SCIENTIFIC SECTION:

MAURICE M. CLASS
Chief, Industry Division.

45" 11
Sec II

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

3 January 1950.

387.6 (3 Jan 50) ESS/IND

INFORMAL MEMORANDUM FOR: Reparation Agency, Tokyo.

SUBJECT : Transmittal of Reconversion Permit.

1. Reference is R.B.R. No. 68 (M3), dated 6 October 1949, subject: Supplementary Reconversion Application of the Tonda Plant, Toyo Soda Kogyo K.K. (45-11)

2. The attached Reconversion Permit for the Tonda Plant, Toyo Soda Kogyo K.K. is transmitted for your action.

3. 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 industructions.

FOR THE CHIEF, ECONOMIC AND SCIENTIFIC SECTION:

Maurice M. CLASS
Chief, Industry Division.

1 Incl: Reconversion Permit.

(O) Copy

Sol File E

Date May 31, 1949.

To: Mr. William S. Vaughan
Chief, Industry Div. ESS, GHQ

Subject: Request for Resumption of Operation of the Solvay Plant of Toyo Soda Industry Company.

45-11
II

Sir,

Referring to our petition dated May 24th, 1949 submitted to the Japanese authorities, of which English translation attached, we wish to state our further point of view in regards to the above subject for your esteemed considerations.

In view of the restricted supply of raw materials, we are well aware of the present situation which hinders the equal operation of the existing four solvay plants.

Since the recent announcement of the US policy regarding the reparations, both the Japanese government sources and those circles interested have begun to feel that Toyo Soda should now be placed on the same footing as other plants for the operation.

It is our intention to pursue the policy of the concentrated production principle set forth, and we are all well aware of the fact that this is a very pressing problem. Should the all four solvay plants be placed on the same footing, we firmly believe that all four by cooparation and negotiation can operate their plants much more economically, until such time that we can operate without any restrictions. Let us take, for example, the method of two plants' operating with allocated raw materials for the four, two plants by operating efficiently can realize profit. However, when all four operate with the same amount of allocated raw materials, all will suffer loss. We are now approaching the other three plants along this line. The problem, however, is very difficult to tackle with, without the assistance of the competent authorities concerned, and we sincerely hope that the Japanese government shall be guided properly by your prudent cooperation in this regard.

As you know, due to the restriction placed upon the plants designated for the reparation, our plant has not been operating for nearly three years. Should this state of things continue further, it would be unavoidable for the company to lose customers, skilled engineers, financial means, and our excellent

DECLASSIFIED E.O. 12065 SECTION 3 (b), MAR 8 1978

equipment of solvay plant finally become unusable. We have been endeavoring to rationalize the management further by dismissing approximately 30% of the employees, in order to place our company on equal standing as other three plants.

We trust that the principles of giving equal chance to the operation of the four plants will be established without delay. We also feel that this step is necessary for the existence of the all four plants.

We shall be grateful if you review this newly created situation, and give it your kind consideration. We remain,

Yours respectfully,

KEISUKE SADANAGA
President,
Toyo Soda Ind. Company

Soda file a

TOYO SODA MANUFACTURING COMPANY LTD.
TONDA, TOKUYAMA-SHI

(Translation)

May 24, 1949

Mr. Takayoshi Aoki,
Secretary General,
Economic Stabilization Board.

45-11
II

Mr. Heitaro Inagaki,
Minister of Commerce and Industry.

Subject:-Petition for Authorization to Operate Soda Ash Plant of Toyo Soda Manufacturing Co.

Sirs,

We beg to remind you,sirs, that the soda ash plant of Toyo Soda Mfg. Company was eliminated from consideration as a qualified plant entitling it for the current operations in carrying out the rationalization program for soda ash production launched in April. This action was taken, we beg also to remind you, in spite of the fact that the soda ash plant of Toyo Soda had been recognized to be not inferior, if not superior, to the other similar plants in the country in the essential requirements for plant efficiency and low cost production including the technical standards, the plant equipment, relative production costs and the geographical conditions of the plant by the Committee of Experts named by the Ministry of Commerce and Industry following their on-the-spot survey of the four plants in February.

The basic reason for the elimination of the soda ash plant of Toyo Soda given by the Government authorities was that the Toyo Soda plant was a designated plant for reparations removal.

However, in view of the announcement made by Maj.-General Frank McCoy, of the Far Eastern Commission, of the U. S. Government policy for suspension of the reparations removal from Japan, for which we owe our deepest gratitude and thanks toward the United of States of America, we are encouraged to anticipate the release of our plant from reparations custody would be forthcoming in the very near future.

DECLASSIFIED E.O. 12065 SECTION 3 (E)(1)(iii) NLS

In this connection, the barrier which has been preventing hither-to the operation of our soda ash plant will be removed with the release from reparations custody restoring our plant on an equal footing with the same rights and an equal opportunity for enterprises with the three other competing plants.

We, therefore, beg to request that the soda ash plant of Toyo Soda Mfg. Company be granted an equal consideration with the three other similar plants and that the four plants, including our own, be given an equal consideration in carrying out the ratinalization of production as far as soda ash production concerns, we beg to remain,

Yours respectfully,

/s/ Keisuke Sadanaga
/t/ KEISUKE SADANAGA, President,
Toyo Soda Mfg. Company.

Inclosure: Extract from paper submitted to Col. Pope.

Advantages Enjoyed by Soda Ash Plant of Toyo Soda
(Extract from paper submitted to Col. Pope)

Some of the advantages which Toyo Soda can claim for its soda ash plant are:-

1) Through the operation of the soda ash plant Toyo Soda can generate electric power by working the power house attached thereto, and transfer any surplus power so generated to the adjoining Electrolytic Caustic Soda plant. When the soda ash plant runs at the production level of 315 tons of soda ash a day, the surplus power made available is sufficient to run the electrolytic plant at full capacity.

In this connection it must be mentioned that Toyo Soda has a bromine plant, and part of the chlorine gas, a bi-product of the electrolytic plant, is profitably utilized by conducting the gas to the bromine installation where it is used in the extraction of bromine from sea water.

2) The Toyo Soda plant possesses superior wharf facilities and a 10,000-ton class ocean-going vessel can be moored alongside the pier, which cut the transportation costs considerably.

3) The Toyo Soda has no problem concerning the disposal of the refuses produced by the soda ash plant. While the disposal of the refuses involving a long-distance moving is proving costly to some other similar plants, Toyo Soda's refuse disposal cost is neglible since it has 150,000 Tsubo or about 150 acres of unreclaimed land within the plant site over which the refuses can be dumped. In this respect the Toyo Soda plant serves a striking contrast with the Makiyama plant of Mitsubishi Kasei Kogyo K.K., where the refuses have to be transported by boat to open sea for disposal. This method of disposal cost the Mitsubishi Kasei plant 3,000 Yen per ton of caustic soda.

4) The reopening for operation of the Toyo Soda plant provides a new outlet for the low grade coal produced in abundance in the prefecture.

5) The Toyo Soda plant is being backed by moderate and efficient workers. There has been no serious labor dispute or strike action at this plant exemplifying harmonious capital-labor relations, an important and essential factor for increased productivity of the plant.

6) By the reopening of the soda ash plant of Toyo Soda at the production level of 100 tons of soda ash a day the per capita

production is expected to be raised by nearly five times the present level, which amounts 20,000 Yen. This will enbale the Company to decrease the ratio of the general and administrative expenses proportinately.

7) While most of the industrial establishments at present are suffering from an excess number of employees without any other wayout than to resorting to their dismissal or laying off, Toyo Soda is able to find an easy solution of the problem without resorting to similar steps by the reopening of the soda ash plant, which can smoothly absorb any excess number of workers which may exist.

DECLASSIFIED E.O. 11652 SECTION 3 (E)(1)(B) NSC Ltr.

TOYO SODA MANUFACTURING COMPANY LTD.
TONDA, TOKUYAMA-SHI

(Translation) May 24, 1949

Mr. Takayoshi Aoki,
Secretary General,
Economic Stabilization Board.

45-11

Mr. Heitaro Inagaki,
Minister of Commerce and Industry.

Subject:- Petition for Authorization to Operate Soda Ash Plant of Toyo Soda Mfg. Co.

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The basic reason for the elimination of the soda ash plant of Toyo Soda given by the Government authorities was that the Toyo Soda plant was a designated plant for reparations custody.

However, in view of the announcement made by Maj.-General Frank McCoy, of the Far Eastern Commission, of the United States policy for suspension of the reparations removal from Japan, for which we owe our deepest gratitude and thankfulness to the United States of America, we are encouraged to anticipate the release of our plant from reparations custody in the near future.

In this connection, the barrier which has been preventing hither-to the operation of our soda ash plant will, of course, be removed with the release from the reparations custody, which will restore our plant on an equal

footing with the same rights and an equal opportunity for enterprises with three other existing plants.

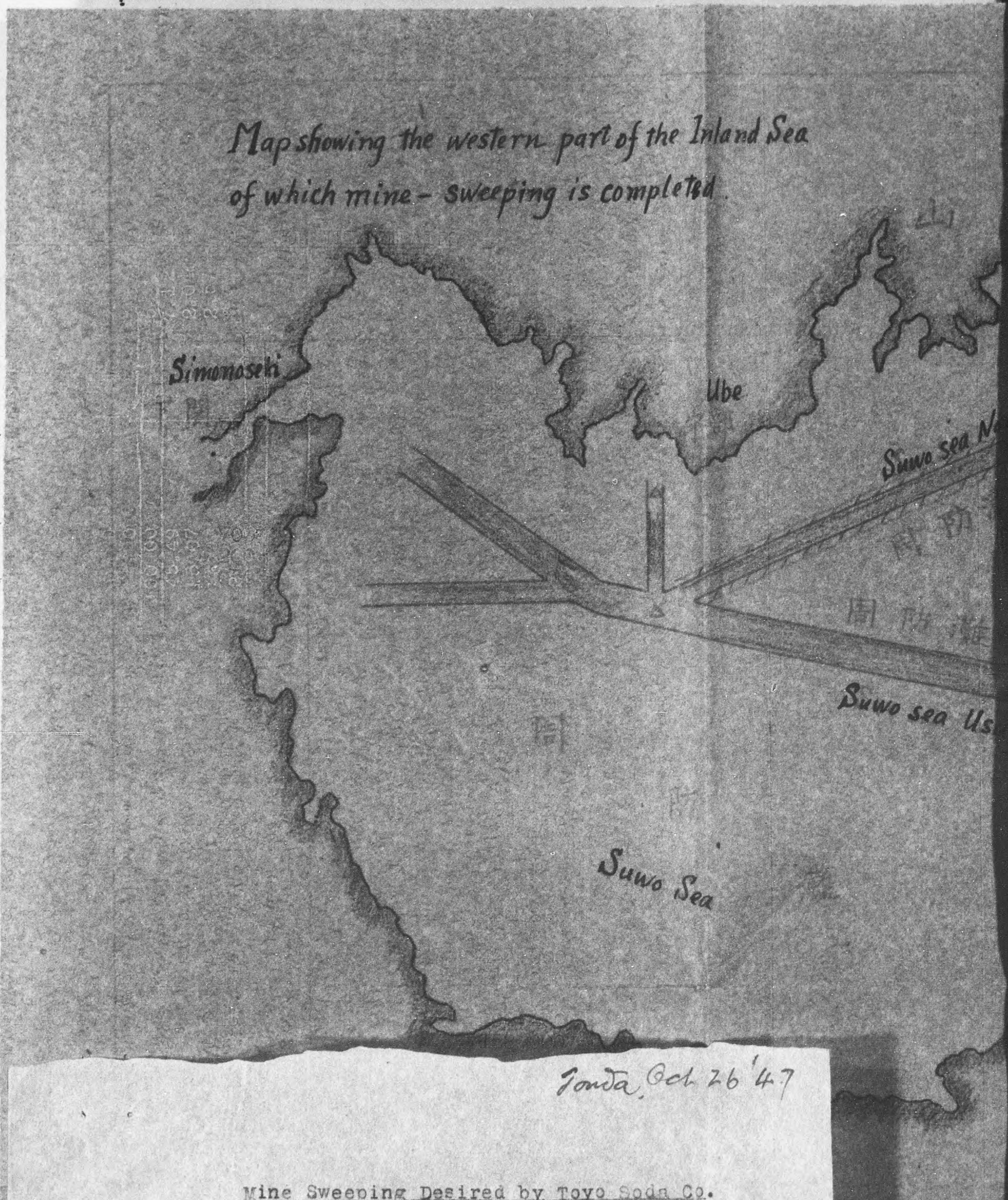
We, therefore, beg to request that the soda ash plant of Toyo Soda Mfg. Company be granted an equal consideration with three other competing plants and that the four existing soda ash plants, including our own, be given an equal consideration in carrying out the rationalization program for production so far as soda ash production concerns, we beg to remain,

Yours respectfully,

/s/ Keisuke Sadanaga

/t/ KEISUKE SADANAGA, President,
Toyo Soda Mfg. Company, Ltd.

Inclosure: 1 Extract from Paper submitted to Col. Frederick Pope.



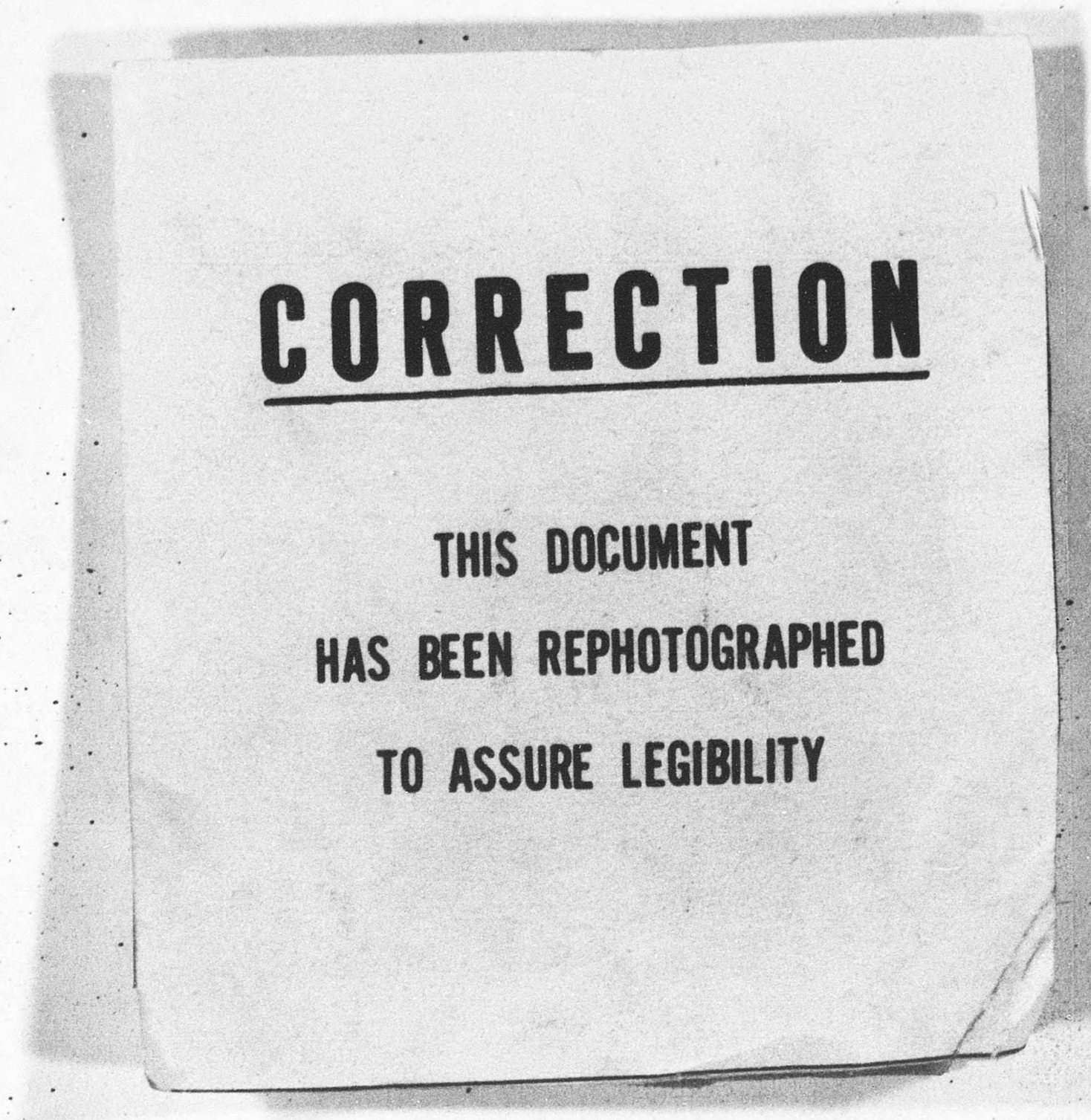
Mine Sweeping Desired by Toyo Soda Co.

1. Mine sweeping of the sea lane leading to Toyo Soda Company's wharf- starting off the Mitajiri coast and passing north side of OTSU island.

2. The width of the sea lane in the Suo Nada(sea) to be extended up to 2,000 metres. At present the lane the mine sweeping had been completed has only 600 metres of width.

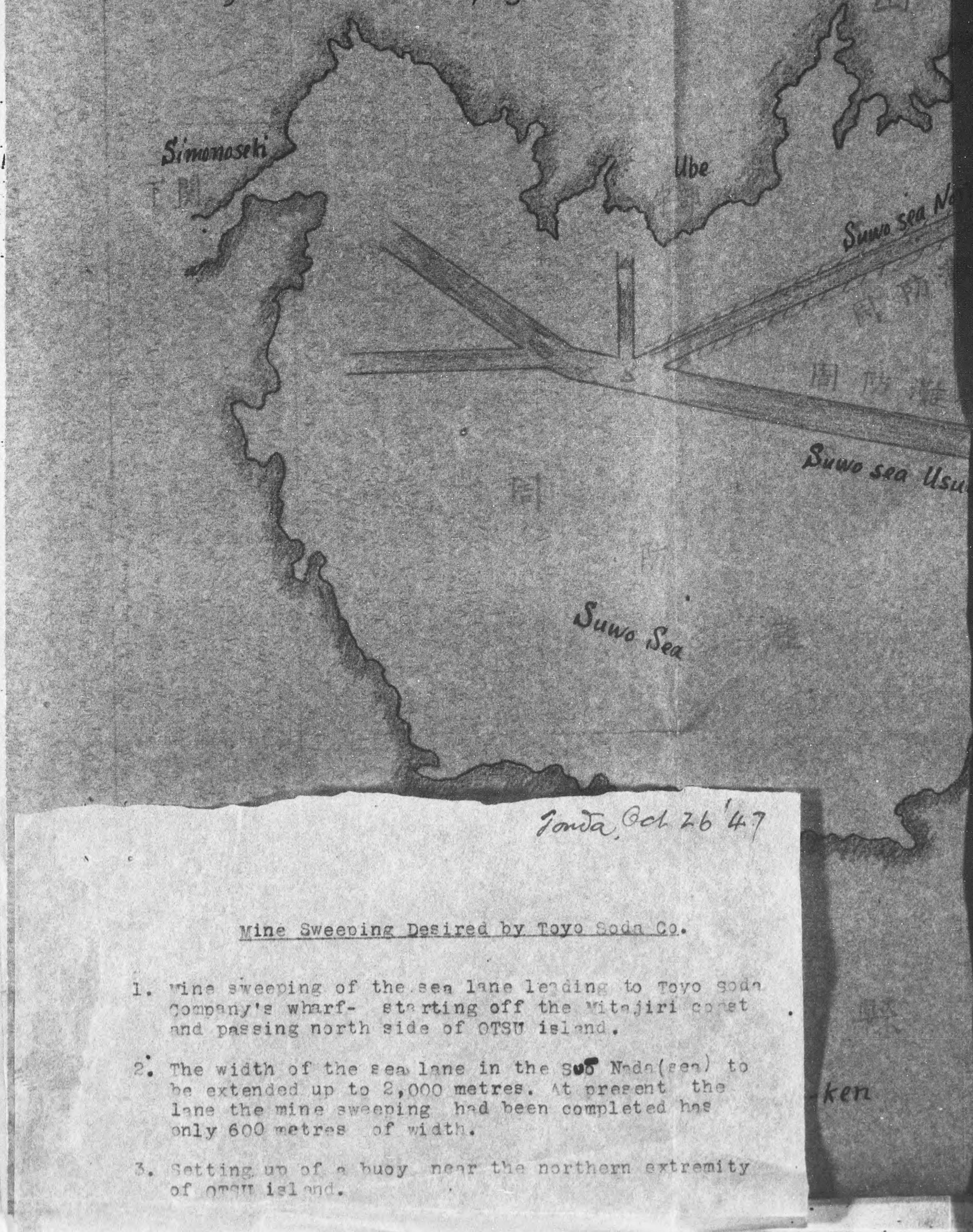
3. Setting up of a buoy near the northern extremity of OTSU island.

DECLASSIFIED - E.O. 12065 SECRET - NO, AND NOFORN



DECLASSIFIED E.O. 12065 SECTION 3 (E), MDR 93-

Map showing the western part of the Inland Sea
of which mine-sweeping is completed



Iwakuni, Oct 26 '47

Mine Sweeping Desired by Toyo Soda Co.

1. Mine sweeping of the sea lane leading to Toyo Soda Company's wharf- starting off the Mitajiri coast and passing north side of OTSU island.

2. The width of the sea lane in the Suo Nada(sea) to be extended up to 2,000 metres. At present the lane the mine sweeping had been completed has only 600 metres of width.

3. Setting up of a buoy near the northern extremity of OTSU island.

-ken

DECLASSIFIED E.O. 12065 SECTION 3 102, NARS Date

内海西部海況予報基準圖

Yamaguti-ken

Tokuyama

Mitajiri

Kudamatu

Otis

Hikari

Suwo sea Northward course

(600m)

(2000m)

(2000m)

Suwo sea Usual course

Heigu

Himesima channel

Bungo

Tokuyama course

No.3 Sea

ken

Bungo course

DECLASSIFIED E.O. 12065 SECTION 3 (E)(1)(B) NSC NOTE

Toyo Soda Mfg Co., Ltd
Tsuda, Oct 26 '47

禾 圖

縮尺 一:三〇〇,〇〇〇

Scale - 1: 300,000

Yanai

(1000m)

Heigun channel

(2000m)

Heigun course

Iyo sea Northward course

Iyo sea

(4000m)

Iyo sea course No 2 Sea

Iyo

Sikoku

DECLASSIFIED E.O. 11652 SECTION 3 (E)(1)(2)(3) NARS Date

Jonda, Oct 26'47

Mine Sweeping Desired by Toyo Soda Co.

1. Mine sweeping of the sea lane leading to Toyo Soda Company's wharf- starting off the Mitajiri coast and passing north side of OTSU island.

2. The width of the sea lane in the Suo Nada(sea) to be extended up to 2,000 metres. At present the lane the mine sweeping had been completed has only 600 metres of width.

3. Setting up of a buoy near the northern extremity of OTSU island.

-ken

Notes:

1. The sea surface marked in blue indicates the part of the sea has been cleared of mines by "magnetic mine sweeping" by Shimonoseki Japanese Mine Sweeping Det.

2. The part marked in red indicates the extension of the mine-cleared sea lane by a fresh mine sweeping operations.

3. indicates buoys placed along the sea lanes.

DECLASSIFIED E.O. 11652 SECTION 3 (E)(2) AND (3)

Oct 26 '47

Bungo

Tokuyama course

No. 3
Sec

Beppu course

(1000 m)

Beppu

ta-ken

Oda Co.

g to Toyo oda
itajiri coast
d.

Noda(sea) to
present the
mpleted has

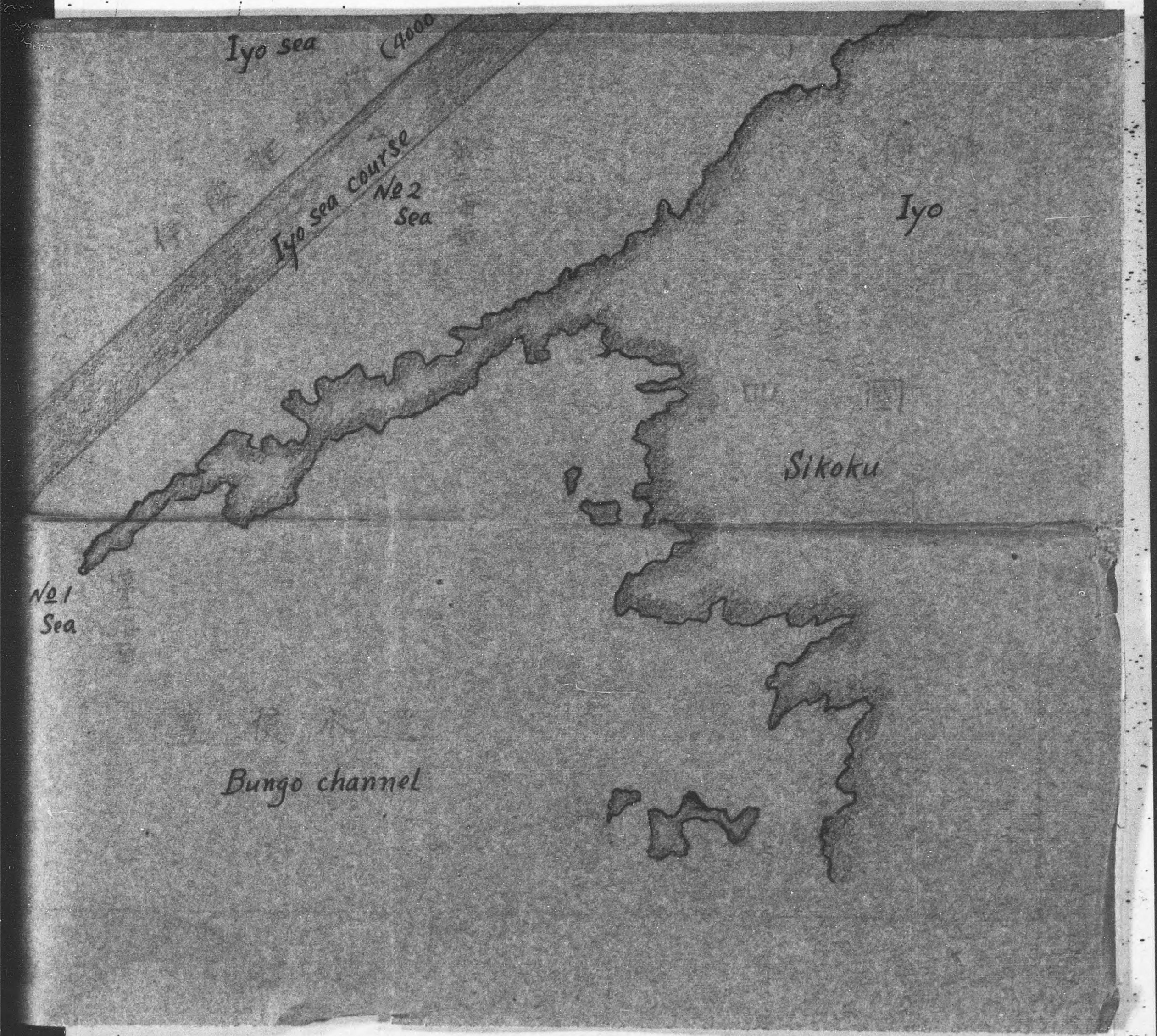
hern extremity

dicates
of
by
Det.

the extension
fresh mine sweeping

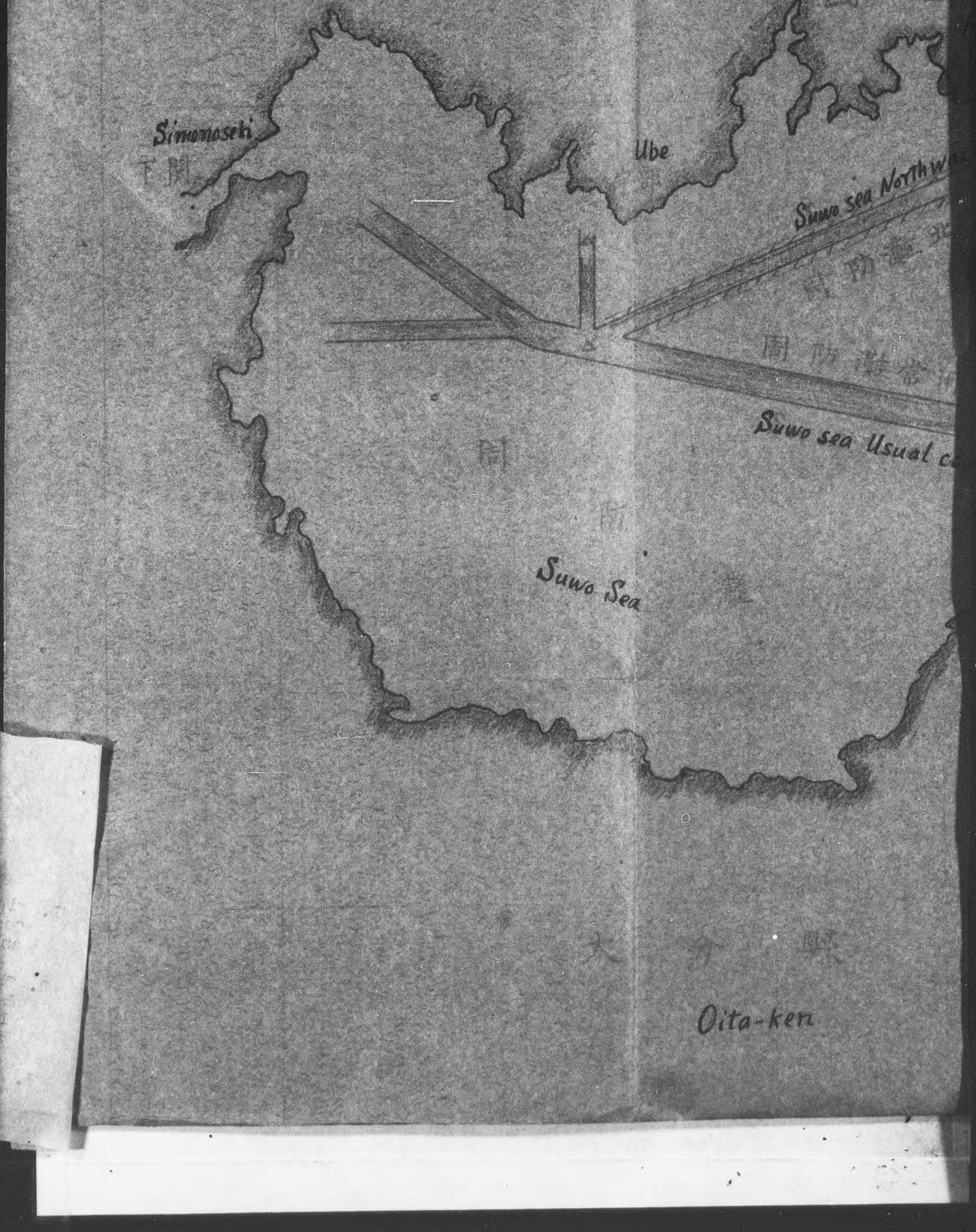
sea lines.

DECLASSIFIED E.O. 12065 SECTION 3 (E), NARS Date



DECLASSIFIED E.O. 12065 SECTION 3 (b)(1) NND 969

Map showing the western part of the Inland Sea
of which mine-sweeping is completed.



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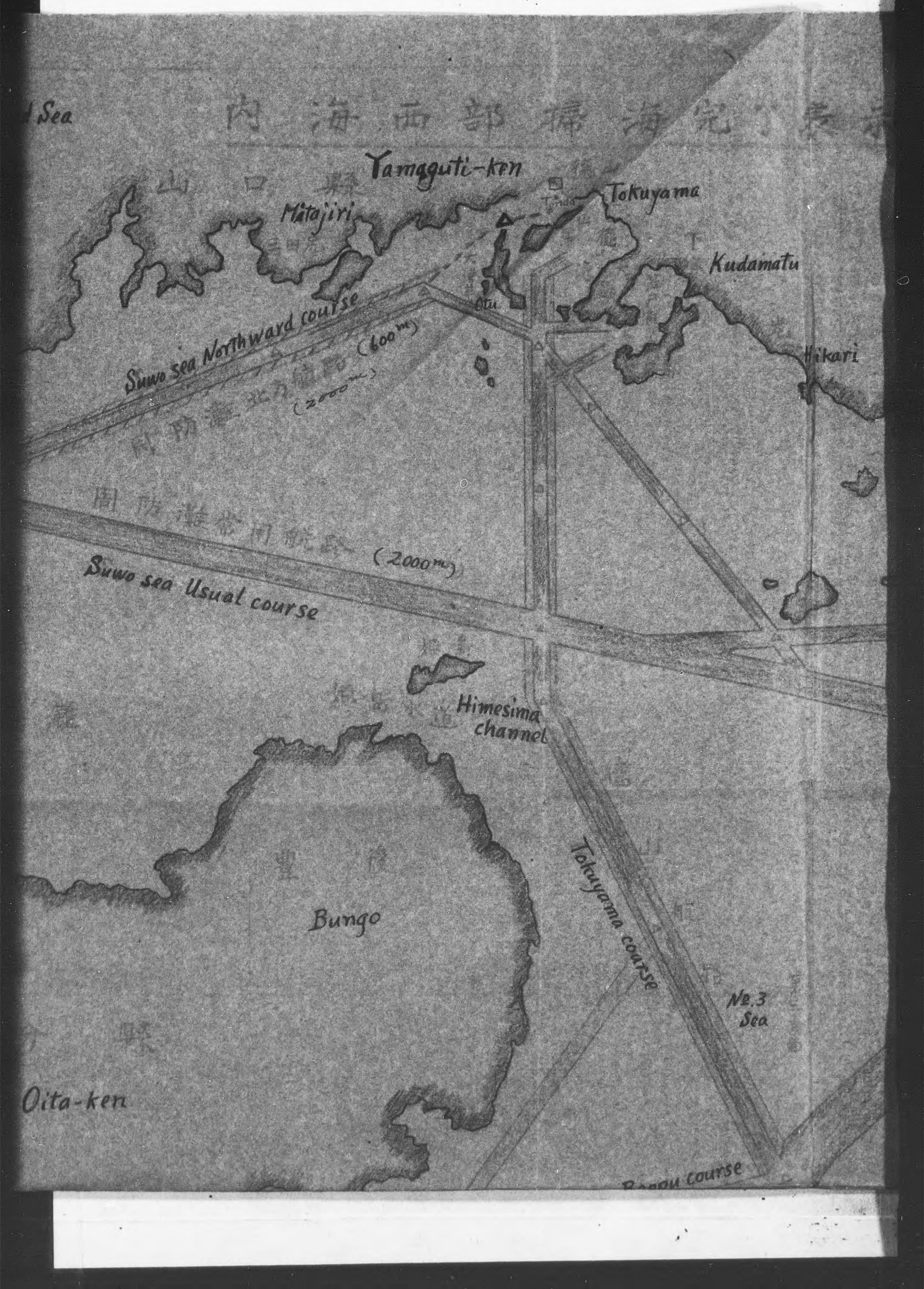


DECLASSIFIED - Authority NND 760033 By NARA Date 12/22/06

Tōyō Kōdō Kōgyō Co., Ltd.
Tsuda, Oct 26 47

第六圖

Scale - 1: 300,000

Yanai

Hikari

(1000m)

Heigun channel

(2000m)

Heigun course

Iyo sea Northward course

Iyo sea

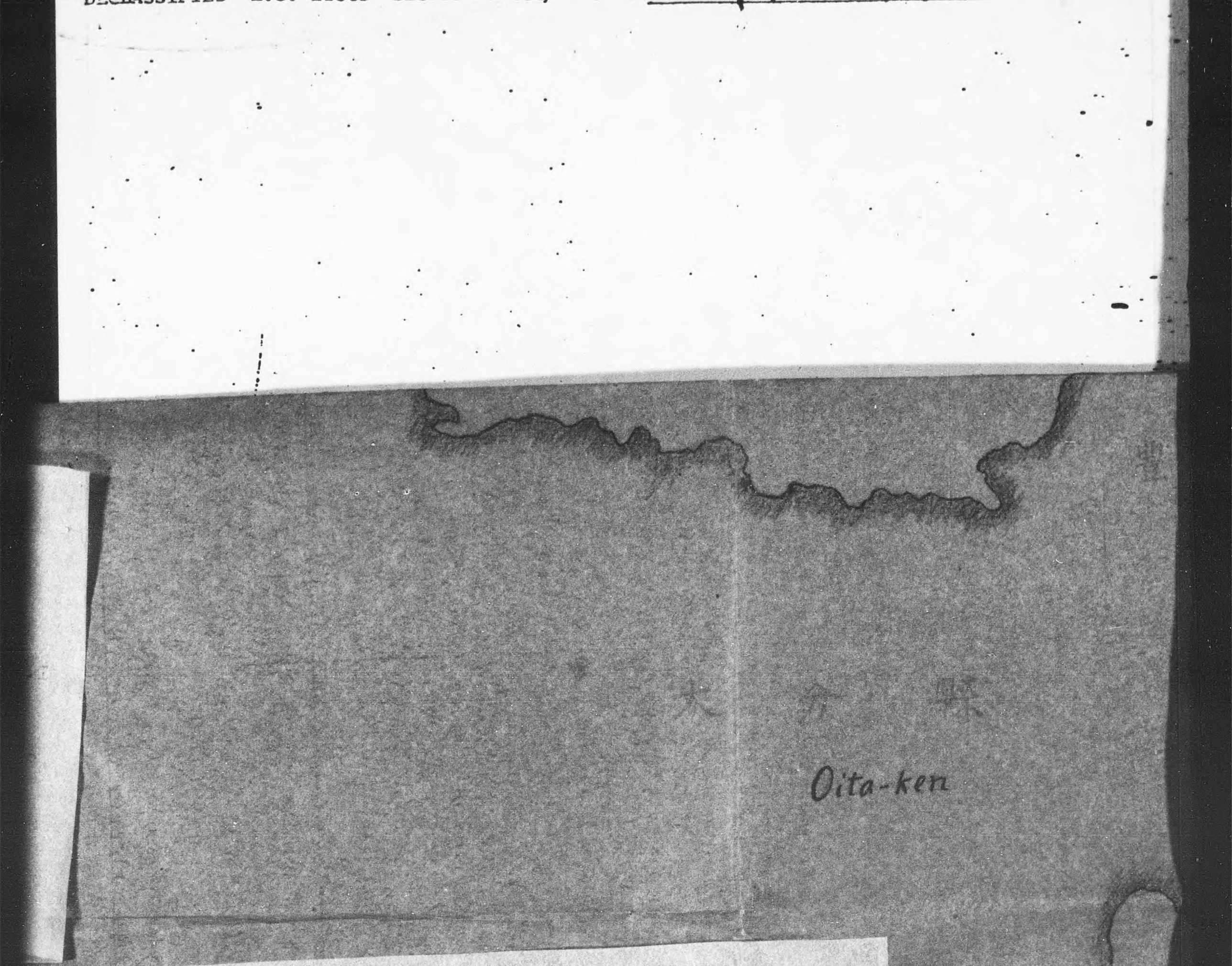
(4000m)

Iyo sea course No 2 Sea

Iyo

Sikoku

DECLASSIFIED - NOT FOR PUBLIC RELEASE



Notes:

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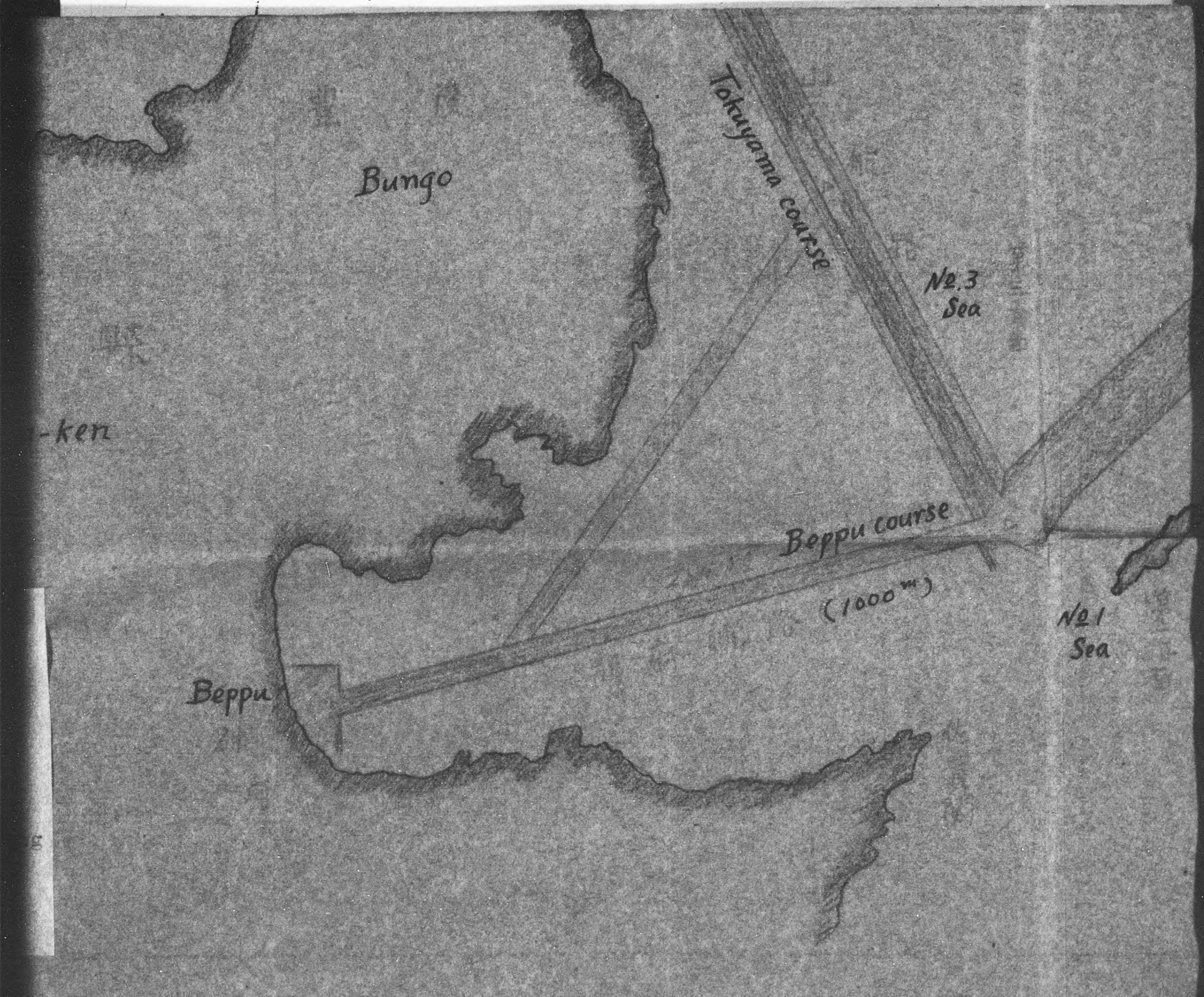
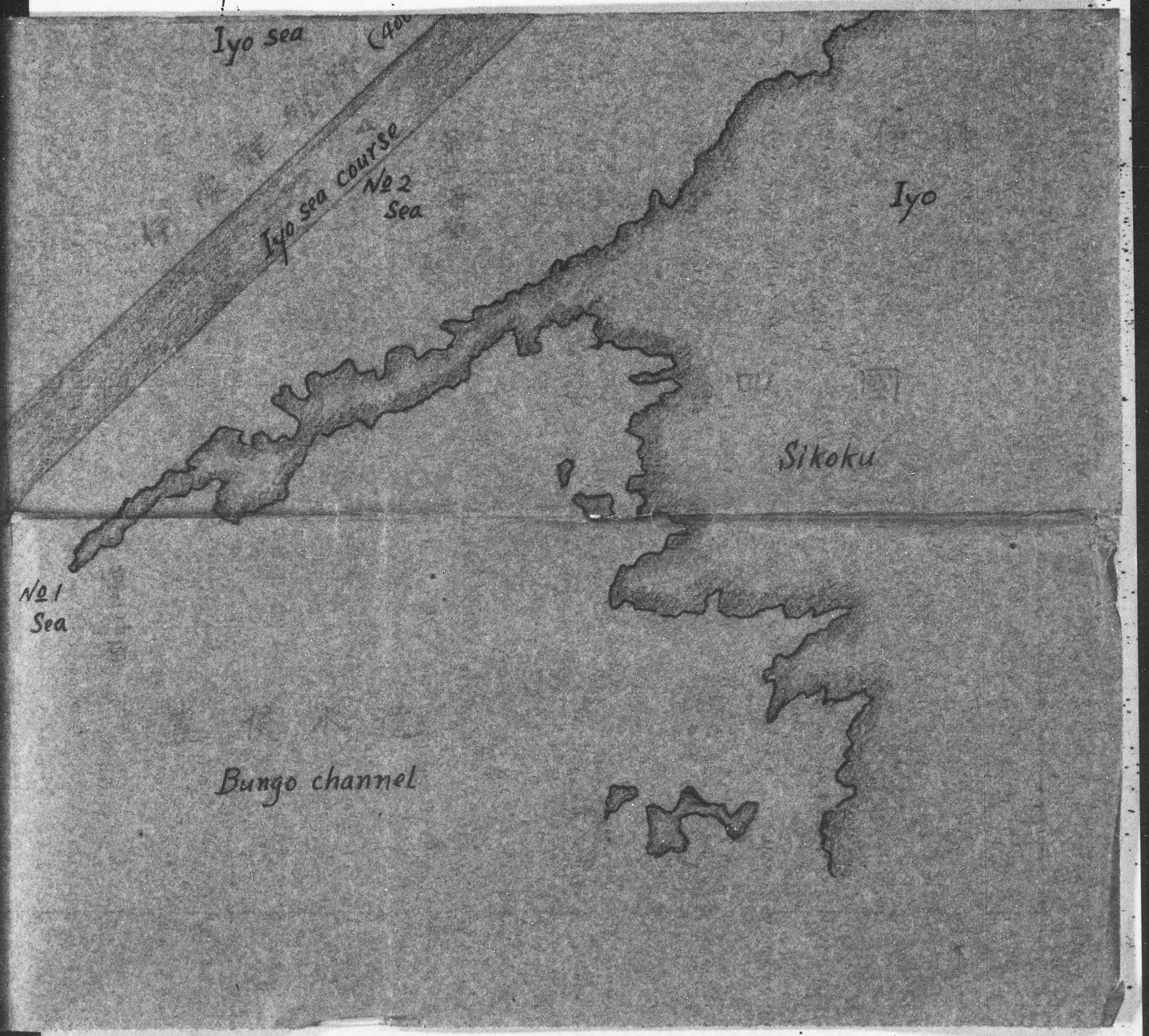
2. The part marked in red indicates the extension of the mine-cleared sea lane by a fresh mine sweeping operations.
3. indicates buoys placed along the sea lanes.

DECLASSIFIED E.O. 12065 SECTION 3 (E) MR



DECLASSIFIED E.O. 12065 SECTION 3 (E)(2)(B) NLN



DECLASSIFIED E.O. 11652 SECTION 3 (E)(2), MRS NO. [illegible]

Copy to Mr. E. Teneyke
Sub
File
a

TOYO SODA MANUFACTURING COMPANY LTD.
TONDA, TOKUYAMA-SHI

May 4, 1949

Lt.-Col. Eugene J. McNamara,
Commanding,
Yamaguchi Mil. Gov't Team,
Yamaguchi.

45-11
II

Sir,

On behalf of Toyo Soda Mfg. Co., I wish to express my deepest appreciation for the kind interest and assistance you were good enough to extend to us in connection with the reopening of our soda ash plant for operation.

The project of the concentration of soda ash production has resulted, as you are already aware of, in the selection of three out of the four plants for experimental operation. The three plants selected were Tokuyama Soda, Ube Soda and the Makiyama plants of Mitsubishi Kasei, all of which have been under operation.

Although we are not quite convinced of the decision made by the Japanese Government, we have decided to refrain from pushing our claim against it in view of the assurances made by responsible sources that the decision under which the three plants have been permitted to operate was a temporary procedure only, and that a final dicision would be made after another careful survey of the four plants to be made by experts coming from the U.S. in the near future. The assurance about another on-the-spot survey by U.S. experts was given us by both Mr. Frederick Pope and Mr. William S. Vaughan, Chief, Industrial Division, ESS., GHQ.

The operation of the three plants is subject to condition that the production cost must be materially reduced so as to permit a lower market price for the products. The prices on soda products were subsequently fixed on the basis of costs calculated to be attained when the soda ash production is actually concentrated in two plants. The prices so fixed represented about 20 per cent below that which existed heretofore. Tokuyama Soda and Ube Soda are authorized to operate their plants on the condition that the two will use the 3,200 carolific low grade coal. The Makiyama plant of Mitsubishi Kasei has no restrictions placed on the quality of coal they use and they can use 5,000 carolific high grade coal to produce similar products. This is a downright discrimination in favour of Mitsubishi Kasei and leaves a moot question.

We learn that Toyo Soda was left out because of the view point of the GHQ represented by Mr. Sprague, Chemical Industry Section, who held that Toyo Soda lacked authorization under SCAPIN 1355 of Nov. 22, 1946 for operation of its designated plant. Mr. Sprague ruled the authorization granted Toyo Soda by the HQ. the Eighth Army dated Oct. 19, 1946 authorizing it for continued

DECLASSIFIED E.O. 11652 SECTION 3 (E)(1) AND (3)

operation invalid on that ground that the authrization expressly states that Toyo Soda is authorized to operate the plant for production of "consumer goods", while Soda Ash and Caustic Soda are not "consumer goods" but "production materials". This point had been clearly defined by the SCAP Directive dated Sept. 22, 1945 that the term "consumer goods" was used to differentiate the goods from "war materials" and the term is used to include all goods and materials contiributing to the stabilization of the people's liyelihood. We are convinced that the authorization by the Hq. the Eight Army which we have is valid and that we are on the same footing as three other soda ash plants so far as operation for production for the present concern and so we have the legitimate right to claim for an equal opportunity for plant operation.

I had been in Tokyo for a little over three weeks in April and while there had several interviews with officers in the ESS., GHQ. in Tokyo and also had an opportunity to see Major Treneman of the Military Government Section, Headquarters the Eighth Army ih Yokohama. Besides valuable hints and suggestions obtained regarding the future management of our plant, I feel that I gained much through these meetings in that they contributed much to broaden my restricted provincial outlooks.

We are currently engaged in studying plans for management plans for our plant under the Economic Stabilization Program. In this our employees are fully cooperating with the management. We are also considering plans for inviting foreign capital and techniques to our plant.

Thanking you again for your kind interest and assistance, I remain, sir,

Your obedient servant,

J Furuuchi

Jinzo Furuuchi, Director,
Toyo Soda Manufacturing Co.

DECLASSIFIED E.O. 11652 SECTION 3 (E), NARS Date

TOYO SODA MANUFACTURING COMPANY LTD.
TONDA, TOKUYAMA-SHI

March 22, 1949

Lt.-Col. Eugene J. MacNamara,
Commanding,
Yamaguchi Mil. Govnt. Team,
Yamaguchi.

45-11
II

Subject:- Petition on Behalf of Toyo Soda Ammonia-Process Soda Ash Plant.

Sir,

On behalf of Toyo Soda Mfg. Company and the employees numbering some 1,000, we wish to express our deepest appreciation of your esteemed good offices in behalf of the three soda ash plants in the prefecture in connection with the plans for concentrating soda ash production in fewer plants for economy in coal consumption and lower cost production, and beg your kind indulgence for our taking the liberty to lay before you the particular circumstances of Toyo Soda for your kind consideration.

The Ammonia-process Soda Ash plant of Toyo Soda has been suspending operations for the last two and half years. The stoppage of the plant, which covers more than one-half of the entirev installations of the Company and constitutes the main enterprise of the firm, has been a serious blow financially to the management as well as to the employees. For the past two and half years the management has managed to maintain the establishment against financial difficulties by undertaking various minor undertakings by utlizing Chlorine, a bi-product of the Electrolytic Caustic Soda plant. An early resumption of operation of the Ammonia-process Soda Ash plant has been the only source of strength that has sustained the management and the workers.

In this respect, the situation with Toyo Soda materially differs from that of the two other soda plants in the prefecture, Tokuyama Soda and Ube Soda, and an early resumption of operation is particularlily imperative with us. Delays in the resumption of operation for Toyo Soda plant will inevitably hit harder than the other two plants, which are under operation.

The poor market condition which developed of late is increasingly renders the maintenance of the establishment difficult financially, and the management sees the only hope of placing the Company's enterprises on a permanently sound basis to lie in the early reopening of the Ammonia-process

Soda plant for operation, the minor enterprises which the Company has undertaken to tide over the transitional period being short of affording sufficient and stable sources of income.

Some of the advantages which Toyo Soda can claim for its Ammonia-process Soda plant are:-

1) Through the operation of the Ammonia-process Soda Ash plant Toyo Soda can generate electric power plant attached thereto and transfer any surplus power so generated to the Electrolytic Caustic Soda plant. When the Ammonia-process plant runs at the production level of 315 tons of Soda Ash a day, the surplus power is sufficient to run the Electrolytic plant at full capacity;

2) The Toyo Soda plant possesses superior wharf facilities and a 10,000-ton class ocean-going vessel can be moored alongside the pier, which cut transportation cost considerably;

3) The Toyo Soda has no problems concerning the disposal of the residues produced by the Ammonia-process plant. While the disposal of the residues involving a long-distance haul is proving costly to some other similar plants, Toyo Soda's residuce disposal cost is negligible since it has about 150 acres of unreclaimed land within the plant site over which the residues can be dumped. In this respect the Toyo Soda plant presents a striking contrast with the Makiyama plant of Mitsubishi Kasei Kogyo K.K. where the residues have to be transported by boat to open sea for disposal. This method of disposal cost the Mistubishi Kasei plant 3,000 Yen per ton of Caustic Soda.

4) The reopening for operation of the Toyo Soda plant provides a new outlet for the low grade coal produced in abundance in the prefecture;

5) The Toyo Soda plant is being baeked by moderate and efficient workers. There has been no serious labor dispute or strike action at this plant in the past exemplifying harmonious capital-labor relations, an essential factor for efficient and increased productivity of the plant;

6) By the reopening of the Ammonia-process plant at the production level of 100 tons of Soda Ash a day the per capita production is expected to be raised by nearly five times the present level, ~~which amount to 10,000 Yen.~~ This enables the Company to decrease the ratio of the general and administrative expenses in proportion;

7) While most of the industrial establishments at present are suffering from an excess number of employees without having any other wayout than to resorting to their dismissal or laying off, Toyo Soda is able to find an easy

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solution of the problem without resorting to similar steps by reopening the Ammonia-process plant, which can smoothly absorb any excess number of employees existing.

Should, for some unforeseen reasons, the resumption of operation of Toyo Soda's Ammonia-process plant be delayed or unrea;ized, at least 40 per cent of the present employees of the Company or some 400 will have to be discharged immediately, while , on the other hand, if the plant is reopened for operation an additional 350 workers will be added to the present working force instead. Furthermore, while loans from city banks would readily be available for operating outlays for the plant when the plant operation has been allowed, it would be difficult to secure them when the plant remains idle. As a result the Company would be financially hard up and it may deprive the Company its ability , we are afraid, to pay wages to the workers regularly.

The spot-investigations of the soda plants in connection with the projected production concentration had already been made by both Colonel Frederick Pope, Heading U.S. Mission to Investigate Chemical Industry in Japan, and a Cmeical Industry Committee sponsored by the Japanese Ministry of Commerce and Industry. While we are confidently hoping that the results would be favourable, the decision by the authorities concerned, for some reasons or other unknown to us, have been delayed and we find ourselves in suspension.

Under these circumstances, we shall be infinitely grateful to you, if you, sir, would take kind attitude toward our humble petition and be so good as to exercise your esteemed influence as you may see fit for an early reopening of Toyo Soda plant for operation, we remain,sir,

Your humble servant,

~~Nobuyoshi Tamaguchi,~~

Managing Director,
Toyo Soda Mfg. Co. Ltd.

DECLASSIFIED: Authority NND 760036 By NARA, Date 12/22/76

61

Tokyo, February , 1949.

TO : Major General W.F. Marquat
Chief, Economic & Scientific Section,
G.H.Q.

FROM: Tatsuo Tanaka
Governor, Yamaguchi Prefecture.

SUBJECT: Petition for a special consideration to be given to the cause of the Prefecture's administration and its industries.

45-11
II

The Yamaguchi Prefecture is the largest soda producing prefecture in this country with its three plants (Tokuyama Soda, Ube Soda and Toyo Soda) of Solvey Process soda industry existing in Japan. Each of the plants has been producing yearly a large amount of soda industrial chemicals for the last fifteen to thirty years and largely contributing not only to the industries of the Prefecture, but also extensively to those of the nation. After the termination of the war, Ube Soda has kept on its production; Tokuyama Soda has recommenced its production since June last, and Toyo Soda is now expecting the re-opening of its plant from April this year, having completed all the preparations for the operation. Throughout these periods, it is needless to say that they have met all kinds of difficulties and had to overcome them.

But, because of the proposal for centralizing the production of the existing four Solvey Process soda plants, the fact that not only the employees of the three plants, but the people at large in the district and all industrials in the prefecture have become restless from anxiety for what bad effects there would be, is naturally a cause of inexpressible worries for me, the Governor, responsible to the Prefecture administration. The present petition is submitted to your Excellency for a special consideration be given to the subject.

The employees numbering about 5000 who are directly connected with these three plants are largely the local people, each of whom is keeping a large number of dependants in the family. There is also numerous groups of people directly related to the plants, in such as attendant repair shops, transportation and loading services, civil engineering staffs, etc. Besides, about 50 per cent of the proceeds from the production in the plants is being disbursed in the respective district affording the local business people and others to get considerable

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benefits. Needless to say, these are principal and important sources for the revenue of the self-governing prefecture. In other words, the majority of the local people is in the direct or indirect relation with these plants for their subsistence, thus having stabilized the livelihood of a large portion of the people, thanks to say, by the rehabilitation of these plants after the war ended.

If such cases happen as the suspension of the operating plant or the suppression of the reopening of the non-operating plant, there would be a large number of the local people unemployed and overthrown out of the means of livelihood. It is also evident that local self-governing finance would become bankrupted. The effect, I am afraid, would be serious and extensive.

The Ube city lost about 70 percent and the Tokuyama about 80 percent of the city devastated by the war. The people's resources for livelihood are extremely poor and much weakened. The Tokuyama city particularly being dependant both nominally and materially upon the Soda Plant as its life-line, would be immeasurably affected. A special stress should be given upon the effect on the people's thought. The Prefecture since the end of the war has become bordered with China and Korea accross the sea. The conditions of the other shores is being felt sensitively keen and the Communistive movement within the Prefecture getting more active day after day. In the recent general election, the Communist Party has gained about 12 percent of the votes, and the Tokuyama district is now being numbered as one of the strongholds of the Party. Under such conditions, I am proud to say that the Labor Unions in these three plants have trod along the line of a healthy development hand in heired with labor and management, because of the realization of the importance of the Soda Production. The Labor Union of Tokuyama Soda, for instance, was under the influence of the Communist Party a year ago, but now being reopened to operation is working along the democratic principle. The Toyo Soda Labor Union is now enduring hardship in its difficult living conditions with an only expection for the day of reopening. I believe and am most worried about that once the proposal of centralizing the production is unfavorably decided upon, it will inevitably afford the Communist Party an opportunity so important as to extend its power and influence over the working class of people.

Next and not the least, I wish to call your attention to the Ube Coal which is closely related to the Soda Industry. In the production index of the last December, both the Tokuyama and Ube Plants, having gradually improved their production

capacities, showed its output of 130 to 140 percent by fully surpassing the allocated production amounts of the Government. If added to them the Toyo Soda now waiting for the reopening order, the Soda Production plan for 1950 will be accomplished by the full operation of these three plants. The essential condition for achieving such an enviable result, one must not forget, will be due to the active utilization of the Ube Coal locally produced. I have been exerting my best effort in co-operating with the local people for the increasing output of the Ube Coal which is no doubt serving as one wing for the coal production plan of the country. The production result has been, glad to say, always in an upward trend by producing more than the planned amount and leaving a very large amount in stock. But due to its low calorie, a serious consideration should be made to find the way of its most effective and efficient utilization, as the demands for such coal are naturally limited. The good use of such low class coal would be for the local consumption to save its transportation expenses or for specially equipped burning installations. Here we find the soda plants of this Prefecture, which are built in the neighborhood of the coal mines. Such as the Ube Soda plant, for instance, is most conveniently situated near the entrance to a coal mine. The three Soda plants from the outset are built specially fitted to use a large amount of the Ube Coal and have large scaled equipments for burning it. At present, almost all their needs are met with the Ube Coal. In future as well, they can depend upon the supply of this coal. I believe it is the most effective and appropriate national policy to utilize the important material resources of the country. For that purpose, I can not but recommend that a abundant supply of the coal should be allocated to these plants for the increasing production of soda.

The suspension or suppression of the operation of these three plants will stop the demands for the Ube Coal amounting to the monthly output of 30,000 tons and will strike the hardest hit upon all the Ube Coal Miners of nearly 70 mines. It is not a question of the least importance for the Prefecture, nay for the country at large. As above said somewhat in detail, I sincerely solicit you for your kind consideration and careful examination upon what an important role these three plants are playing on the stabilization of the livelihood of many Prefecture people, on the control of their thought, on the development of the Prefecture industries and consequently on the rehabilitation

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of the nation's economy. Not only for the continuation of the operation of both the Ube and Tokuyama plants, but also for the reopening of the Toyo Soda plant, your special assistance is earnestly solicited.

Signed: Tatsuo Tanaka

Tatsuo Tanaka
Governor
Yamaguchi Prefecture.

DECLASSIFIED Authority NND 947111

2

February 2, 1949

TO: Commanding,
Yamaguchi Mil. Gov'nt Team,
Ysmaguchi.

FROM: Toyo Soda Trade Union.
Tonda, Tokuyama-shi.

SUBJECT:- Petition on Behalf of Ammonia-Process Soda Ash Plant of Toyo Soda Mfg. Co.

Sir,

Regarding the projected plans under consideration by the Japanese Government to lay off two of the four Ammonia-process soda ash plants for the reasons of plant efficiency and lower cost operation, we beg to submit for your esteemed consideration the following:-

1. The Toyo Soda plant has two outstanding advantages both contributing to the plant efficiency and lower cost operation: one , a power plant for self-supply of electric power and the other, an elctrolytic caustic soda plant alongside the ammonia-process soda plant. When the ammonia-process soda plant is operated on a production level of 150 tons and upwards a day the power plant attached to the installation will be worked by waste heat to generate electric power to attain virtual self-sufficiency in the power supply, while economy and efficiency are further augumented by the paralell operation of the ammonia soda and the electrolytic plants.

2. Of the four existing ammonia-soda plants in the country, Toyo Soda plant, because of its being designated as a reparations plant, has been suspending its operation for the past two and half yaars, and consequently the efficiency of the plant when it resumes operations remains to be unknown. But we can assure of the plant's comparatively higher efficiency in view of the fact that the equipment are comparatively new and that they have been well maintained.

3. We are against an arbitrary selection of two plants for lay off without Toyo Soda plant being given a chance to demonstrate its efficiency and lower cost operation. We shall have no objection should such selection be made after all four of the plants were given a fair chanc-e to show their respective merits.

On August 31 this year Toyo Soda Mfg. Co. was granted permission by the Hqs. Eighth Army to resume operation of their ammonia-process soda ash plant. This plant is now undergoing refitting in preparation for the reopening in March this year.

Laying off of this plant will seriously affect the livelihood of 1,100 workers and their dependents numbering about 3,000 souls. The bulk of these workers will be thrown out of their employment due to the lay off and it will create a grave local social problem.

In this connection, we beg to mention, sir, that we, the workers of Toyo Soda plant, have been working hard in cooperation with the management in the work of rehabilitating the company's enterprise without involving ourselves in any serious labor disputes in spite of comparatively lower wages. The resumption of operation of the ammonia soda plant has been the gaol set before us and for attainment of this goal we have sacrificed almost everything.

We shall be infinitely grateful to you, sir, if you would have the goodness to favour us your kind consideration of our humble petition, we remain, sir,

Your humble servant,

Shigeru Watanabe

Shigeru Watanebe,
President,
Toyo Soda Trade Union.

Inc: Date on Toyo Soda Trade Union.

DECLASSIFIED - NOT RELEASABLE TO FOREIGN NATIONALS

TOYO SODA TRADE UNION

1. Location: 4560 Tonda, Tokuyama-shi, Yamaguchi-ken.

2. Date when established: 6 March 1946.

3. Membership: 1,100 composed of employes of Toyo Soda Kogyo K.K., Tonda, Tokuyama-shi Yamaguchi-Ken.

4. principal officers of the Union:

President	WATANABE, Shigeru (Graduate of Meiji Tachnical College, Kyushu)
Vice-President	SADAHIRO, Estuo (Primary School education)
Secretary	TOSHIMITSU, Itaru (Graduate of Hiroshima Tech. C.)
Youngmen's Sect;	TOMITA, Noboru (Graduate of Hiroshima Tech. C.)
Young Women's Section	SAKKA, Hanako(Miss) (Graduate of Tokuyama Girls High)

5. Guiding Principles of the Union:

The Toyo Soda Trade Union has followed a moderate course since its formation in March 1946 , unaffected by the labor unrest and turbulent radical labor movements which characterized the post surrender Japan.

In December 1946, the Union at a general meeting of its members adopted a two-point program as guiding principles for the conduct of the Union activities. These principles embodied in the program were:

1. Labor and management should work for the rehabilitation of the country's industry in harmony and on an equal footing. While the industrial rehabilitation should not be sought at the sacrifice of the labor, the workers should not prevent or retard the industrial recovery by persuing their selfish interest;

2. The attainment of a self-supporting economy for the country is only possible through the industrial rehabilitation within the country, which can only be expected through the labor-capital cooperation.

6. General strike of Government Workers in Feb. 1947 and Toyo Soda Trade Union:

When a nation-wide strike of the Japanese Government workers was staged on Feb. 1, 1947, many labor unions in the country struck in sympathy, Toyo Soda Trade Union remained out of the struggle despite strong pressures brought to bear upon it.

In March 1947, when the Communist control of the Sanbetsu Rodo Kumiai Kaigi(CIO) became apparent, the Union severed its connection with it following a general meeting of the Union.

7. "Sekinin Seisan Sei" or assumption of responsibility by the workers for production:

In June 1947, a general meeting of the Union adopted a resolution embodying a principle of assuming responsibility for production by the workers. To implement the principle a Production Committee was created through voluntary action by the Union. The Committee's work include prmotion of labor efficiency, elimination of wastes in production, suitable and rational placement of workers on jobs, and prevention of waste in fuel and power.

8. Labor-Management relations:

The Union has always tried to maintain at least the minimum living wages. and has asked raises in pay several times necessitated by rising prices. The demands made by the Union have always been reasonable and beyond refutation by the management.

In this connection it must be added in fairness for the Union members that their demands for pay raises have been always restrained in view of the fact that their plant is a reparations plant and the Ammonia-process Soda Ash installation is suspending its operation. They are bravely bearing the difficulties of livelihood with comparatively lower wages hoping for an early resumption of the Ammonia Soda Ash plant operations. Preparations for the plant reopening for operation are now underway and it is expected that theplant reopening will be materialized in March,1949.

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FILE

TOYO SODA MANUFACTURING COMPANY, LTD.

Founded:	February 11, 1935.
Capital:	¥60,000,000.
Location of Firm and Plant:	4560 Tonda, Tokuyama-shi, Yamaguchi-Ken.
Tokyo Office:	8 Shiba Tamura-cho 2-Chome, Minato-Ku, Tokyo-To.
Osaka Office:	90 Kitahama 2-Chome, Higashi-Ku, Osaka.
Principal Officers:	Keisuke Sadanaga, President-Director. Nobuyoshi Yamaguchi, Managing Director. Tatsuma Ishida, Standing Director. Jinzo Furuuchi, Director. (The Company's Overseas Dept. is in charge of Kazuo Tomozawa, B.A. Colorado '30, M.A. Denver U. '32)
No. of Employees:	Approximately 1,100.
Plant Site:	350,000 tsubo including projected reclamation area)
Buildings:	20,000 tsubo.

Plants operated by the Company include:

Soda Ash(Solvay) plant, Electrolytic Caustic Soda plant, Bleaching Powder plant, L'Blanc Sodium Sulphate and Hydrochloric Acid plants, Bromine plant, Ethyl Bromide plant, Chlorsulphonic Acid plant, Silicate of Soda plant, Zinc Chloride plant, Calcium Carbonate plant, Permanganate of Soda plant, Monochlor Acetic Acid plant, Sulphamin plant, Hexyl Resorcin plant, etc.

Products, Plant Capacity and Uses of Products:

Product	Capacity (Tons per Month)	Uses
Caustic Soda(Solvay)	9,600	Manufacture of rayon, dyestuffs soap, paper and aluminum.
Soda Ash(Solvay process)	5,100	Manufacture of glass, soap, medicines of chemical origin and seasoning.
Caustic Soda(Electrolytic)	330	Same as Solvay-process Caustic Soda.
Bleaching Powder	70	For bleaching paper and cloths disinfecting soil and water.
Synthetic Hydrochloric Acid	630	Manufacture of Amino Acid Soy sauce, leather processing.
L'Blanc Sodium Sulphate	120	Manufacture of glass, Kraft paper, Sulphide Dyes, Sulphide Soda.

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Products	Capacity (Tons per month)	Uses
Inorganic Hydrochloric Acid	185	Same as Synthetic Hydrochloric Acid
Bromine	60	Manufacture of drugs and Bromides.
Ethyl, Bromide	5	Manufacture of dyestuffs, photographic sensitizer, and drugs
Sulphamin	500 kgs	Vermifuge
Hexyl Resorcin	100 "	Manufacture of Sulphonic Anid and sweet(saccarin)
Chlorsulphonic Acid	75 tons	processing cloths, paper, plating and manufacture of batteries.
Zinc Chloride	30 "	Manufacture of drugs and dyestuffs.
Monochlor Acetic Acid	1.5 tons	Manufacture of soap, paper; paste , processing cloths.
Silicate of Soda	800 tons	Manufacrure and processing rubber and manufacture of cosmetics.
Calcium Carbonate	90 "	

Superior Advantages enjoyed by the Company:

1. The Company's plant is situated at a convenient geographical point for both over-land and sea transportation. For sea-transportation, the Company has wharf facilities accommodating 10,000-ton class of Ocean going vessel, and private railway trucks extending 2 kilo-metres connecting with the State railway lines at Tonda Railway Station for overland transportation.

2. For coal supply, the Company has the sources of supply near at hand at UBE and Kyushu. Big rayon manufacturing plants, largest consumers of caustic soda, moreover, are located chiefly along the insland sea coast of Setonaikai, where the Company's plant is also situated.

3. Toyo Soda has a Solvay-process Soda Ash plant alongside with an electrolytic Caustic Soda plant and the concurrent working of the two plants by a company is unique in Japan.

With the resumption of operations of the Soda Ash plant in April, 1949, the power houses attached to the plant will be put into service again. The power houses will generate 35,000 kwh of power and self-supply of power for the Company's electrolytic Caustic Soda and other minor plants is expected to be attained.

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Manufacturing Processes

1. Soda Ash(Solvay process)

Equipment	No.	Processes 6
Brine Settler	2	Brine is settled and refined by removal of all impurities in this tank before it is sent into the Ammonia Absorber.
Ammonia Absorber	8	Here Brine meets Ammonia to be converted into Ammoniacal Brine.
Carbonating Tower	5	Ammoniacal Brine is carbonated in this Tower by infusion of Carbon Dioxide gas from the Lime Kiln.
Separator	6	Here the Carbonated Brine is subjected to centrifugal machine to separate crude Bicarbonate of Soda from the rest of the liquid.
Calciner	21	Crude Bicarbonate of Soda is burned or calcinated in this cylindrical kiln to convert it into Soda Ash.

2. Caustic Soda(Solvay process)

Equipment	No.	Processes
Causticizer	15	Bicarbonate of Soda is mixed with milk of Lime in this Causticizer before it is sent into the Dorr-thickner.
Dorr Thickner	11	The mixed substance is allowed to settles in the Dorr-thickner to obtain Caustic Soda liquid.
Vacuum Evaporator	12	Water in the Caustic Soda liquid is removed by evaporation in this tank before it goes under further dehydrating process in the Kettle.
Kettle	18	Here thick liquid of Caustic Soda from the Evaporator is boiled for further evaporation of water. Crystalized Caustic Soda is obtained by allowing it cool itself.

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3. Caustic Soda(Electrolytic)

1) Salt is dissolved in water in the Salt Dissolving Tank and, after all impurities contained in the salt having been removed, is conducted into the Electrolytic Cell.

2) The Electrolytic Cell is equipped with Graphite Electrodes and the thick Brine is decomposed by direct current to produce Caustic Soda liquid. Chlorine and Hydrogen gases are produced as by-products in this decomposing process.

3) The Caustic Soda liquid, so obtained, is boiled in the kettle to make it finished Caustic Soda in liquid form of the standard density or crystalized Caustic Soda.

4. Synthetic Hydrochloric Acid

Chlorine and Hydrogen gases, by-products of the Electrolytic process, are brought together and burned to make it Hydrochloric gas. The gas, after being cooled, is infused into water to obtain Hydrochloric Acid.

5. Chlorsulphonic Acid

Fuming Sulphuric Acid is heated and turned into anhydrous Sulphuric gas. The gas, then, is conducted into the Reaction Tower, where it meets Chlorine gas from the Electrolytic or Silicate of Soda plant to obtain Chlorsulphonic Acid.

6. Sodium Sulphate(Mannheim process)

1) Waste Sulphuric Acid from the Chlorsulphonic Acid plant is infused into salt in the Reaction Pot and when heated Acid Sodium Sulphate is produced.

2) The product is conducted into the Muffle Furnace, where salt is added and again subjected to heating to make it anhydrous Sodium Sulphate. Chlorine gas is produced as a by-product during this heating process.

3) The Chlorine gas is either sent to Chlorsulphonic Acid plant for use as a raw material for the production of Chlorsulphonic Acid or it is made into Hydrochloric Acid by allowing the gas to be absorbed by pure water.

7. Silicate of Soda

Soda Ash is mixed with Silica and sent into the Melting Reaction Furnace and, when heated, a glass-like Silicate of Soda base is obtained. The stuff is put into the High-pressure Melting Pot, where after it has been melt by high pressure steam is refined in the Settling Tank. It is then put to a further dehydrating process in the Vacuum Evaporator to get finished Silicate of Soda.

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8. Zinc Chloride

Zinc scraps are first melted in Hydrochloric Acid from the electrolytic Caustic Soda or Silicate of Soda plant. The melted stuff, after having been refined in the Storage Tank by removal of iron and sulphuric acid contents, is boiled in the pot and Zinc Chloride is obtained.

9. Bromine

1) Sea-water is drawn into the Blowing-out Tower, where a small quantity of Sulphuric Acid is infused.

2) The sea-water treated with Sulphuric Acid is then, after absorbing Chlorine gas from the electrolytic plant, goes into the Bromine Tower, where the sea-water is dropped into the Tower from the top in fine spray while strong air current is sent into the Tower from the bottom. The Brine content of the sea-water is separated in a gas form.

3) This gas is absorbed by Caustic Soda liquid in the Absorber producing Sodium Bromide.

4) Sodium Bromide is neutralized by adding to it Sulphuric Acid and sent into the Distillation Tower. Here the substance is distilled by steam and Bromine gas is generated. The gas is cooled to reduce it to liquified Bromide. Sea-water contains 6/100,000 of Bromine.

10. Ethyl Bromide

Iron Bromide is first produced through reaction of Bromine on iron scraps in the Reaction Tank. This iron bromide is then put into the Reaction Pot, where Sulphuric Ethyl is added, and when it is heated, Ethyl Bromide is produced through reaction between the two. The Ethyl Bromide so produced is refined by Caustic Soda or by war water to make it finished Ethyl Bromide.

11. Bleaching Powder

Bleaching Powder is made by infusing Chlorine gas into slaked lime.

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SODA ASH PLANT EQUIPMENT EXEMPTED FROM REPARATIONS

Equipment	No.	Weight (Ton)	Section
1. Undergr ound belt Conveyer	1	3.5	Brine Chamber
2. Bucket Elevator	1	1.0	" "
3. Dissolving Tank	2	2.0	" "
4. Belter	1		
5. V Notch	1	0.2	" "
6. Lime Mixing Tank	2	2.0	" "
7. Milk of Lime Tank	2	5.0	" "
8. Supporting Structure for Brine Purifying Installation	1	4.0	" "
9. Milk of Lime Head Tank	1	1.0	" "
10. Mud Washing Tank	1	4.0	" "
11. Washed-mud Receiving Tank	1	1.0	" "
12. V Notch	1	0.2	" "
13. Gas-tunnel for Lime Kiln	1	15.0	Compressing Chamber
14. Gas Regulator	1	2.0	" "
15. Drain Separator	1	2.0	" "
16. Crude Liquid Tank	4	28.0	Carbonating Chamber
17. Bicarbonate of Soda Waste Tank	1	0.5	" "
18. Decomposer	2	10.0	Distilling Chamber
19. Sand Trap	2	0.5	" "
20. Heat Trap	1	2.5	" "
21. Supporting Structure for Decomposer	1	10.0	" "
22. Caustic Liquid Receiving Tank	1	3.0	Causticizing Chamber
23. Converter Liquid Receiving Tank	1	3.0	" "
24. Finished Liquid Receiving Tank	2	2.0	Thickning Chamber
25. Piston Pump	4	4.0	
26. Piston Pump Motor (15 HP)	2	0.2	

DECLASSIFIED E.O. 11652 SECTION 3 (E), MAR 1982

Mr. Kawaguchi Toyo Soda
Mr. Tomozawa

Breifback, for Thor.

Check approval for opn of Soda Ash Plant and verify Exemption listed Items against the designation criteria and the inventory

E

TOYO SODA

AMMONIA SODA PLANT EQUIPMENT EXEMPT FROM REPARATIONS
TOYO SODA MANUFACTURING CO. LTD.

The following items of equipment, which are exempt from reparations, are to be installed in the Ammonia Soda Plant of Toyo Soda Mfg. Co. at Tonda as part of refitting the plant for resumption of operations. The exempt equipment were either secured or built by the Company since Aug. 1946 when the Company's Ammonia Soda Plant was designated as reparations plant:

Equipment	No.	Location for Installation	Idenfication No. On Chart
-Underground belt conveyer	1	Brine Chamber	1
-Bucket Elevator	1	2 "	2
-Dissolving Tank	2	" "	3
-V- Notch	1	" "	4
-Lime Mixing Tank	2	" "	5
-Milk of Lime Tank	2	" "	6
-Supporting Structure for -Brine Purifying Eqt.	1	" "	7
-Milk of Lime Head Tank	1	" "	8
-Mud Washing Tank	1	" "	9
-Washed Mud Receiving Tank	1	" "	10
-V- Notch	1	" "	4
-Building housing Salt Dissolver	1	" "	22
-Building housing Filter Press	1	" "	21
-Gas Tunnel for Lime of Kiln	1	Compressing Chamber	11
-Gas Regulator	1	" "	12
-Drain Separator	1	" "	13
-Ammonia Brine Tank	4	Carbonating Chamber	14
-Decomposer	2	Distilling Chamber	15
-Preheating Tower	2	" "	26
-Sand Trap	2	" "	16
-Heat Trap	1	" "	17
-Supporting Structure for Decomposer	1	" "	18
-Caustic Liquid Receiving Tank	1	Causticizing Chamber	6
-Converter Receiving Tank	1	" "	6

MOVED FROM PARTS OF SILICATE OF SODA WATER GLASS PLANT.

Equipment	No.	Location for Installation	Identification No. on Chart
Receiving Tank ALUM	2	Thickning Chamber	24
Underground Tank ALUM	2	"	25
Finished Liquid Receiving ALUM Tank	2	"	6
piston Pump ALUM.	4	Lime Chamber	19
Lime Stone Sieve UNDER CONSTRUCTION	1	" "	20
Pulverizer PURCHASED 14 NOV 48	2	Finishing Chamber	23

Dated Jan. 10, 1949

T. Kawaguchi.
Taketo Kawaguchi, Director,
Custodian Reparations Plant.

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SODA ASH PLANT EQUIPMENT EXEMPTED FROM REPARATIONS

Equipment	No.	Weight (Tons)	Section
1. Underground belt Conveyer	1	3.5	Brine Chamber
2. Bucket Elevator	1	1.0	" "
3. Dissolving Tank	2	2.0	" "
4. Pelter	1		
5. V Notch	1	0.2	" "
6. Lime Mixing Tank	2	2.0	" "
7. Milk of Lime Tank	2	5.0	" "
8. Supporting Structure for Brine Purifying Installation	1	4.0	" "
9. Milk of Lime Head Tank	1	1.0	" "
10. Mud Washing Tank	1	4.0	" "
11. Washed-mud Receiving Tank	1	1.0	" "
12. V Notch	1	0.2	" "
13. Gas-tunnel for Lime Kiln	1	15.0	Compressing Chamber
14. Gas Regulator	1	2.0	" "
15. Drain Separator	1	2.0	" "
16. Crude Liquid Tank	4	28.0	Carbonating Chamber
17. Bicarbonate of Soda Waste Tank	1	0.5	" "
18. Decomposer	2	10.0	Distilling Chamber
19. Sand Trap	2	0.5	" "
20. Heat Trap	1	2.5	" "
21. Supporting Structure for Decomposer	1	10.0	" "
22. Caustic Liquid Receiving Tank	1	3.0	Causticizing Chamber
23. Converter Liquid Receiving Tank	1	3.0	" "
24. Finished Liquid Receiving Tank	2	2.0	Thickning Chamber
25. Piston Pump	4	4.0	
26. Piston Pump Motor (15 HP)	2	0.2	

DECLASSIFIED E.O. 11652 SECTION 3 (E)(1) NND 963001

To Commerce & Industry Section, Dec 22 '48
G. W. G. T.

Report on Business Status of Toyo Soda Mfg. Co.
for the Year Ending by Dec. 31, 1948

The following are a summary report on the present business and operation status of the Toyo Soda Manufacturing Company, Ltd. with prospectives for 1949:

1. Reconditioning and Refitting of the Ammonia Soda Plant for Resumption of Operations.

The funds amounting to ¥21,000,000 required for the work of reconditioning and rehabilitating the Company's Ammonia Soda plant had been secured through a loan granted by the Rehabilitation Finance Bank of the Japanese Government in November. The Company has received loans from the local Bank of Yamaguchi on the security of the Government loan and the work of reconditioning the plant is in progress. The work is expected to be completed by the end of Feb. 1949 and the plant operations to be resumed in March. The present plans call for an initial production of Raw Soda Ash on the level of 110 metric tons a day.

2. Electric Power Supply.

Under the current seasonal restrictions on the power supply the Company has been forced to suspend 64 cells of the Eletrolytic Caustic Soda plant from working, leaving the other half, 64 cells, working. The situation is decidedly gloomy for the Company. as far as the power situation concern.

3. Increases of Company's Capital.

Arrangements are now being made to raise the Company's present capital of ¥30,000,000 up to ¥60,000,000 at the end of January, 1949. The current market price of the Company's shares (face value ¥50) is strong, maintaining ¥90 level. With the capital increase, the present double account system, the Old and the New, will be unified and the Company will be removed from the Government list of Special Accounting Firms.

4. General Business Situation.

With the tightening of the money market which set in in the Spring this year the sales of the Company's products have been weaker. The financial conditions of the Company, consequently, cannot be said to be good. However, the Company is expected to tide over the present disfficulties.

Besides the weaker market for the Company's products due to the tight money situation causing the difficult financial management of the Company, the full employment of the workers which the Company has maintained despite the suspension of operations of the Ammonia Soda plant two years ago is another factor, more fundamental perhaps, contributing to the difficult financial situation the Company now confronts. A considerable number of the workers should have been discharged or laid off when the Ammonia Soda plant was shut down in 1946. But the Company has tried to find means of keeping them on its employment by undertaking various minor enterprises including the manufacture of sulfamin drugs, hexylresorcin etc. So far these new undertakings failed to prove a success. Now the Company is pinning its hope on the resumption of operations of the Ammonia Soda plant in early next Spring.

In this connection, we wish to mention that our employees in key positions have been exerting their unstinted efforts in helping their financially pressed firm to tide over the transition.

5. Capital-Labor Relations.

Relations between the management and the employees remain quiet and peaceful and there is no prospect of labor troubles at the Company's plant.

For the Toyo Soda Co., Ltd.
J. Furuuchi
Director.

DECLASSIFIED E.O. 12065 SECTION 3(E), NLJ 93-1

BASIC: Ltr, Hqs, Yamaguchi Mil Govt Team, APO 317, Serial No. 1143-B, subj: "Petition to Resume Operations", dated 11 August 1948.

AGMGEM 004 2nd Ind

Headquarters Eighth Army, APO 343 31 AUG 1948

TO: Commanding Officer, Chugoku Military Government Region, APO 317

1. The application of the Toyo Soda Company to operate their Soda Ash Plant in Takuyama-shi, Yamaguchi-Ken pending reparations removal is approved.

2. This approval is not to be used as a basis for obtaining allocation of supplies and materials. These will be secured through normal Japanese allocation channels.

BY COMMAND OF MAJOR GENERAL RYDER:

R. SCHAFER
Lt. Col., AGD
Asst. Adjutant General

1 Incl:
n/c

CMGR 386.3 (D-No) 3rd Ind

Headquarters, Chugoku Military Government Region, APO 317, Kure, Honshu, 7 September 1948

TO: Commanding Officer, Yamaguchi Military Government Team, APO 317

1. Your attention is invited to 2nd Ind.

2. Request that the Toyo Soda Company be notified of the approval of their application to operate and the stipulations therein.

BY ORDER OF COLONEL SNYDER:

JERRY W. TOM
1st Lt, USAF
Adjutant

1 Incl:
n/c

1. ADJ J
2. SMGO
3. RCI
4. LBR
5. EDG
6. ED
7. WELF
8. PH
9. INF
10. D.CO
11. FILE

SEP 11 RECD

45-11

C-774

that permission be granted for Toyo Soda Co to operate their Soda Ash plant.

8552

1 Incl:
as par 2

EUGENE J. McNAMARA
Lt Col, Infantry
SMGO

CMGR 386.3 (D-No) 1st Ind

Headquarters, Chugoku Military Government Region, APO 317, Kure, Honshu, 12 August 1948

TO: Commanding General, Eighth Army, APO 343

Forwarded recommending consideration be given to request made in paragraph 5 of basic letter.

1 Incl:
n/c

RUSSELL C. SNYDER
Colonel, FA
Commanding

9/30

DECLASSIFIED - Authority NND 947076 By NARA, Date 12-18-09

S.C

HEADQUARTERS
YAMAGUCHI MILITARY GOVERNMENT TEAM
YAMAGUCHI, HONSHU, JAPAN
APO 317

WJG/chh

11 August 1948

Serial No. 1143-B

SUBJECT: Petition to Resume Operations

THRU : Commanding Officer
Chugoku Military Government Region
APO 317

TO : Commanding General
Eighth Army
APO 343
Attn: Military Government Section

1. Reference CD 21 for 1948, subject "Japanese Industrial Reparations Facilities."

2. Attached herewith petition from Toyo Soda Manufacturing Co. Ltd, Yamaguchi Prefecture, requesting permission to operate their Soda Ash plant. The company has also submitted this petition to the Japanese Government.

3. The Toyo Soda Co. have two plants located in the one area, both being designated for reparations, Caustic Soda (45-11) and Soda Ash (45-16). The Caustic Soda plant is being operated by authority headquarters 8th Army letter AG 004.04 (MG), dated 19 October 1946, subject: "Toyo Soda Kogyo KK, authorization to continue operation temporarily.

4. The operation of this company's Soda Ash plant would enable them to attain self-sufficiency in electric power by utilizing waste heat to operate their own power plant, thus conserving 800,000 - 1,000,000 KWH of electricity per month at present supplied by the Electric Power Distribution Company.

5. In view of the importance of this project to the economy of the region it is the opinion of this headquarters

that permission be granted for Toyo Soda Co to operate their Soda Ash plant.

1 Incl:
as par 2

EUGENE J. McNAMARA
Lt Col, Infantry
SMGO

DECLASSIFIED E.O. 12065 SECTION 3 (E)(1)(2)(3) NLS #

TOYO SODA MANUFACTURING CO. LTD.
TONDA, TOKUYAMA-SHI

August 10, 1948

Major Frederick C. Wiggins,
Commerce and Industry Section,
Yamaguchi Mil. Gov'nt Team.

Subject:- Fitting Up Ammonia Soda Plant

Sir,

We are desirous of undertaking work of fitting up our ammonia soda plant to have it ready for resumption of its operation and beg for your kind recommendation for the approval of the project to the G.H.Q. Authorities. The ammonia soda or Solvay plant of Toyo Soda Mfg. Co. located at Tonda, Tokuyama-shi, Yamaguchi prefecture, has been suspending its operation since November, 1946, following its designation for reparations on August 24, the same year.

We are being moved in this project by the following considerations: (1) to have the plant in readiness for an early resumption of its operation so as to meet the growing demand for soda products; (2) to prevent deterioration of the plant facilities from their long idleness; (3) to attain self-sufficiency in electric power through the working of the power house attached to our ammonia soda plant which is now remaining idle.

We wish to undertake the work of fitting up the plant to produce 150 tons of crude soda ash a day to begin with. When the plant starts working on the above basis the electric power generators attached to the plant will be worked to generate sufficient volume of power for the plant. The electric generators are worked by steam required for the manufacturing processes of the plant. Our immediate objective was limited to a lower productivity in view of limited supplies of the required raw materials within the foreseeable future. The desgined capacity of our ammonia soda plant is 560 tons a day. The project of restoring the plant to this limited production level is expected to require outlays amounting to 21,854,045 Yen. including 6,866,525 Yen for the purchase of the needed parts and materials and 14,987,520 Yen for wages to be paid out to the workers employed in the project. A loan covering the expenditures will be obtainable from city banks or the Rehabilitation Finance Fund

DECLASSIFIED E.O. 11652 SECTION 3 (E)(M)(3) NLJ

of the Japanese Government upon approval of the project by the Authorities concerned. The time required for the completion of the work will be three months.

We shall be deeply grateful to you,sir, for your kind consideration of our humble request, we remain, sir,

Yours most respectfully,

N. Yamaguchi

Nobuyoshi Yamaguchi,
Managing Director.

Enclosures:

1. Appendix I- Materials Required for Working Ammonia Soda Plant and Power House Attached Thereto
2. Appendix II-Particulars of Repairs Required
3. Appendix III- Estimated Labor Cost of the Repairs
4. Appendix IV-Estimated Cost of Necessary Materials for the Repairs