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Tokyo water

WATER WORKS BUREAU
Tokyo Metropolitan Office

23, Feb. 1951

TO: Mr. C.W. Allen, Sanitary Engineer
Public Health Section, Kanto Civil
Affairs Region

SUBJECT: Monthly Report on Bacteriological Tests
of Raw Water of Deep Wells for February.

Location	Total Count of Bacteria Colonies (in 1cc)	Coliform Group (in 50 cc)	Date
Hayashicho Well	1	(-)	5 Feb.
Ikebukuro	0	"	"
Shimocho	0	"	"
Saginomiya	0	"	"
Inatsuke	0	"	"
Rikugien	0	"	"
Mabashi	1	"	"
Shōwadōri	1	"	"
Nippori	0	"	"
Kurihara	6	"	"
Umeda	2	"	"
Motoki	65	"	"

Signed by K. Taniguchi
K. Taniguchi
Chief of Water
Purification Division

File
Tokyo under

JANUARY PRODUCTION DATA CONCERNING LIQUID CHLORINE

Asahi Denka Kogyo K.K.
2850 9-Chome, Ogu-machi
Arakawa-ku, Tokyo

DATE	NO. OF CELLS IN OPERATION		HOURS IN OPERATION		ELECTRIC CURRENT (AMP)		AMOUNT OF ELECTROLYTIC SODA (Approximate Calculation)	(a) AMOUNT OF CHLORINE (Approximate Calculation)	CHLORINE CONCENTRATION	(b) LIQUID CHLORINE PRODUCED	b/a
	NO.1	NO.2	NO.1	NO.2	NO.1	NO.2					
4	58	103	14.83	15.00	4.329	3.447	11.427	9.813	98.3	2.650	27.0
5	58	103	24.00	24.00	4.500	4.470	24.606	21.309	98.0	6.890	32.3
6	58	103	24.00	24.00	4.500	4.404	24.015	20.584	98.2	6.960	33.8
7	58	103	24.00	24.00	4.500	4.393	25.119	21.540	98.2	6.590	30.6
8	59.2	101.4	23.42	23.50	4.462	4.318	24.232	20.762	98.2	6.430	31.0
9	60	100.1	24.00	24.00	4.000	3.158	19.196	16.534	98.2	5.980	36.1
10	60	99.6	24.00	24.00	3.963	3.200	19.573	16.874	98.0	7.110	42.1
11	60	99.8	23.58	23.75	4.117	3.489	20.735	17.796	98.0	6.620	37.2
12	60	100	24.00	24.00	4.600	4.634	25.844	22.194	98.0	6.570	29.6
13	60	100	24.00	24.00	4.575	4.627	25.695	21.770	98.0	7.010	32.2
14	60	100	24.00	24.00	4.582	4.627	26.277	22.508	98.6	7.390	32.8
15	60	101.3	24.00	24.00	4.600	4.634	26.565	22.826	98.4	6.940	30.4
16	60	102	24.00	24.00	4.572	4.571	24.802	21.310	98.4	7.660	35.9
17	60	102	24.00	24.00	4.600	4.625	26.412	22.737	98.6	7.460	32.8
18	60	102	24.00	24.00	4.482	4.456	25.770	22.353	98.6	7.000	31.3
19	60	102	23.50	24.00	4.577	4.429	25.490	21.980	98.2	7.910	35.9
20	60	103	24.00	24.00	4.600	4.534	27.299	23.447	98.4	8.180	34.9
21	60	103	23.00	23.50	4.115	3.904	23.010	19.814	98.4	7.500	37.8
22	60	103.8	23.33	23.60	4.200	4.081	23.772	20.463	98.4	7.830	38.2
23	60	104	24.00	24.00	4.600	4.321	26.196	22.254	98.4	9.410	42.3
24	60	103.2	24.00	24.00	4.600	4.412	25.708	22.148	98.2	8.150	36.8

DATE	NO. OF CELLS IN OPERATION		HOURS IN OPERATION		ELECTRIC CURRENT (AMP)		AMOUNT OF ELECTROLYTIC SODA (Approximate Calculation)	(a) AMOUNT OF CHLORINE (Approximate Calculation)	CHLORINE CONCENTRATION	(b) LIQUID CHLORINE PRODUCED	b/a
	NO.1	NO.2	NO.1	NO.2	NO.1	NO.2					
25	60	103	24.00	24.00	4.600	4.375	25.618	22.193	98.4	8.950	40.3
26	60	103	23.08	23.42	4.600	4.278	24.992	21.523	98.0	8.240	38.3
27	60	103.7	24.00	24.00	4.600	4.200	25.620	22.049	98.2	9.640	43.7
28	60	104	24.00	24.00	4.600	4.200	25.604	22.043	98.2	9.920	45.0
29	60	104	24.00	24.00	4.600	4.183	25.466	22.030	98.6	9.770	44.3
30	60	104	22.58	23.17	4.600	4.242	25.147	21.923	98.4	8.870	40.4
31	60	104	24.00	24.00	4.600	4.242	25.430	22.112	98.6	9.270	41.9
Total							679.620	584.889		212.900	
Average	59.69	102.32	23.47	23.55	4.480	4.238			98.3		36.4

AMOUNT OF LIQUID CHLORINE DELIVERED DURING JANUARY, 1951

DATE	SAKAI	YODOBASHI	KANAMACHI	SHIBAURA SEWAGE DISPOSAL STATION	SUNAMACHI SEWAGE DISPOSAL STATION	MOBARA TOWN OFFICE	HACHIOJI MUNICIPAL OFFICE	CIVILIAN USE	PLANT USE	TOTAL
5	-	2,000	2,000	-	-	-	-	-	-	4,000
6	-	-	-	-	-	-	-	2,050	-	2,050
8	-	2,400	-	-	-	-	-	-	-	2,400
9	2,400	2,000	-	-	-	-	-	4,150	-	8,550
10	2,400	-	-	-	-	-	-	-	-	2,400
11	-	-	-	4,000	-	-	-	13,000	-	17,000
12	2,400	2,000	-	-	-	-	-	750	-	5,150
13	-	-	-	-	-	-	-	2,550	-	2,550
16	-	2,400	2,000	-	-	150	-	6,600	-	11,150
17	2,400	2,000	2,400	4,000	-	-	-	-	-	10,800
18	2,400	-	-	-	1,250	-	-	3,700	-	7,350
19	-	2,400	2,000	-	-	-	-	6,600	-	11,000
20	-	-	-	-	-	-	-	18,250	-	18,250
22	2,400	2,000	-	-	-	-	-	2,550	-	6,950
23	-	-	2,000	4,000	-	-	-	3,500	-	9,500
24	2,400	2,000	2,400	-	-	-	-	2,500	-	9,300
25	-	-	-	-	-	-	-	2,500	-	2,500
26	-	2,400	2,000	-	-	-	-	8,850	-	13,250
27	-	-	-	-	-	-	-	200	-	200
29	2,400	2,000	2,400	-	-	-	200	6,500	-	13,500
30	-	-	-	4,000	1,250	-	-	13,750	-	19,000
31	2,400	2,400	2,400	-	-	-	-	1,700	150	9,050
Total	21,600	26,000	19,600	16,000	2,500	150	200	99,700	150	185,900

Brought over from December	15,150
Put into storage during January	212,900
Total	228,050
Amount delivered during January	185,900*
Amount carried over to February	42,150

*Water works	67,550
Sewage disposal station	18,500
Civilian use	99,700**
Plant use	150

**Mitsubishi Seishi (paper)	17,000
Nihon Kei-Kinzoku (chemicals)	16,500
Odawara Seishi (paper)	13,000
Tohoku Pulp (Pulp)	10,000
Nitto Seishi (paper)	10,000

Sotp-to water

1

16 March 51

From: J. Nukuzawa.
To: Mr. C. W. Allen
Subject: Sagami Ri System Extension Project, Tokyo-to W.W.

F.Y of 1950

Original expected budget	110,000,000 yen
Request of floatation of loan	110,000,000 "
Approval of " "	50,000,000 "
Government subsidy	0 "
Transfer of general accounts	0 "

The budget was decided by the municipal assembly on 26 Dec. 1950

Works:

1) Lower structures of the bridge crossing over the Tama-Ri. (at Inada)
(Bridge length 355 m, 11 spans)
a) Purchase of cement, steel bars & pipes laid on the bridge.
3) Construction of piers and abutments
(contracted 9 mat.)

2) Preliminary works
Survey, boring & etc.

Remarks: Majority of the budget will be postponed to the next fiscal year.

F.Y. of 1951

Expected budget	600,000,000 yen
Request of floatation of loan	600,000.000 "
Approval " "	not yet
Expectation of approval	unknown
Government subsidy	0
Transfer of general accounts	0

Works of the budget of 600,000,000 yen

1) Upper structures of the bridge crossing over the Tama-Ri
2) Distribution pipe laying (dia 1000 mm) 3,900 m
3) Conveyance pipe laying (dia 1500 mm) about 500 m (in the area of Nagasawa filter plant, Kawasaki w.w.)
4) Land purchase, (area of distribution pipe laying)

WATER WORKS BUREAU

TOKYO METROPOLITAN OFFICE

SAGAMI RIVER SYSTEM EXTENSION PROJECT OF TOKYO WATER WORKS

CONTENTS

1 OUTLINE

2 EFFECT OF PROJECT

3 ESSENTIAL POINTS OF PLAN

4 WORK PERIOD AND CONSTRUCTION COST

ATTACHED FIGURE

FEBRUARY, 1951

1. OUTLINE

The Sagami River System Extension Project of Tokyo Water Works depends upon a water share from the Kawasaki Water Works as a water source. The Kawasaki Water Works is now executing an extension project, with a water source in an allotment of a discharge of 480,000 m^3/day from the Sagami River Water Control Project of Kanagawa Prefecture. As this discharge is a surplus for their future demands the Tokyo Water Works intends to increase its water supply by receiving a share of 230,000 m3/day of raw water from this discharge.

The Control Project controls Sagami River Water in Sagami Reservoir. Controlled raw water is conveyed to Tsukui Dividing Basin through Tsukui Tunnel by way of Tsukui Regulating Reservoir. At the basin Kawasaki receives its allotted discharge, which is conveyed to Nagasawa Filter Plant through a tunnel total length 22 Km by way of Shimokuzawa Dividing Well. Tokyo gets its share of water at the Receiving Well of the Filter Plant, which is at the end of the tunnel. It is stipulated that Tokyo will bear a part of Kawasaki's expenses for the River Water Control Project (both construction and maintenance costs), and also construction and maintenance costs of the Kawasaki city tunnel in ratio to the quantity of water received, and, moreover, compensation of electric power decrease and payment.

After being purified at Nagasawa Filter Plant, located in the neighbourhood of the Kawasaki Plant, the water share will be conducted into the Metropolis by natural flow and the water quantity of max. 200,000 m^3/day will be supplied to the South-West District of the Metropolis. The extension project is to construct facilities which are required for conduction, purification and distribution of this water.

2. EFFECT OF PROJECT

The Metropolitan Water Works has lost much of its flexibility by operating irrationally, and by trying to supply over its standard capacity actually amounting to 120 -- 130 %; nevertheless the supply condition is in general very poor. In order to improve these conditions and to provide against the future population increase of Tokyo, the Extension Project of Kanamachi Filter Plant System and that of Ogochi Reservoir System are now under construction. But it is estimated that a water supply of about 250,000 m^3/day will be lacking in 1955, the mark of our plans. The subject is the only way by which the above lack of water can be supplemented timely and in quantity. Completion of this project is expected to improve our general supply condition fundamentally.

The supply area of this project is the natural flow system of the existing Tamagawa Filter Plant, the supply condition of which is now the poorest in the Metropolis. It is almost geographically hopeless for this area to receive water increase influence from the completion of the Extension Projects of Kanamachi and the Ogochi System; the supply condition for this area cannot be improved other than through this project. As the supply condition in this region is expected to be improved remarkably by the completion of this project, the improvement will be especially noticeable in Haneda Air-Base and Shibaura Q.M. Depot, situated at the end of the distribution pipe system.

1. OUTLINE

The Sagami River System Extension Project of Tokyo Water Works depends upon a water share from the Kawasaki Water Works as a water source. The Kawasaki Water Works is now executing an extension project, with a water source in an allotment of a discharge of 480,000 m^3/day from the Sagami River Water Control Project of Kanagawa Prefecture. As this discharge is a surplus for their future demands the Tokyo Water Works intends to increase its water supply by receiving a share of 230,000 m3/day of raw water from this discharge.

The Control Project controls Sagami River Water in Sagami Reservoir. Controlled raw water is conveyed to Tsukui Dividing Basin through Tsukui Tunnel by way of Tsukui Regulating Reservoir. At the basin Kawasaki receives its allotted discharge, which is conveyed to Nagasawa Filter Plant through a tunnel total length 22 Km by way of Shimokuzawa Dividing Well. Tokyo gets its share of water at the Receiving Well of the Filter Plant, which is at the end of the tunnel. It is stipulated that Tokyo will bear a part of Kawasaki's expenses for the River Water Control Project (both construction and maintenance costs), and also construction and maintenance costs of the Kawasaki city tunnel in ratio to the quantity of water received, and, moreover, compensation of electric power decrease and payment.

After being purified at Nagasawa Filter Plant, located in the neighbourhood of the Kawasaki Plant, the water share will be conducted into the Metropolis by natural flow and the water quantity of max. 200,000 m^3/day will be supplied to the South-West District of the Metropolis. The extension project is to construct facilities which are required for conduction, purification and distribution of this water.

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The Metropolitan Water Works has lost much of its flexibility by operating irrationally, and by trying to supply over its standard capacity actually amounting to 120 -- 130 %; nevertheless the supply condition is in general very poor. In order to improve these conditions and to provide against the future population increase of Tokyo, the Extension Project of Kanamachi Filter Plant System and that of Ogochi Reservoir System are now under construction. But it is estimated that a water supply of about 250,000 m^3/day will be lacking in 1955, the mark of our plans. The subject is the only way by which the above lack of water can be supplemented timely and in quantity. Completion of this project is expected to improve our general supply condition fundamentally.

The supply area of this project is the natural flow system of the existing Yamagawa Filter Plant, the supply condition of which is now the poorest in the Metropolis. It is almost geographically hopeless for this area to receive water increase influence from the completion of the Extension Projects of Kanamachi and the Ogochi System; the supply condition for this area cannot be improved other than through this project. As the supply condition in this region is expected to be improved remarkably by the completion of this project, the improvement will be especially noticeable in Haneda Air-Base and Shibaura Q.M. Depot, situated at the end of the distribution pipe system.

3. ESSENTIAL POINTS OF PLAN

(1) Source of Water Supply

The water source for this project will be a capacity of 230,000 m^3/day of raw water, which will be drawn at the receiving well in Nagasawa Filter Plant of Kawasaki City from the 480,000 m^3/day that Kawasaki receives from the Sagami River Water Control Project of Kanagawa Prefecture.

(2) Water Quantity Plan

Maximum capacity of raw water per day (Shared water capacity) ---------- 230,000 m^3

Maximum capacity of water supply per day ----- 200 000 m^3

(3) Water Supply Area

Area supplied by natural flow in existing Tamagawa Filter Plant System —— a large part of Ōta Ward, and a part of Shinagawa Ward, Minato Ward, and Setagaya Ward.

(4) Method

Conveyance and Distribution —— natural flow
Purification —— Rapid filtration and Chlorination

(5) Feeding System

Receiving Well of Nagasawa Filter Plant of Kawasaki
Conduit Pipe → Nagasawa Filter Plant of Tokyo
Distributing-Pipe → Water Supply Area.
(Crossing Tama River)

4. WORK PERIOD AND CONSTRUCTION COST.

Work Period: 4 Years (1950 -- 1953)

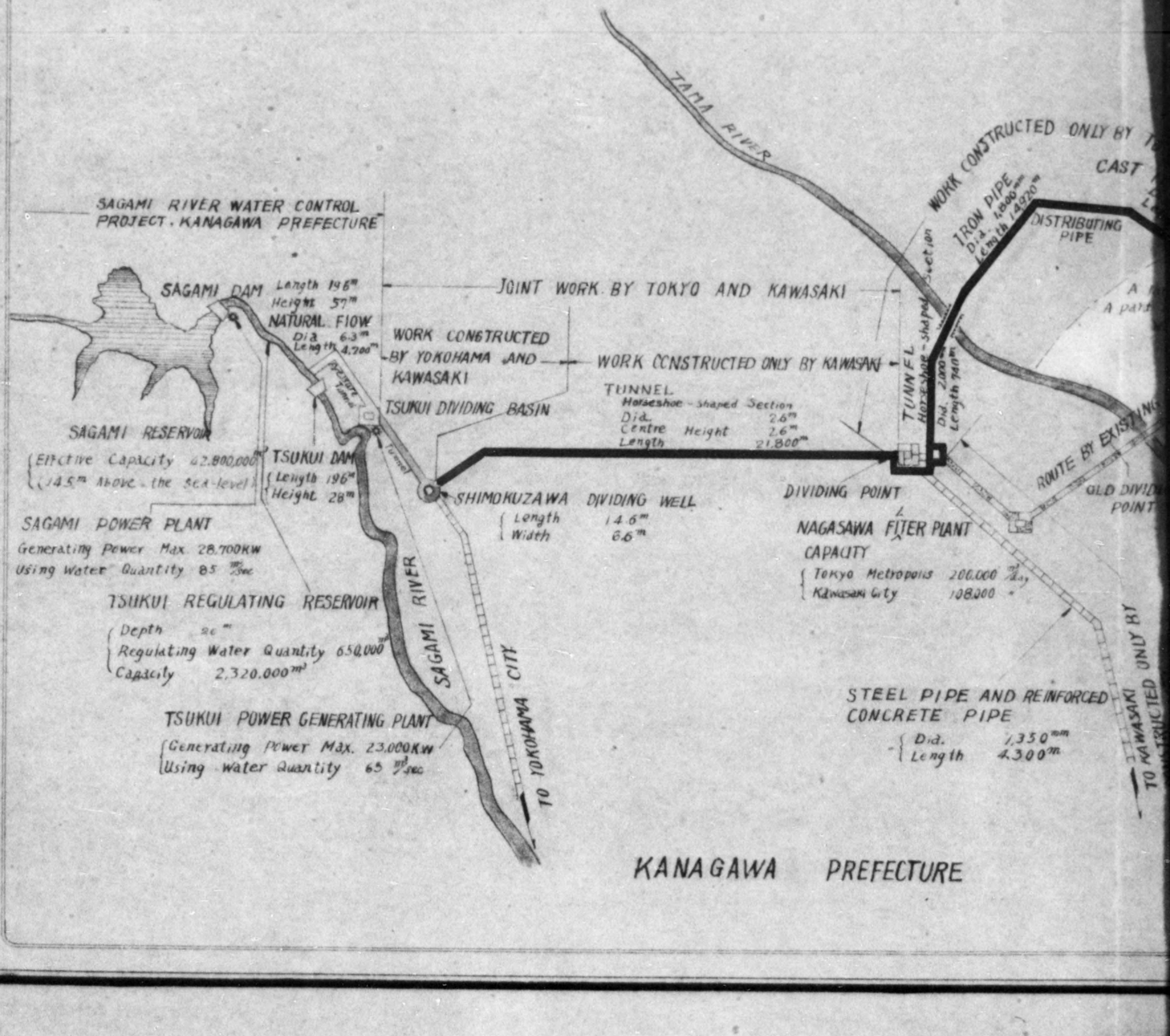
Construction Cost:

Total		2,750,000,000 Yen
Fiscal	1950	50,000,000 "
"	1951	1,080,000,000 "
"	1952	1,248,000,000 "
"	1953	372,000,000 "

—— THE END ——

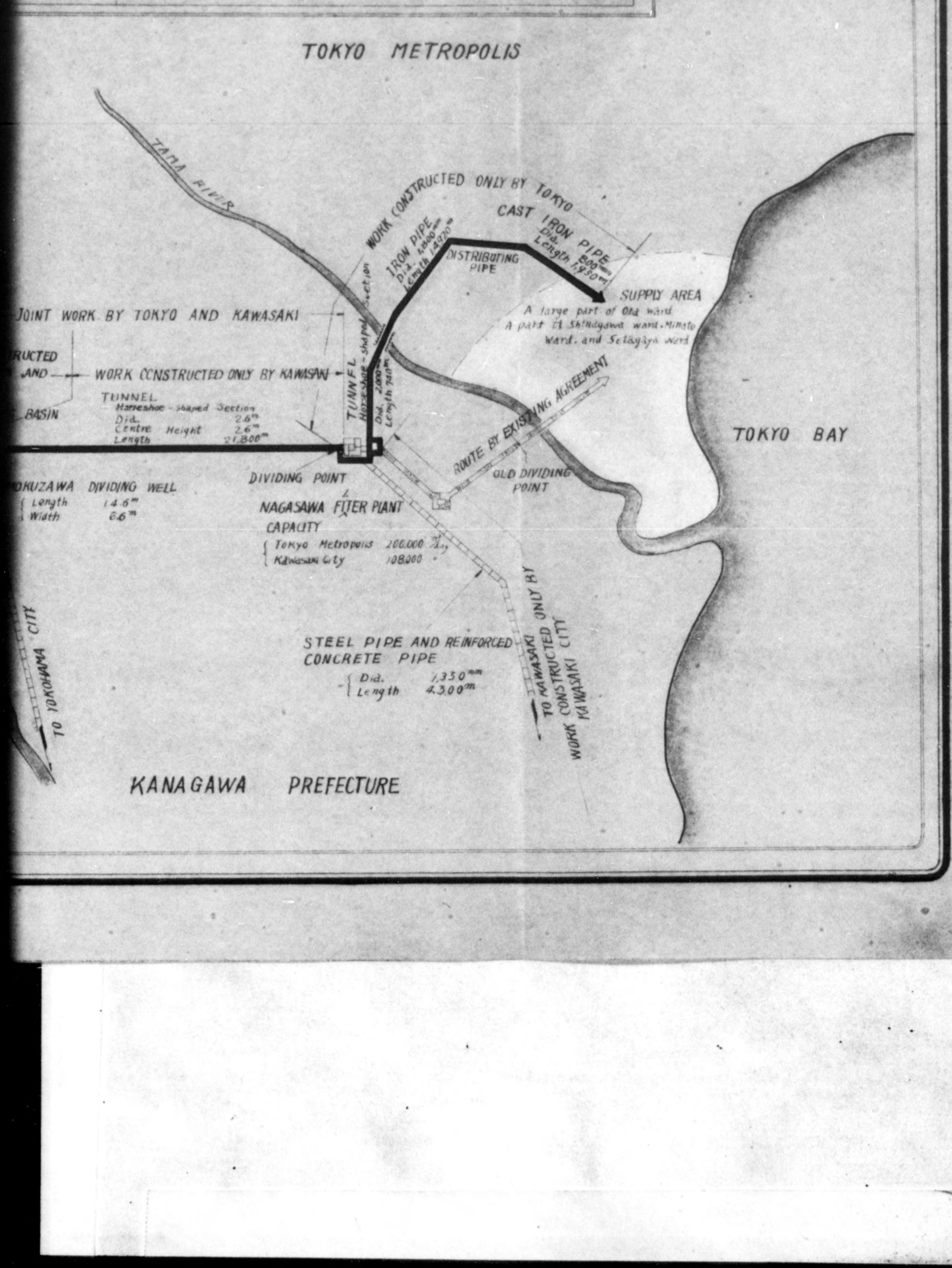
SCHEMATIC PLAN OF SAGAMI RIVER SYSTEM EXTE
TOKYO METROPOLITAN WATER WORKS B

TOKYO METROPOLIS



KANAGAWA PREFECTURE

N OF SAGAMI RIVER SYSTEM EXTENSION PROJECT
O METROPOLITAN WATER WORKS BUREAU



WATER WORKS BUREAU
Tokyo Metropolitan Office

19 March 1951

TO: Mr. C. W. Allen, Sanitary Engineer,
Public Health Section, Kanto Civil Affairs Region

SUBJECT: Monthly Report on Bacteriological Tests of Raw Water of Deep Well for March.

Location	Total Count of Bacteria Colonies (in 1 cc)	Coliform Group (in 50 cc)	Date
Hayashicho Well	1	(-)	6 Mar.
Shimocho "	0	"	"
Saginomiya "	1	"	"
Inatsuke "	1	"	"
Rikugien "	50	"	"
Mabashi "	0	"	"
Showadori "	20	"	"
Nippori "	0	"	5 Mar.
Kurihara "	2	"	"
Umeda "	6	"	"
Motoki "	6	"	"

Remarks: The Ikebukuro Well could not be examined, because it was out of order.

Signed by K. Taniguchi
K. Taniguchi
Chief of Water
Purification Division

Feb

FEBRUARY PRODUCTION DATA CONCERNING LIQUID CHLORINE

Asahi Denka Kogyo K.K.
2850 9-Chome, Ogu-machi
Arakawa-ku, Tokyo

DATE	NO. OF CELLS IN OPERATION		HOURS IN OPERATION		ELECTRIC CURRENT (AMP)		AMOUNT OF ELECTROLYTIC SODA (Approximate Calculation)	(a) AMOUNT OF CHLORINE (Approximate Calculation)	CHLORINE CONCENTRATION	(b) LIQUID CHLORINE PRODUCED	b/a
	NO.1	NO.2	NO.1	NO.2	NO.1	NO.2					
1	60	104	24.00	24.00	4.600	4.325	26.243	22.774	98.4	9.020	39.6
2	64	103	8.75	9.16	4.242	3.641	8.037	6.914	98.2	1.940	28.0
3	64	103	23.70	24.00	4.400	4.525	26.223	22.544	98.6	9.350	41.5
4	64	103	24.00	24.00	4.400	4.471	26.206	22.542	98.8	10.140	45.0
5	64	103.7	24.00	24.00	4.351	4.069	26.236	22.781	98.4	9.580	42.0
6	64	103.3	24.00	24.00	4.355	3.892	24.837	21.390	98.4	9.540	44.6
7	64	103	24.00	24.00	4.328	4.069	25.494	21.983	98.4	9.450	43.0
8	64	103	24.00	24.00	4.384	4.035	24.647	21.331	98.4	8.310	39.0
9	64.67	103	23.27	23.33	4.267	3.471	21.855	18.793	98.4	6.790	36.1
10	65.7	103	23.67	23.83	4.485	3.814	24.537	21.171	98.0	6.720	31.8
11	66	103	23.08	23.17	4.494	3.904	24.335	20.992	98.4	9.150	43.7
12	66	103	23.75	23.75	4.388	3.419	22.930	19.736	98.6	7.970	40.4
13	67.2	103	24.00	24.00	4.417	4.154	25.501	22.054	97.8	9.090	41.1
14	68	103.7	18.50	18.58	3.369	3.550	18.120	15.633	98.6	5.670	36.2
15	68	104	12.50	17.92	3.407	3.176	11.943	12.621	98.2	4.750	37.6
16	68	104	24.00	24.00	3.417	2.971	19.025	16.564	98.2	7.260	43.8
17	68.7	104	12.50	23.42	2.993	3.041	14.975	12.816	98.6	5.380	41.9
18	69	104	9.83	23.83	2.761	3.232	14.066	12.048	98.6	6.700	55.5
19	69	104	23.33	23.75	4.324	3.932	24.426	20.932	98.4	8.170	39.0
20	70.42	104	24.00	24.00	4.289	3.963	25.611	22.225	97.2	8.590	38.6
21	71	104.7	24.00	24.00	4.017	3.800	24.761	21.427	97.8	8.760	40.9
22	71	104.7	22.17	23.17	4.067	3.800	23.385	20.262	96.7	7.420	36.6

DATE	NO. OF CELLS IN OPERATION		HOURS IN OPERATION		ELECTRIC CURRENT (AMP)		AMOUNT OF ELECTROLYTIC SODA (Approximate Calculation)	(a) AMOUNT OF CHLORINE (Approximate Calculation)	CHLORINE CONCENTRATION	(b) LIQUID CHLORINE PRODUCED	b/a
	NO.1	NO.2	NO.1	NO.2	NO.1	NO.2					
23	71.69	104	24.00	24.00	4,088	3,800	24,476	21,263	98.0	7,970	37.5
24	72	104	23.58	23.58	4,032	3,910	24,119	20,899	98.2	8,480	40.5
25	72	104	24.00	24.00	3,684	3,652	22,727	19,675	98.6	7,980	40.5
26	71.2	104	20.33	23.08	3,702	3,800	21,777	18,890	98.2	7,160	37.9
27	71	103.6	24.00	24.00	3,693	3,800	23,367	20,107	98.6	8,210	40.8
28	71	102.3	24.00	24.00	3,528	3,959	23,689	17,668	98.2	5,570	31.5
Total							623,548	538.035	98.	215,120	
Average	67.49	103.6	21.60	22.88	4,062	3,812			98.2		40.0

AMOUNT OF LIQUID CHLORINE DELIVERED DURING FEBRUARY, 1951

DATE	SAKAI	YODOBA-SHI	KANAMA-CHI	SUNAMACHI SEWAGE DISPOSAL STATION	SHIBAURA SEWAGE DISPOSAL STATION	BOSHU WATER WORKS	CHIBA WATER WORKS	TOKORO-ZAWA TOWN OFFICE	SAITAMA SOUTH WATER WORKS	HACHIO-JI MU-NICIPAL OFFICE	CIVILIAN USE	PLANT USE	TOTAL
1	-	-	-	-	-	50	-	-	-	-	500	-	550
2	-	-	-	-	-	-	-	-	-	-	2,750	-	2,750
3	4,400	2,000	2,000	-	-	-	1,500	-	-	-	1,710	-	11,610
5	2,400	-	-	-	4,000	-	-	100	-	-	6,900	-	13,400
6	-	2,400	-	-	-	-	-	-	-	-	2,000	-	4,400
7	2,400	2,000	-	-	-	-	-	-	-	-	2,000	-	6,400
8	-	-	2,000	1,250	-	-	-	-	-	-	9,000	-	12,250
9	-	-	-	-	-	-	-	-	1,150	-	2,750	-	3,900
10	2,400	-	2,400	-	-	-	-	-	-	-	8,600	-	13,400
12	2,400	4,400	-	-	4,000	-	-	-	-	-	13,500	-	24,300
13	-	-	-	-	-	-	-	-	-	-	1,500	-	1,500
14	2,400	2,000	2,000	-	-	-	-	-	-	-	2,900	-	9,300
16	-	-	-	-	-	-	-	-	-	-	1,500	-	1,500
17	-	-	-	-	4,000	-	-	-	-	-	12,050	-	16,050
19	-	-	-	-	-	-	-	-	-	-	7,400	-	7,400
20	2,400	2,000	2,400	1,250	-	-	-	-	-	-	5,000	-	13,050
21	-	-	-	-	-	-	-	-	-	-	2,500	-	2,500
22	-	2,400	-	-	4,000	-	-	-	-	-	11,250	-	17,650
23	2,600	-	-	-	-	-	-	-	-	-	750	-	3,350
24	-	-	-	-	-	-	-	-	-	-	2,500	-	2,500
26	2,700	2,700	-	-	-	-	-	-	-	-	2,800	-	8,200
27	-	-	2,700	1,250	-	-	-	-	-	-	350	-	4,300
28	2,700	-	-	-	4,000	-	-	-	-	150	4,350	100	11,300
Total	26,800	19,900	13,500	3,750	20,000	50	1,500	100	1,150	150	104,560	100	191,560

Brought over from January	42,150
Put into storage during February	215,120
Total	257,270
Amount delivered during February	191,560*
Amount carried over to March	65,710

*Water works	63,150
Sewage disposal station	23,750
Civilian use	104,560**
Plant use	100

**Jujo Seishi (paper)	14,500
Mitsubishi Seishi (paper)	14,000
Odawara Seishi (paper)	13,000
Nihon Kei Kinzoku (chemicals)	11,500
Tohoku Pulp (paper)	10,000

18 Jan. 1951

Tokyo to
Water

Tokyo - to Chlorine situation

1) Average amount of consumption is 90 tons per month.

2) In the month of Dececber 108.15 tons delivered in.

3) Price of chlorine is 37,800 yen per ton plus 4,000 yen as container fee, delivered at the factory.

4) Chlorine purchased mostly from the Asahi Denka Company and some from the Tsurumi Co.

5) The contract term expired at the end of laster year. The new likely to be 40,000 yen per ton plus containers fee. price

6) the stock is about one month consumption amount.

file
Tokyo-water

WATER WORKS BUREAU
Tokyo Metropolitan Office

17 Jan. 1951

TO: Mr. C. W. Allen, Sanitary Engineer,
Public Health Section, Kanto Civil Affairs Region

SUBJECT: Monthly Report on Bacteriological Tests
of Raw Water of Deep Wells for January.

Location	Total Count of Bacteria Colinies (in 1 cc)	Coliform Group		Date
		10 cc	50 cc	
Hayashicho Well	7		(-)	8 Jan.
Ikebukuro "	2		"	"
Shimocho "	6		"	"
Saginomiya "	9		"	"
Showadori "	10		"	"
Rikugien "	4		"	"
Inatsuke "	1		"	"
Mabashi "	2		"	"
Nippori "	1	(-)		2 Jan.
Umeda "	5	"		"
Kurihara "	12	"		"
Motoki "	3	"		"

Signed by K. Taniguchi
K. Taniguchi
Chief of Water
Purification Division

9 January 1951

MEMO FOR RECORD:

SUBJECT: Pipe Break Due to Earthquake

1. The 800 mm main under the underpass at Shinjuku Station broken due to earthquake at 8 p.m., 8 Jan 51.

2. Water break stopped at 0200 hrs., 9 Jan 51.

3. Water being supplied from adjacent areas to Hongo and Shinjuku Wards which suffered water cut at time of break. One small area has no water.

4. Complete restoration to be finished by 10 Jan 51.

Clinton W. Allen

CLINTON A. ALLEN
Sanitary Engineer

File
Cve

WATER WORKS BUREAU
Tokyo Metropolitan Office

16 Oct. 1950

TO: Mr. C. W. Allen, Sanitary Engineer,
Public Health Section, Kanto Civil Affairs Region

SUBJECT: Monthly Report on Bacteriological Tests
of Raw Water of Deep Wells for October.

Location	Total Count of Bacteria Colonies (in 1 cc)	Coliform Group (in 10cc)	Date
Shimocho Well	1	(-)	2 Oct.
Saginomiya "	10	"	"
Showadori "	1	"	4 Oct.
Rikugien "	0	"	"
Ikebukuro "	2	"	"
Inatsuke "	0	"	"
Hayashicho "	0	"	"
Nippori "	0	"	2 Oct.
Kurihara "	0	"	"
Umeda "	0	"	"
Motoki "	6	"	"

Remarks: The Mabashi Well is out of order due to the trouble with pumping equipments.

Signed by K. Taniguchi
K. Taniguchi
Chief of Water
Purification Division

CWA/yn

HEADQUARTERS
KANTO CIVIL AFFAIRS REGION
APO 500

KPH 720 28 August 1950

SUBJECT: Test Work of Water in Tokyo-To Near Kimuraya Bakery (Ace Bakery)

TO: Commanding Officer
Army Central Exchange
Japan Logistical Command
APO 503
ATTN: Food Service Division

1. In reply to telephone conversation requesting information concerning test work carried out by Tokyo-To Water Bureau, the following information is given. The routine check point nearest the Ace Bakery is located at Nakano Fish Store, 6, 3-chome Tsukiji, Chuo-Ku, for which the following results are given:

Date	Time	Residual (PPM) Chlorine
July 10	14:30	1.40
" 11	9:42	0.80
" 12	9:24	1.40
" 13	8:57	1.40
" 14	14:11	1.40
" 15	9:45	0.80
" 16	8:45	0.80
" 17	10:15	1.40
" 18	9:47	1.20
" 19	9:50	1.00
" 20	10:48	0.60
" 21	9:50	1.20
" 22	9:47	1.10
" 23	10:06	1.00
" 24	10:03	1.30
" 25	9:47	1.40
" 26	9:48	1.00
" 27	9:43	1.00
" 28	---	---
" 29	---	---
" 30	10:59	1.30
" 31	10:00	1.50

KPH 720
Subject: Test Work of Water in Tokyo-To Near Kimuraya Bakery (Ace Bakery)

28 August 1950

Date	Time	Residual (PPM) Chlorine
August 1	10:23	1.00
" 2	9:55	1.50
" 3	10:08	1.20
" 4	10:44	1.20
" 5	10:40	1.40
" 6	8:03	1.50
" 7	9:08	1.10
" 8	10:11	1.80
" 9	10:31	1.90
" 10	10:26	1.80
" 11	9:52	1.80
" 12	10:20	0.90
" 13	9:27	1.00
" 14	9:54	1.50
" 15	9:57	1.30
" 16	10:00	1.40
" 17	10:08	1.20
" 18	10:48	1.70
" 19	10:28	1.50
" 20	8:48	1.60
" 21	10:14	1.30
" 22	9:54	1.50
" 23	9:34	1.60

2. Routine bacteriological tests were made of the same locations on the following dates with results:

Date	Plate Count	10 cc Coli Determination
July 10	0	---
" 17	0	---
" 25	0	---
" 30	2	---
August 8	1	---
" 14	0	---

FOR THE CHIEF:

GEO. B. NIBLOCK JR.
Major, Infantry
Deputy Chief

File under Tokyo

WATER WORKS BUREAU
Tokyo Metropolitan Office

21 Aug. 1950

TO: Mr. C.W. Allen, Sanitary Engineer,
Public Health Section, Kanto Civil Affairs Region.

SUBJECT: Monthly Report on Bacteriological Tests of Raw Water of Deep Wells for August.

Location	Total Count of Bacteria Colonies (in 1 cc)	Coliform Group (in 10cc)	Date
Shimocho Well	2	(-)	7 Aug.
Inatsuke "	2	"	"
Rikugien "	8	"	"
Hayashicho "	14	"	"
Ikebukuro "	4	(+)	"
Saginomiya "	0	(-)	"
Nippori "	1	"	1 Aug.
Kurihara "	3	"	"
Umeda "	0	"	"
Motoki "	1	"	"

Remarks : The Mabashi and Showadori Wells are out of order due to the trouble with pumping equipments.

Signed by K. Taniguchi
K. Taniguchi
Chief of Water
Purification Division

Tokyo Water general

APPLICATION FOR AUTHORIZED USE OF
REPARATION MACHINERY AND EQUIPMENTS

Date 15 Aug. 1950

TO : Mr. Isato Ikeda
Minister of Finance

From : Director of Tokyo Water Works Bureau,
Tokyo Metropolitan Office

Address : 5, 3-chome, Marunouchi, Chiyoda-ku, Tokyo-to.

(1) Name of plant and code No. :

Former 2nd Tokyo Army Arsenal
Present Itabashi Filter Plant,
Tokyo Metropolitan Water Works

Code No. 39-54

(2) Location of plant : No.3569, Itabashi-cho 6-chome,
Itabashi-ku, Tokyo-to.

(3) Production : Filtered water.

(4) Machinery and Equipment to be used: Please see attached List.

(5) Necessity for use :

The Itabashi Filter Plant located in the compound of the former 2nd Tokyo Army Arsenal Itabashi Factory had been in exclusive use for water service in the above factory. Although, due to the disorganization of the munition works after the termination of the war, water demand in the compound has decreased in a considerable degree, water service is still needed for those of them which are now used as peace-time industry works or as schoolhouses. On the other hand, the area surrounding this plant is furnished by the farthest ends of distribution pipes of the Metropolitan water service, so both volume and pressure of water around here are far from satisfactory, making it still more difficult for us to meet the demand of the increased population in the vicinity. As we judged the situation too dangerous to be left intact from the viewpoints of public sanitation and fire prevention, we asked for and was granted

"Authorized Use" (KOKUKAN-KEI No.205) and have been using the said Plant since April, 1946, under its authority, thus keeping up water supply to the above area in adequate condition. Although we have always been considering about providing sufficient water for the area on our own account, we cannot as yet hope for rapid improvement because of shortage in water source and construction materials.

For the above reasons we ask for your approval on our using the machines, equipments buildings and land specified in the attached list, which are, every one of them, indispensable to our water service to the above area.

Signed by Y. Tokuzen

Y. Tokuzen
Director, Water Works Bureau,
Tokyo Metropolitan Office

Note

on

Water Service Situation of
The Itabashi Filter Plant

1.	Raw water used The Tama River Water		9,000 cub.m/day.
2.	Filtered water used		8,000 cub.m/day.
3.	Population served	aprox.	70,000
4.	Area served	aprox.	1,990 acres

5. Districts & Installations served

Itabashi 7-chome, Itabashi-ku.

Oji-machi, Kita-ku.

Occupation Units in the former
Tokyo 1st Military Arsenal.

Whole area of the former
Tokyo 2nd Military Arsenal.

Welfare Ministry

Date: Sept 9, 1950

KŌSEISHŌ TŌEI - 184

TO : Vice-Minister, Finance Ministry.

SUBJECT: Recommendations for Continuous Use of Itabashi Filter Plant Equipments.

The whole area of Itabashi-cho, Itabashi-ku, Tokyo-to and its vicinity which have developed into congested commercial and residential quarters in recent years, are located at the farthest ends of the Tokyo Metropolitan water supply system, so that water supply to these areas was not satisfactory despite the extension program of water works proposed by the Metropolitan authorities, which has not yet been materialized; frequent water suspension and reduction often exposed the inhabitants in the areas to the danger of fire and poor health. However, since the Tokyo Metropolitan Water Works Bureau started supplying water to these areas, using with "Temporary Use" permit the water facilities of the former Tokyo 2nd Arsenal Itabashi Factory, there has been remarkable improvement so far as water volume is concerned.

We have been notified, however, by the authorities concerned that as the "Temporary Use" permit has been revoked for certain reasons, we should re-apply for the permit of use if we are to continue using the above facilities. It is absolutely necessary, as you will see in the above statement, for us to use them in order to secure public health and fire prevention. We, therefore, ask you to grant "Temporary Use" permit to the Tokyo Metropolitan Office so that they may continue to make use of the above equipments.

Signed_____

Vice-Minister,
Welfare Ministry.

List of Machinery and Equipments to be used

(1) List of machines

No.	Code No.	House No.	Name of Machine	Brief Specifications	Used for
1	39-54-192	3	Pump	Centri. EBARA. Bore 300mm 35m 8.5 m^3/min	Feeding to elevated tank from clear water reservoir
2	" " 415	"	Motor	3 phase, MITSUBISHI, 75HP 3000V 1941	
3	" " 479	"	Switchboard	3000V, 200A SHIBAURA-DENKI 1941	
4	" " 189	3	Pump	Centri. EBARA, Bore 250mm 40m 6.8 m^3/min	Feeding to piping systems or elevated tank from reservoirs
5	" " 412	"	Motor	3 phase, HITACHI, 100HP 3000V 1943	
6	" " 497	"	Oil Switch	Box-type, HITACHI 3000V, 30A, Compensator	
7	" " 193	3	Pump	Turbine, DENGYOSHA Bore 200mm, 35m, 4.0 m^3/min	Feeding to piping systems from reservoir or deep-well
8	" " 414	"	Motor	3 phase, KOWASEIKO 45HP 200V	
9	" " 620	"	Switch Box	3 phase, KATSUMATA 250V 200A 1934	
10	" " 335	3	Transformer	60 KVA, Single phase ODAWARA 200-3300V	For 414, 417, 416 Low Voltage Motors
11	" " 336	"	"	" "	
12	" " 392	"	"	20 KVA Single phase 100-3300V, 1938	Electric-lighting
13	" " 196	494	Pump	For Deep-Well, TAMAGAWA, 38M	Pumping up deep-well water
14	" " 417	"	Motor	3 phase, FUJIDENKI, 20KW, 200V, 1941	
15	" " 618	"	Switch Box	3 phase, 250V 150A 1941	
16	" " 195	"	Pump	Turbine, EBARA, 2 stg 40m 22 L/s	Distributing water Pumped from deep-well
17	" " 416	"	Motor	3 phase MITSUBISHI 200V 15KW 1941	
18	" " 619	"	Switch Box	250V 150A KATSUMATA 1940	

No.	Code No.	House No.	Name of Machine	Brief Specifications	Used for
19	39-54-194	356	Pump	Turbine, DENGYOSHA 35m 6 m^3/min	Feeding water in case of emergency
20	" " 413	"	Motor	3 phase, TOBA, 200V 70HP	
21	" " 621	"	Switch Box	250V 300A KAITSUKATA, 1934	
22	" " 460	541	Switch Panel	INOUE Works	Feeding electricity to this plant
23	" " 465	"	"	"	
24	" " 300	8	Pump	Volute, EBARA, 22m 10 m^3/min.	Feeding raw water from settling basins to filter beds
25	" " 435	"	Motor	3 phase, FUJIDENKI, 60KW 3000V	
26	" " 507	"	Switch Box	3 phase FUJIDENKI, 3000V	
27	" " 299	"	Pump	Volute, EBARA 22m 5 m^3/min.	"
28	" " 434	"	Motor	3 phase, FUJIDENKI 30KW 200V	
29	" " 500	"	Switch Box	3 phase, FUJIDENKI 200V	
30	" " 505	"	Switchboard	High Voltage 150A	For 430, 429, 428 electric motors & 434, 304, 190 low voltage motors & electric lighting
31	" " 506	"	Switchboard	"	
32	" " 297	"	Transformer	3 phase, 50KVA 200V - 3300V	
33	" " 393	"	Transformer	Single phase 10KVA 100V - 200V	
34	" " 303	542	Pump	Volute, DENGYOSHA 25m 1883 L/sec.	Feeding raw water from Settling basins to filter beds
35	" " 428	"	Motor	3 phase, HITACHI 100 HP, 3000V	
36	" " 499	"	Oil Switch	3 phase, HITACHI 30A 3000V	
37	" " 305	"	Pump	Volute DENGYOSHA 25m 1883 L/s	"
38	" " 429	"	Motor	3 phase HITACHI 100HP 3000V	
39	" " 498	"	Oil Switch	3 phase HITACHI 30A 3000V	

No.	Code No.	House No.	Name of Machine	Brief Specifications	Used for
40	" " 306	"	Pump	Volute, DENGYOSHA 25m 1863 L/Sec	Feeding raw water from sedimentation basins to filter beds
41	" " 430	"	Motor	3 phase HITACHI 100 HP 3000V	
42	" " 520	"	Oil Switch	3 phase HITACHI 30A 3000V	
43	" " 304	"	Vacuum Pump	HITACHI 0.9 m^3/min. of air. 580 mm/Hg	Starter for 303, 305, 306 pumps.
44	" " 188	62	Pump	Volute, HITACHI 100 HP	Pumping up raw water to sedimentation basins in dry season
45	" " 411	"	Motor	3 phase HITACHI 100HP 3000V	
46	" " 496	"	Oil switch	3 phase HITACHI 30A 3000V	
47	" " 190	"	Vacuum Pump	HITACHI 0.9 m^3/min air 3HP 580 mm/Hg	Starter for No.188 pump
48	" " 294	524	Pump	Deep-Well Pump 38m 22L/S Bore 125 mm	Pumping up raw water from deep well
49	" " 432	"	Motor	3 phase MITSUBISHI 20KW 200V	
50	" " 622	"	Switch Box	3 phase NAFADA 20KW 200V	
51	" " 293	"	Pump	Turbine, SHAFA 3 stg 45m 22L/S	Boosting water pumped from deep-well
52	" " 431	"	Motor	3 phase MITSUBISHI 20KW 200V	
53	" " 623	"	Switch Box	3 phase NAFADA 20KW 200V	
54	" " 301	"	Transformer	Single phase, OSAKA 20KVA 200-3300V	For 432, 431 low voltage Motors
55	" " 363	"	"	Single phase, OSAKA 20KVA 200-3300V	
56	" " 475	"	"	Single phase, OSAKA 20KVA 200-3300V	

Total No. of machines: 56

No.	Code No.	House No.	Name of Machine	Brief Specifications	Used for
57	39-54-2785	8	Accessories	Switch 12, Insulator 39 Cable head, Steel pipe	For 503, 506 switch boards
58	" " 1265	"	Switchboard	A-Meter, V-Meter, Knofe Switch2, Converter	For 297, 393 Transformers
59	" " 2787	3	Accessories	Switch 2, Circuit Breaker 3, converter	For 335, 336, 302 Transformers
60	" " 2786	524	"	Insulator 17, Switch 3, Cable head 2	For 301, 363 Transformers
61	" " 3174	3	Pipes & accessories	Water distribution pipes & others (71)	Distributing water

Total No. of machines: 5

Grand Total No. of machines: 61

(2) List of Land

No.	Item	Area(in Tsubo)	Description of purpose
1	Site for Reservoirs	3,882	Occupied by Reservoirs, Filter Beds and pump-houses.
2	" Sedimentation Basins	5,934	Occupied by Sedimentation basins, Raw Water Pump house.
3	" Deep well house	307	Occupied by deep well and its pumping house at the Northern gate
4	" Pump house	56	Occupied by pump house
Total		10,179 Tsubo	

Note: One Tsubo = 0.00082 Acre

(3) List of Buildings

Building No.	Floorage (in Tsubo)	Made of	Used for
3	39.00	Brick, One floored	Distribution Pump House
356	13.00	Reinforced Concrete	"
226	76.00	"	Office room
494	12.00	"	Pump House for Deep Well
331	3.00	Steel	Storehouse for Chlorine
8	22.00	Brick, One floored	Pump House for raw water pumping
46	14.00	Wood, coated with mortar.	Room for applying alum
542	27.00	Concrete, one-floored	Raw Water Pumpinghouse
62	55.00	"	"
524	12.00	"	Pump House for Deep Well
369	5.00	Wood, one floored	Latrine
301	3.00	"	"
368	3.00	"	"
303	0.60	"	"
350	66.00	"	Lodging House for Pump operators
160	94.00	"	Store house
94	31.00	"	Lodging House for Guards & Pump Operators
635	4.00	Wood, Zinc-roofed	Latrine
63	24.00	Brick, One-floored	Proposed Pumping room
64	23.00	"	Storehouse for alum
65	36.00	"	"
404	53.00	"	Room for Guards

Total 22 Houses 615.60 Tsubo

Note: One Tsubo = 35.58 sq.ft.

(4) List of Equipments

Item	Number	Capacity	Used for
Settling basins	2	each, 1000 m^2, 3000 m^3 concrete	Raw water sedimentation
"	1	2000 m^2, 6000 m^3 concrete	"
Filter Basins	2	760 m^2, 2980 m^3/day Brick	Filtration
"	1	580 m^2 2320 m^3/day Brick	"
"	1	82 m^2 328 m^3/day Brick	Filtration of Deep Well water
Reservoir	1	500 m^2, 2000 m^3 Brick	Clear water Reservoir
"	1	80.25 m^2 208 m^3 Concrete	"
Elevated Tank	1	45 m^2 Circular, 200 m^3 Concrete	Water distribution
Sand-Washer	1	With accessaries	Washing sand of Filter beds
Mixing Tank	1	3m x 2m x 1.5m	Coagulant Mixing
Deep Wells	2	Casing dia 300mm each, depth,230m and 260m	Supplimentary raw water source
Conduit	1300m	Dia.24inch. Concrete pipe	Leading raw water
"	880m	Dia.14inch. Cast Iron " 12 " "	Leading from settling basins to Filter basins
Distribution Pipes	12,095 m	Dia. 12 -- 3 inch, Cast Iron	Feeding water within the compounds
Gate Valves	62	Dia. 12 -- 5 inch	On the piping
Water meters	4	Dia. 12 -- 6 inch	"
Hydrants	93	Dia. 2 1/2 inch	"
Total	17 Items		

9. Aug. 50

Works for the exclusion of the bad supply, Tokyo-to W. W.

(1) Urgent extension works

By the progression of the urgent extension works — such as NO.1 chemical settling basin at the Kamiamachi filter plants, inverted siphons and many distribution mains — Some areas were improved passably. Consequently, it seems that the bad supply at these areas were excluded remarkably.

The following works included in the urgent extension works, are the improvement works of bad supply chiefly.

Locality	Kind of work	Dia. of Pipe (mm.)	Length (m)
Work completed			
a. River bank of Naka-gawa, front of	newly laying	150	113
Azuma-cho 7~8 chome, Sumida-ku	"	110	328
b. Sagisnomiya, 3 chome, Nakano-ku	"	250	3,200
— Toyotama-Kita-machi, 6 chome,	withdrawal	200	2,430
Nerima-ku	"	150	870
Under construction			
c. Minami-Suna-machi, 3 chome,	newly laying	200	1,870
— 2 chome, Koto-ku	withdrawal	150	1,570
	"	100	300

(Continued)

	Locality	Kind of work	Dia. of Pipe (mm)	Length (m)
	Work not yet started			
d.	Umeta-cho ~ Magome-nishi-2 chome, Ota-ku	newly laying	100	250
e.	Kami-Ikegami-cho ~ Magome-nishi, 2chome, Ota-ku	"	100	250
f.	Itabashi 7~10 chome, Itabashi-ku	"	300	1.020
g.	Shimura-Hasunuma ~ Shimura-Maino-machi, Itabashi-ku	"	200	1.200
h.	Omiyamai ~ Shimmei-cho, Suginami-ku	"	250	900
		withdrawal	100	900
i.	Amanuma, 1 chome, Suginami-ku	newly laying	200	420
		withdrawal	150	420
j.	Hirazuka, 4 chome ~ Nishi-Osaki, 1 chome, Shinagawa-ku	newly laying	300	1.080
k.	Kami-Jujo, 4 chome ~ Inatsuki-nishi, 5-chome, Kita-ku	"	200	600
		"	100	500
l.	Toshima-cho, 1 chome, ~ Higashi-Jujo, 4 chome, Kita-ku	"	300	1,920
		withdrawal	150	200
		"	100	1,720

(Continued)

	Locality	Kind of Work	Dia of Pipe (mm.)	Length (m)
m	Higashi-Tajo, 5-chome ~ Akabane, 1-chome, Kita-ku	newly laying	200	1,400
		withdrawal	100	780
		"	65	480
n	Higashi-nakano-machi, Nakano-ku ~ Honan-cho, 4-chome, Suginami-ku	newly laying	300	1,960
		withdrawal	150	380
			100	220
o	Yoyogi ~ Nishihara Service Res. Shibuya-ku	newly laying	350	1,000
p.	Senju-Kawara-machi ~ Senju-Okawa-machi, Adachi-ku	"	350	1,600
	Total (urgent works)	newly laying		19,611
		withdrawal		10,220

(2) The following work is an individual improvement one which does not belong to the urgent works

Higashi-Komatsu-cho, 3-chome ~ Ukitabashi, Higashi-Funabori-cho Edogawa-ku	newly laying	350	2,200

(3) Partial improvement works in 50 J.F.Y

Newly laying

Locality	Dia of Pipe (m.m.)	Length (m)
Yukigaya-machi, Ota-ku	100	300
Hongo-cho, Meguro-ku	"	600
Omori, 9 chome, Ota-ku	"	470
Senzoku-cho, Meguro-ku	"	500
Iriarai, 3chome, Otaku	"	300
Oi-kanoizuka-machi, Shinagawa-ku	"	580
Komazawa-machi, Meguro-ku	200	160
Seijo-machi, Sedagaya-ku	150	600
Azukizawa, 3chome, Itabashi	100	570
Umeta-higashi-machi, Adachi-ku	100	180
Total		4160

Relaying

Locality	Laying dia (mm)	Laying length (m)	Withdrawal dia (mm)	Withdrawal length (m)
Koyamadai, 2chome, Shinagawa-ku	100	150	auxiliary pipe	150
Oi-Motoshiba-cho, "	"	250	"	250
Den'en-chofu, 2chome, Sedagaya-ku	"	490	"	490
Iriarai, 6chome, Ota-ku	"	510	"	510
Senju-Sakae-machi, and Umeda-machi, Adachi-ku	"	350	"	350
Tateishi-machi, Katsushika-ku	"	320	"	320

(Continued)

Locality		Laying		Withdrawal	
		dia (mm.)	length (m)	dia (mm)	length (m)
Oi-kitahamakawa-cho, Shinagawa-ku	100	320	auxiliary pipe		320
Nishi-Togoshi 1—2 chome, Shinagawa-ku	"	450	"		450
Nishi-Ichinoe, 1 chome, Edogawa-ku	"	550	"		550
Yasukata-machi, Ota-ku	"	260	"		260
Total		3,650			3,650

(4) In addition to the a/m works, the extension works of the Suginami filter plants are carrying out now. This is the enlargement of pump capacity chiefly

By I. Nukazawa.
Sanitary Engineer.

9. Aug 50.

Distribution Amounts, Tokyo-to W.W.
(from 16 July to 6 Aug. 1949 and 1950)

Date	1950 Amt. (m^3/day)	1950 weather	1949 Amt. (m^3/day)
July 16	1,409,100	cloudy & fair	1,249,800
17	1,435,800	fair	1,304,900
18	1,416,400	"	1,278,500
19	1,437,900	"	1,300,600
20	1,427,200	"	1,317,800
21	1,434,700	"	1,300,800
22	1,464,500	"	1,312,700
23	1,467,500	"	1,299,500
24	1,441,600	"	1,316,800
25	1,444,200	"	1,299,500
26	1,453,400	"	1,308,000
27	1,445,700	"	1,321,300
28	1,420,900	"	1,320,500
29	1,400,900	rainy	1,330,100
30	1,414,700	cloudy	1,298,100
31	1,451,300	cloudy & fair	1,322,300
Aug. 1	1,450,000	"	1,343,200
2	1,463,600	"	1,329,700
3	1,430,400	cloudy & rainy	1,337,700
4	1,422,200	"	1,315,600
5	1,433,400	"	1,340,700
6	1,448,600	cloudy & fair	1,327,000
	Average 1,437,000		1,312,000

ao

9 August 1950

Subjects: Counter Devices Against Decrease and Suspension of Water Supply at Tokyo and Yokohama

Date of Inspection: Tokyo 2 August 1950
Yokohama 3 August 1950

1. Causes of decrease and suspension of water supply at Tokyo and Yokohama. The following 5 causes are considered. (These are common for both cities).

a. Increase of water demand; increase of population, and increase of water demand per head per day. It means that the increase of demand is more than the increase of supply.

b. Change of phases of water demands before and after the War. Before the War, population was dense at the central area of the city, but to-day, revival of the most parts of there have delayed, on the other hand, the outskirts developed remarkably as recidence zones of citizens.

c. Complexity of topography - Many booster pumping stations have been installed for the upland districts, but for partial unevenness, it seems that it is difficult to adjust the water pressure.

d. Insufficiency of dia. of pipes - Mostly, the cases of supply decrease and suspension have occurred at the districts which have this defect, especially at the adjacent places of pipe ends.

e. Leakage - It is estimated that leakage amt. is 30 - 35% of distribution amt.

2. Case of Tokyo-to Water Works - On and after 16 July 50, total distribution amt. increased up to 1,450,000 m^3/day by beginning of use of the newly constructed No. 1 chemical setting basin at Kanamachi filter plants.

Remarks: On Aug ma. distrib. amt. was 1,338,000 m^3/day

Bad supply districts:

Lowland districts

a. The whole area of Adachi-ku

b'. Nippori, Arakawa-ku

b''. Oku, Arakawa-ku

Upland districts

e. The whole area of Suginami System

f. Shimura area, Itabashi-ku

g'. Tozuka-machi, Yodobashi-ku

g". Nakamatsu-cho, Yodobashi-ku

h'. Osaki, Shinagawa-ku

h". Gotanda, Shinagawa-ku

Remarks: Area C was improved by newly laid pipes (dia. 300 mm. length 1600m.) Area b' and b" will be expected good supply by completion of Shin-arakawa and Ayase inverted siphons. (Expected date of beginning of water passing, 5 this month.) Area d is caused from the low pressure of Kawasaki water works.

Improvement works: See attached sheets - works for the exclusion of the Bad Supply, Tokyo-to water works.

3. Case of Yokohama Water Works.

Bad supply districts

a. Some parts of Isogo-ku

b. " " " Gumyoji area

c. " " " Kanazawa-ku (Yokosuka side

d. Osato, Hommoku, (near Sankeien-garden)

e. Some parts of Tsurumi-ku (Kawasaki side)

f. " " " upland areas in the whole city

Remarks: Supply for Occupation Forces, very good.

Distribution and arrival amounts at Nishiya Purif. Plants. from 14 July 1950 to 2 Aug 1950.

Date	Distrib. Amt. (m^3/day)	Arrival Amt. (m^3/day)	Remarks
Jul 14	318,800	329,700	
15	328,000	332,700	
16	327,400	335,600	
17	341,600	332,700	
18	336,100	334,700	
19	341,500	335,600	
20	334,200	331,500	
21	343,600	332,900	
22	349,000	335,600	max. demand
23	334,300	335,600	
24	336,100		
25	335,500		
26	340,700		

(2) Works under construction

Locality	Kind of Work	Dia.of Pipe (mm)	Length (m)	Five Plugs
Shinohara-machi, Kohoku-ku	Newly laying	150	800	3
Mutsura-machi, Kanazawa-ku	"	75	172	1
Hommoku-Osato, Naka-ku	"	75	72	1
Total			1,044	5

(3) Works not yet started

Locality	Kind of Work	Dia.of Pipe (mm.)	Length (m)	Five Plugs
Hommoku-Motomachi, Naka-ku	Newly laying	150	522	
Namamugi-chugakko-dori, Tsurumi-ku	"	100	540	1
Kanazawa-machi, Kanazawa-ku	"	75	72	
" "	"	100	141	3
Tsurumi-machi, Tsurumi-ku	"	100	390	3
Shimosuiyoshi-cho, Tsurumi-ku	"	100	267	3
Total			1,932	10
Gross total			7,070	44

Remarks: Mr. Kunitomi said, "Even the others than the a/m works, they will be carried out as long as the budget lasts".

by I. Nukazawa
Sanitary Engineer

Date	Distrib. Amt. (m^3/day)	Arrival Amt. (m^3/day)	Remarks
Jul 27	329,300	333,800	
28	326,900	333,900	
29	327,600	335,600	
30	332,700	318,200	
31	343,300	329,300	
Aug 1	325,800	321,200	
2	319,100	327,900	

Improvement works

a. Pipe laying works for the purpose of water supply improvement in the Isogo, Gumyoji and Kanazawa.

Area.

Locality: Kubosho - Gumyoji
Dia. of pipes: 560 mm. (22 in)
Length: 3446 m.
Budget: 11,800,000 yen
Exp. period of works 20 Aug - 30 Nov (this year)
(Mr. Kumitomo, Chief of Y.W.W.B. said, "this plan will be decided by the municipal assembly within 2 or 3 days")

b. Partial improvement works in 50 J.F.Y.

(1) Completed works up to 31 July

Locality	Kind of Work	Dia. of Pipe (mm.)	Length (m)	Five Plug
Kita-saiwai-cho, Nishi-ku	newly laying	100	398	4
Central market, Kanagawa-ku	"	150	68	
Tozuka-machi, Tosuka-ku	"	100	156	1
Idogaya-nakamachi, Minami-ku	"	100	303	
Iwama-machi, Nishi-ku	"	200	945	4
Yamuko-machi, Tsurumi-ku	"	100	204	3
Hiyoshi-machi, Kohoku-ku	"	75	189	2
Nakasato-machi, Minami-ku	"	100	216	2
Hommoku-mitsusaka, Naka-ku	"	100	119	1
Yamamoto-cho, Naka-ku	"	100	315	4
Hama-cho, Isogo-ku	"	100	370	2
Yatsusaka, Kanazawa-ku	"	100	48	
" "	"	65	58	
" "	"	127	15	
Daimonbashi-dori, Hodogaya-ku	"	100	128	1
Toyooka-dori, Tsurumi-ku	"	100	235	2
Ichiba-machi "	"	75	327	3
Total			4,094	29

WATER WORKS BUREAU
Tokyo Metropolitan Office

18 July 1950

TO: Mr. C.W. Allen, Sanitary Engineer,
Public Health Section, Kanto Civil Affairs Region

SUBJECT: Monthly Report on Bacteriological Tests
of Raw Water of Deep Wells for July.

Location	Total Count of Bacteria Colonies (in 1 cc)	Coliform Group (in 10cc)	Date
Shimocho Well	2	(-)	3 July
Inatsuke "	4	"	"
Rikugien "	5	(+)	"
Hayashicho "	4	(-)	"
Ikebukuro "	1	"	"
Saginomiya "	2	"	"
Nippori "	1	"	7 July
Umeda "	0	"	"
Kurihara "	9	"	"
Motoki "	3	"	"

Remarks: The Mabashi and Showadori Wells are out of order due to the trouble with pumping equipments.

Signed by K. Taniguchi
K. Taniguchi
Chief of Water
Purification Division

File
Tokyo to water

Water Works Bureau
Tokyo Metropolitan Office

Date: 13 July 1950.

To: Mr. Clinton W. Allen Sanitary Engineer
Public Health Sec. Kanto Civil Affairs Region

Subject: Report on detailed equipments of private Wells located in Tokyo-to

I report to you hereby on the detailed equipments of private wells located in Tokyo-to as shown in the attached list according to you requested on 11 July 1950.

Remark: The attached equipments of private wells not include the facility located in the area where no public sewerage system.

Signed by Y. Tokuzen
Y. Tokuzen
Director of Water Works Bureau

B = Borehole pump
A - air Compressor
T - Turbine pump

Water Works Bureau

List of Private Wells Located in Tokyo-to

Location	Name of User	Well Pump				Sub. engine		Remarks
		Motor H.P.	Type	Head	Quantity	Fuel	H.P. K.W.	
Chiyoda								
2-16, Marunouchi	Meiji Life Insurance Co.	30	B	125 ft	80 m3/H	Heavy oil	180 H.P.	
1-6, "	Kaijo Building	15	B	170 ft	38 "	" "	180 "	
2-2, "	Marunouchi Building	40	B	40 m	50 "	Gasoline	20 "	
"	"	20	A	30 "	50 "			
2-6, "	Yaesu Building	20	A	30 "	50 "			
1-1, "	Transportation Ministry	20	B	35 "	80 "	Heavy oil	75 HP.	
"	Tokyo Station	25	B	35	50 "			
1-2, Yurakucho	Nippon Theatre	60	B		115 "	" "	50 K.W.	
2-5, Marunouchi	Chiyoda Bank	35	B	42.7 m	80 "	Gasoline	60 H.P.	
2-1, "	Central Post Office	35	B	45	50 "			
1-9, Yurakucho	Mainichi Press	50	B		80 "	Heavy oil	200 K.W.	
"	" "	50	B	60 m	80 "			
1-1, "	Daiichi Life Insurance Co.	50	B	35 "	50 "	Heavy oil	330 H.P.	
1-2, "	Teikoku Building	75	B		30 "	Gasoline	100 "	
1-2, "	Hibiya Theater	15	B	85 ft	50 "			
1-14, "	Yurakuza Theater	10	B	70 ft	30 "			
1-12, "	Toho Theater	20	B		50 "			
" "	" "	20	B	120 ft	50 "			
1-11, "	Sanshin Building	15	B	170 "	38 "			
1-11, "	Agriculture and Forestry Ministry	15	B	40 m	50 "			
Nagatacho	House of Councillors	65	A		50 "			
"	House of Representatives	65	A		50 "			
2-2, Uchisaiwaicho	Radio Tokyo	20	B		30 "	Heavy oil	300 H.P.	
"	" "	20	B	52 m	30 "			
"	" "	35	B	52 "	115 "			
2-1, Uchisaiwai	Osaka Building	15	B	211 ft	30 "	Heavy oil	200	

			H.P.			m3/H	Remarks
2-2,	Otemachi	Nomura Life Insurance Co.	30	B	200 ft	50 "	Heavy oil 200 H.P. Trial run is needed for this.
3-1,	Fujimicho	Teishin Hospital	10	B		18 "	
1-1,	Kanda Misakicho	Electric School	15	B		18 "	
1-1,	Kanda Surugadai	Meiji University	10	B		30 "	
1-8,	" "	Shufunotomo Bldg.	10	B		30 "	
2-5,	" "	Sanraku Hospital	5	A		10 "	
1-1,	" Misakicho	Tokyo Dental College	15	B		30 "	
3-8,	" Nishikicho	Gakushikaikan	10	A		11 "	
1-1,	" Hitotsubashi	Jyoshikaikan	5	B	65 ft	30 "	
1-1,	" "	Kyoritsu Women"s University	5	T		14 "	
2-11,	" Misakicho	Nihon Ice Mfg. Co.	7½	B		30 "	
2-10,	Kanda Sudacho	Kanda Trams-Former Substation	10	B		30 "	
	" "	" " " "	3	B		15 "	
2-5,	" "	Sudacho Transformer Substation	20	A		11 "	
2-7,	Kanda Tocho	Nihon Ice Mfg. Co.	7½	A		11 "	
	" "	" " " "	50	P		12 "	
			7½	P		3 "	

Chuo

						m3/H	
1-7,	Nihonbashi Muromachi	Mitsukoshi Department Store	30	B		80	Heavy oil 114 H.P.
	"	" " " "	7½	B		12 "	
2-1,	"	Mitsui Building	15	B		30 "	
	"	" "	40	B		80 "	Heavy oil 312.5 H.P. Some Some repair is needed for this.
1-9,	Nihonbashi Tori	Shirokiya Department Store	60	B	150 ft	170 "	
2-5,	" "	Takashimaya Department Store	30	B		30	
	" "	" " " "	30	B		80 "	
	" "	" " " "	25	B	100 ft	80 "	Heavy oil 150 H.P.
	" "	" " " "	30	B		80 "	
1-14,	Nihonbashi Ningyocho	Nihonbashi Transformer Substation	20	B	120 ft	30 "	
			7½	B		30 "	
20,	Nihonbashi Ryogoku	Marumiya Shop	5	B		40 "	Gasoline 5 H.P.
4-1,	Ginza	Mitsukoshi Department Store	7½	B		18 "	

			H.P.			m3/H			
Arakawa									
3-101,	Minami-Senju	Tokyo Gus Co.	40			343			
2-1080,	Mikawashima	Nippon Textile Industry Co. Tokyo Textile Works	10	A	126 ft	18			
	"	" "	30	A	49	50			
	"	" "	10	A	100	18			
9-2850,	Ogumachi	Asahi Electric Industry Co.	4	A	120 ft	170	Coal	7350 HP.	Trial run is needed for this.
	"	" " " "	30		120	61			
	"	" " " "	40		170	50			
	"	" " " "	60		170	80			
	"	" " " "	50		185	80			
	"	" " " "	55		180	80			
	"	" " " "	60		200	80			
	Minami Senju	Tokyo Gus Co.	25	B		50			
Adachi									
69,	Senju Motomachi	Nikken Industrial Co.	40	B	54 m	80			
	" "	" " "	10	B	148	30			
87,	" Azumacho	Nisshin Industrial Co.	15	B	130 ft	30			
1-72,	Senju	Japan Brewing Co.	3	A	120 ft	12			
	"	" " "	5	T	70 ft	5			
	"	" " "	5	B		12			
Shinjuku									
3-8,	Shinjuku	Isetan Department Store	20	B	130 ft	50	Heavy oil	150 H.P.	
3-21,	"	Bunka Theatre	20	B	130 ft	30			
3-25,	"	Shinjuku Toho Theatre	40	B	238 ft	80			
3-33,	"	Teito Theatre		B	250 ft	50			
1-1,	Tsunohazu	Mitsukoshi Department Store	25	B		30	Heavy oil	70 H.P.	
	"	" " "	25	B		30			
Minato									
1,	Fukuyoshicho	Akasaka Telephone Office	7½	B	30 ft	30			
2,	Aoicho	Hotel Mantetsu	25	B	38 m	50			

Minato (Cont'd)

2-16,	Omotecho	Toraya Shop	5	B		18	
2,	Shikokucho	Japan Electric Co.	20	A	200 ft	20	
2-105,	Atagocho	Jikei Medical College	5	B	230 ft	12	

Kita

2-7,	Horifune	Toyo Textile Industry Co. Oji Works.	30	B	150 ft	50	
	"	" " "	50	B			
		" "					
1-857,	"	Tokyo Book Publishing Co.	5	B	85 ft	18	
1-86,	Tabata-shinmachi	Hamano Textile Industry Co.	50	B		170	Heavy oil 50 K.W.
	"	" " " "	20	B	120 ft	50	
1-86,	Tabata-Shinmachi	" " " "	10	B	74 ft	30	

Shinagawa					
2-276, Higashi-Osaki	Meidensha Engineering Works	7½	B	60 ft	6 m3/H
" "	"	10	B	100 ft	18 "
Toshima					
4-626, Zoshigaya	Dentsu Film Co.	15	B	200 ft	18 "
" "	"	2	T		2 "
Bunkyo					
1-1, Kasuga-cho	Koraku-en Stadium	25	B		30 "
108, Hisagata-cho	Kyodo printing Co.	25	B	33.5 ft	80 "
" "	"	50	B	160 ft	115 "
3, Motofuji-cho	Tokyo Univercity	15	B		30 "
"	"	10	B		30 "
"	"	10	B		30 "
"	"		B	50 ft	8 "
"	"	15	B	40 ft	30 "
"	"	20	B	200 ft	40 "
"	"	10	B	30 ft	30 "
"	"	5	B	36 ft	18 "
"	"	13	B	55 ft	50 "
Komagome-hayashi-cho	Nippon Ice Mfg. Co.		P		17 "
59, Komagome-sendagi-cho	Nippon Medical College	15	B	133 ft	18 "
31, Kamifujimae	Scienfific Reserch Institute	100	A	165 ft	90 "
		50			
3-19, Otowa-cho	Dainippon Yubenkai-kodansha Co.	15	B		30 "
Taito-ku					
Asakusa-koen Rokku	Theatre (Shochiku)	30		50 ft	80 "
"	" (")	50			80 "
"	Fujikan Movie	25	B	160 ft	50
"	Taishokan House	30	B	66 ft	80 "

Taito (Cont'd)

	Asakusakoen Rokku	Denkikan Movie House	30	B	180 ft	50		
	" "	Daito " "	10	B	130 ft	12		
	" "	Asakusa Grand Movie House	20	B	130 ft	30		
1-1,	Asakusa Hanakamadocho	Tobu Electric Car Co. Kaminarimon Station	40	B	140 ft	80		
3-11,	" Ishihamacho	Nippon Dye stuff Co.	30	B	41	50		
8,	Gojomachi	Keisei Electric Car Co. Ueno Station			75 ft	50		
	Ueno Park	Ueno Zoo.	15	B	42	18		
	" "	" "	10	B	42	18		
	Ueno Hirokoji	Matsuzakaya Department Store	25	B	120 ft	50		
	Kurumazakacho	Ueno Station	20	B		40	Heavy oil	7½ H.P.
	Sumida							
1-15,	Midoricho	Meiji Seika KK	5	B	100 ft	18		
	"	" " "	30	B	170 ft	30		
1-2,	Umayabashi	Lion Tooth Powder Mfg. Co.	35	B	140 ft	80		
	"	" " " " "	15	B		30		
4-2,	Taiheicho	Seikosha KK	35	B	160 ft	50		
	"	" "	35	B	160 ft	50		
3-13,	Azumacho	Kamiya Chuzo KK	10	B		18		
2,	Higashi riyogoku	Memorial Hall	25			80		
5-7,	Narihira	Daiichi Seiyaku KK	30	B	210 ft	50		
	"	" " "	20	B	185	30		
4-1,	Kotobashi	Koto Rakutenchi Theatre	25	B	150 ft	50	Heavy oil	15 K.W.
	"	" " "	25	B	130 ft	50	Gasoline	15 K.W.
80,	Honjo Ukeji	Kikumiya KK	10	B		18		
3-12,	Midoricho	Hoseisha KK	10	A	360 ft	20		

File

WATER WORKS BUREAU
Tokyo Metropolitan Office

12 Dec. 1950

TO: Mr. C. W. Allen, Sanitary Engineer,
Public Health Section, Kanto Civil Affairs Region

SUBJECT: Monthly Report on Bacteriological Tests
of Raw Water of Deep Wells for December,

Location	Total Count of Bacteria Colonies (in 1 cc)	Coliform Group		Date
		50 cc	10 cc	
Ikebukuro Well	5	(-)		7 Dec.
Inatsuke "	0	"		5 Dec.
Hayashicho "	0	"		"
Shimocho "	0	"		"
Rikugien "	0	"		"
Showadori "	0	"		7 Dec.
Saginomiya "	1	"		5 Dec.
Nippori "	0		(-)	"
Kurihara "	2		"	"
Motoki "	12		"	"

Remarks: The Mabashi and Umeda Wells are out of order due to the trouble with pumping equipments.

Signed by K. Taniguchi
K. Taniguchi
Chief of Water
Purification Division

Ishyato
with Supplr

Sept 1950

EXTRACTIONS FROM THE FINANCIAL RULES OF TOKYO-TO

Art. 14 The lowest among the bidding which are less than the reasonable cost expected and more than 2/3 of that cost in the case when "the lower limit cost" has not specially prepared, shall be accepted successful.

Note:- "The lower limit cost" is prepared when the Governor of Tokyo-to has concluded that with the cost less than this limit, works may not be completed successfully when the work execution is difficult, or demanded to be pressed upon.

LIST OF BIDDING RESULTS OF URGENT EXTENTION WORKS

AT KANAMACHI FILTER PLANTS

1. Construction works of #1 chemical settling basin

Date of bidding	3 July 1948
Reasonable cost expected	Y 42,730,000
Lower limit cost	38,450,000
Results of 2nd bidding:	

Bidder	Bidding Cost
Notomi Gumi	Y 44,880,000
Akira Kogyo	45,300,000
Arato Kensetsu	49,590,000
Ikeda Kensetsu	52,800,000
Kajima Kensetsu	53,000,000
Nihon Rika Doboku	57,800,000
Nishimatsu Kensetsu	61,500,000
Sato Kogyo	67,970,000
Tobishima Doboku	68,134,000
Shimizu Kensetsu	69,800,000
by private contract	
* Notomi Gumi	42,730,000

* Successful bidder

2. Constr. works of #2 chemical settling reservoir

Date of bidding		2 Sept. 1949
Reasonable cost expected		Y 52,010,000
Lower limit cost		41,600,000
Results of 1st bidding:		
Bidder	Bidding Cost	
Sanken Kogyo	Y 28,500,000	disqualified
Obayashi Gumi	32,600,000	"
Shimizu Kensetsu	38,570,000	"
Kumagai Gumi	43,600,000	successful
Notomi Gumi	46,900,000	

3. Constr. works of #4 and #5 Clean water reservoirs

Date of bidding	1st bidding	4 Sept. 1948
	2nd bidding	14 Sept. 1948
Reasonable cost expected		Y 73,500,000
Lower limit cost		73,500,000

Results of 1st bidding

Bidder	Bidding Cost
Hazama Gumi	Y 106,500,000
Sanken Kogyo	110,800,000
Mizuno Gumi	111,300,000
Obayashi Gumi	113,200,000
Takenaka Komuten	113,800,000
Konoike Komuten	118,000,000
Taisei Kensetsu	121,700,000
Nissan Doboku	123,500,000
Kumagai Gumi	125,800,000
Zenitaka Gumi	128,000,000

Results of 2nd bidding

Bidder	Bidding Cost
Nihon Rika Doboku *	Y 73,500,000
Kajima Kensetsu	84,200,000
Arato Kensetsu	88,100,000
Akira Kogyo	93,300,000
Ikeda Kensetsu	93,750,000
Sanken Kogyo	98,600,000
Obayashi Gumi	99,500,000
Takenaka Komuten	99,800,000
Hazama Gumi	99,850,000
Mizuno Gumi	104,200,000

4. Constr. works of #3 high lift pump station

Date of bidding	5 Sept. 1949
Reasonable cost expected	Y 36,211,000
Lower limit cost	29,000,000

Results of 1st bidding

Bidder	Bidding Cost
Kajima Gumi	Y 38,750,000
Nishimatsu Kensetsu	39,840,000
Zenitaka Gumi	42,200,000
Sato Kogyo	43,430,000
Taisei Kensetsu	43,950,000

Results of 2nd bidding

Bidder	Bidding Cost
Kajima Gumi	* Y 35,985,000
Nishimatsu Kensetsu	36,550,000
Sato Kogyo	36,830,000
Zenitaka Gumi	37,370,000
Taisei Kensetsu	37,480,000

5. Primary constr. works of Shinarakawa inverted siphon

Date of bidding	13 Dec. 1948
Reasonable cost expected	Y 37,023,000
Lower limit cost	29,620,000

Results of 1st bidding

Bidder	Bidding cost
Hazama Gumi	Y 39,485,000
Kajima Kensetsu	39,950,000
Obayashi Gumi	41,650,000
Taisei Kensetsu	45,520,000
Shimizu Kensetsu	46,155,000
Nishimatsu Kensetsu	47,230,000

Results of 2nd bidding

Bidder	Bidding Cost
Hazama Gumi	Y 38,850,000
Kajima Kensetsu	39,250,000
Obayashi Gumi	39,368,000
Other 3 persons disclaimed	

By private contract, Hazama Gumi * Y 37,023,000

6. Secondary constr. works of Shinarakawa inverted siphon

Date of bidding	16 Dec. 1949
Reasonable cost expected	Y 36,280,000
Lower limit cost	29,794,533

Results of 1st bidding

Bidder	Bidding Cost
Hazama Gumi	Y 42,925,000
Obayashi Gumi	45,800,000
Kajima Kensetsu	46,897,000
Taisei Kensetsu	47,500,000

Results of 2nd bidding

Bidder	Bidding Cost
Hazama Gumi	Y 39,723,000
Obayashi Gumi	41,800,000
Kajima Kensetsu	41,886,000
Taisei Kensetsu	42,200,000
Nishimatsu Kensetsu	42,280,000

Results of 3rd bidding

Bidder	Bidding cost
Hazama Gumi	Y [illegible]
Other	

Results of 4th bidding

Bidder	Bidding Cost

Results of 3rd bidding

Bidder	Bidding cost
Hazama Gumi	Y 38,600,000
Other persons disclaimed	

Results of 4th bidding

Bidder	Bidding Cost
Hazama Gumi	Y 37,885,000
Nishimatsu Kensetsu	38,100,000
Kajima Kensetsu	38,180,000
Obayashi Gumi	38,520,000
Taisei Kensetsu	38,550,000

By private contract * Hazama Gumi *Y 36,280,000

7. Constr. works of Ayasegawa inverted siphon

Date of bidding	11 July 1949
Reasonable cost expected	Y 28,500,000
Lower limit cost	28,470,000

Results of 1st bidding

Bidder	Bidding Cost
Hazama Gumi	Y 29,830,000
Taisei Kensetsu	31,100,000
Kajima Kensetsu	32,880,000
Obayashi Gumi	33,450,000
Zenitaka Gumi	33,900,000
Kumagai Gumi	34,100,000
Nishimatsu Kensetsu	34,420,000

Results of 2nd bidding

Bidder	Bidding Cost
Hazama Gumi	* Y 28,470,000
Obayashi Gumi	28,850,000
Kajima Kensetsu	29,330,000
Taisei Kensetsu	29,500,000
Other 3 disclaimed persons	

RANK OF BIDDERS

A class	* Kajima Kensetsu
	Shimizu Kenseysu
	Taisei Kensetsu
	* Hazama Gumi
	Obayashi Gumi
B Class	Nishimatsu Kensetsu
	Ikeda Kensetsu
	Mitsuno Gumi
	Takenaka Komuten
C Class	Sato Kogyo
	Konoike Gumi
	Nissan Doboku
	Zenitaka Gumi
	Tobishima Doboku
D Class	Akira Kogyo
	* Notomi Gumi
	* Kumagai Gumi
	Sanken Kogyo
E Class	* Nihon Rika Doboku
F Class	Arato Kensetsu

Note: * indicates the present contractor

Tokyo to water supply

July 1950

KANAMACHI FILTER PLANT
(General Information)

A. Located at No. 480, Kanamachi 1-chome, Katsushika-Ku, Tokyo

B. Source of water - Edo River

C. Designed for 71,200,000 gallons per day. Actual production per day at this time 75,000,000 gallons.

D. Equipments consists of 2 intakes, bar screens, grit chambers, chemical feed, coagulation and mixing basin, sedimentation, 12 slow sand filters, 34 rapid sand filters, chlorinators, and 3 clean water reservoirs with necessary pumping and control facilities.

E. This plant is one of 11 scattered throughout Tokyo.

F. Area serviced is Northeast and North central Tokyo

G. Construction at this time is being carried out for additional clear water reservoirs and sedimentation tenks.

H. Original plant was completed in 1926.

- - - - - - - - - - - - -

#19. The original raw water intake of Kanamachi Water Plant, Tokyo Honshu, Japan. This intake takes water from the Edogawa for processing for drinking water. The pipes are under the river and led into the bar screens and grit chamber..

4. An additional raw water intake was necessary upon enlargement of the Kanamachi Plant. This is similar in construction to the original intake but approximately 100 yards upstream from the original intake.

#15. The bar screens and grit chambers are the first of the series of treatment equipment. At first, the bar screens remove large pieces of floating material. The tank immediately following decreases the speed of water which allows the larger pieces of sand and stone to settle to the bottom. This combination is mainly for the protection of the pumps within the treatment plant. Materials, such as, pieces of wood, stone, etc. would damage the pumping equipment.

3. Two of a series of pumps used to take the water from the grit chambers to the chemical feed section of the water plant. Lifting the water at this stage allows the water to flow throughout the plant by gravity

8. The raw water entering the chemical mixing chamber of Kanamachi Water Plant. This channel conveys water to various ports of the plant for further treatment.

6. Adding alum to the raw water is carried on at this point. Pieces of alum are spread out on an inclined board and water is sprayed over it. The dissolved material then drops into the channel. The amount of alum added is controlled by increasing or decreasing the volume of water flowing over the alum.

#14. Aerial view of fluctuation and primary sedimentation tanks of Kanamachi Water Plant. The water is conveyed to these large tanks after the addition of alum. The water is reduced considerably in speed and the silt flow falls to the bottom of the tanks. The water travels the entire length of the tank as the walls dividing the tank do not allow the free passage of water from inlet to outlet. After completing the entire distance, the water is conveyed to a larger sedimentation tank.

1. Sedimentation tanks at Kanamachi Water Treatment Plant. A retention period of 3 to 4 hours allows material to sink to bottom of tanks outlet control valves on right. The water is next allowed to flow to rapid or slow sand filters.

#18. Aerial view of sedimentation tanks in foreground and slow sand filters in background. The difference in elevation allows flow of water from sedimentation tanks to filters.

#10. Original slow sand filters at Kanamachi Water Treatment Plant. Graded sand in the bottom of these tanks remove fine particles of silt as well as bacteria as the water flows downward through the sand. Channels beneath the sand convey the water to central points prior to chlorination.

#24. Removing the upper layer of sand and accumulated silt of a slow sand filter at Kanamachi Filter Plant. The water passing through the sand leaves behind silt and bacteria. After periods of operation from 2 to 5 weeks the filters are allowed to dry and a thin layer is removed. Further use of this filter is impractical as the flow of water is hindered by this accumulation.

#17. Removal of the accumulation of silt and bacteria from a slow sand filter at Kanamachi Water Plant. All the material is removed by hand labor. This material is cleaned by forcing water to remove the lighter material. The cleaned sand is then reused at a later time.

#23. One of the pumping stations within Kanamachi Water Plant. The water upon completion of its treatment is distributed throughout the system by these pumps.

#11. The control room of the rapid sand filters at Kanamachi Water Plant. The controls in this room govern the speed of water through a layer of sand which removes silt and bacteria. After operation of 1 to 2 days these controls also allow water to flow upwards through the sand removing the accumulations. The dirt and silt are then wasted. The man in picture is controlling

rate of water backwashing the filter.

#28. Aerial view of rapid sand filters. This was designed by English firm and was first of two rapid sand filter plants at Kanamachi Water Plant. Sand in the bottom of these tanks remove silt and bacteria as water passes downward through the sand.

#12. Construction work of additional sedimentation tanks at Kanamachi Water Plant. Water will eventually flow from left to right. The V shaped bottom will facilitate the removal of silt when cleaning the tanks.

#16. Second view of sedimentation tanks under construction. At present time the capacity of the Kanamachi Water Plant is limited because of limited sedimentation tanks as well as clear water tanks.

#22. Clear water tanks under construction at Kanamachi Water Plant. The reenforcing steel forms are to hold the covering material over these tanks.

#27. Aerial view of clear water tanks under construction at Kanamachi Water Plant.

5. Aerial view of second clear water tanks under construction at Kanamachi Water Plant. These tanks will eventually hold processed water ready for distribution. Purified water will be stored here at periods of the day when the plant produce more than the people use.

2. One of 3 batch cement mixers for use in constructing additional sedimentation and clear water tanks at Kanamachi Water Plant.

#25. View of present clear water tank at Kanamachi Water Plant. Tank is underground to prevent growth of microscopic plant life in the purified water.

#26. Chemical analysis of water at Kanamachi Water Plant. Chemical analysis is important in treating of water as well as a means of checking chlorine in water. The amount of chlorine that is used to sterilize the water is closely watched so as to prevent impure water from being used.

#13. Bacteria analysis of water at Kanamachi Water Plant. Samples are taken daily from several different locations in the plant to check on the efficiency of the treatment. Further samples are tested from various points throughout the distribution system to detect contamination in the system.

#20. Driving spilling in the construction of retaining walls on a drainage ditch. The women pulling together on a rope pull a weight upwards. As they release the ropes together the weight falls and forces the piling into the ground.

#21. Drainage ditch construction in Adachi ward in Tokyo. Notice the entire lack of mechanized equipment.

7. The transportation of human fertilizer out of the large cities of Japan is a major problem. Each individual house has a tank for such material. Transferring this material to the farming areas is often done by this means. The buckets are playfully called "Honey Buckets" by the people foreign to Japan. However, this material plays on important part in the economics of Japan.

9. Street cleaners at work in Asakusa ward, Tokyo, Japan. On the hard surfaced roads of Tokyo removal of accumulated material plays a important part in reducing disease.

Tokyo-to water supply

WATER WORKS BUREAU
Tokyo Metropolitan Office

31 May, 1950.

Subject : Code Numbers of Reparations Items in Itabashi Filter Plant (Former 2nd Tokyo Military Arsenal Itabashi Factory)

a. (Mentioned in the letter of 21 June, 1949)

39-54-411, 412, 413, 414, 415, 416, 417, 428, 429, 430, 431, 432, 434, 435, 188, 189, 190, 192, 193, 194, 195, 196, 293, 294, 297, 299, 300, 301, 303, 304, 305, 306, 335, 336, 363, 392, 393, 475, 479, 496, 497, 498, 499, 500, 505, 506, 520, 618, 619, 620, 621, 622, 623.

Total 53

b. (Not mentioned in the above letter)

507, 460, 465. Total 3

c. (Under application to Tokyo Civil Affairs Region for Authorized Use)

2785, 1265, 2787, 2786, 3174.

Total 5

Grand Total 61

Signed by J. Tanaka
Y. Tanaka
Chief of Yodobashi
Filter Plant

Items belonging to B

	code number	name of Items	Measure & accessories	Quant,	weight	Bldg no
	507	Switch panel	A-meter, V-meter	1 set	unkown	No. 8
	460	Switch panel	white marble p.p Current-Trans	1 "	"	No 541
	465	Switch panel	etc	1 "	"	No. 541

Above 3 items are not mentioned in the letter of 21 June, 1949

The basis of omittion of the above mentioned items from the list is uncertain whether it had occurred by carelessness or intention. However, it is apparent that those items are now being used for ~~the purpose of~~ operation of the Tabacco filter plant only.

many Switch panels

other use	460	other use	"	"	465	other use

Bldg No 541

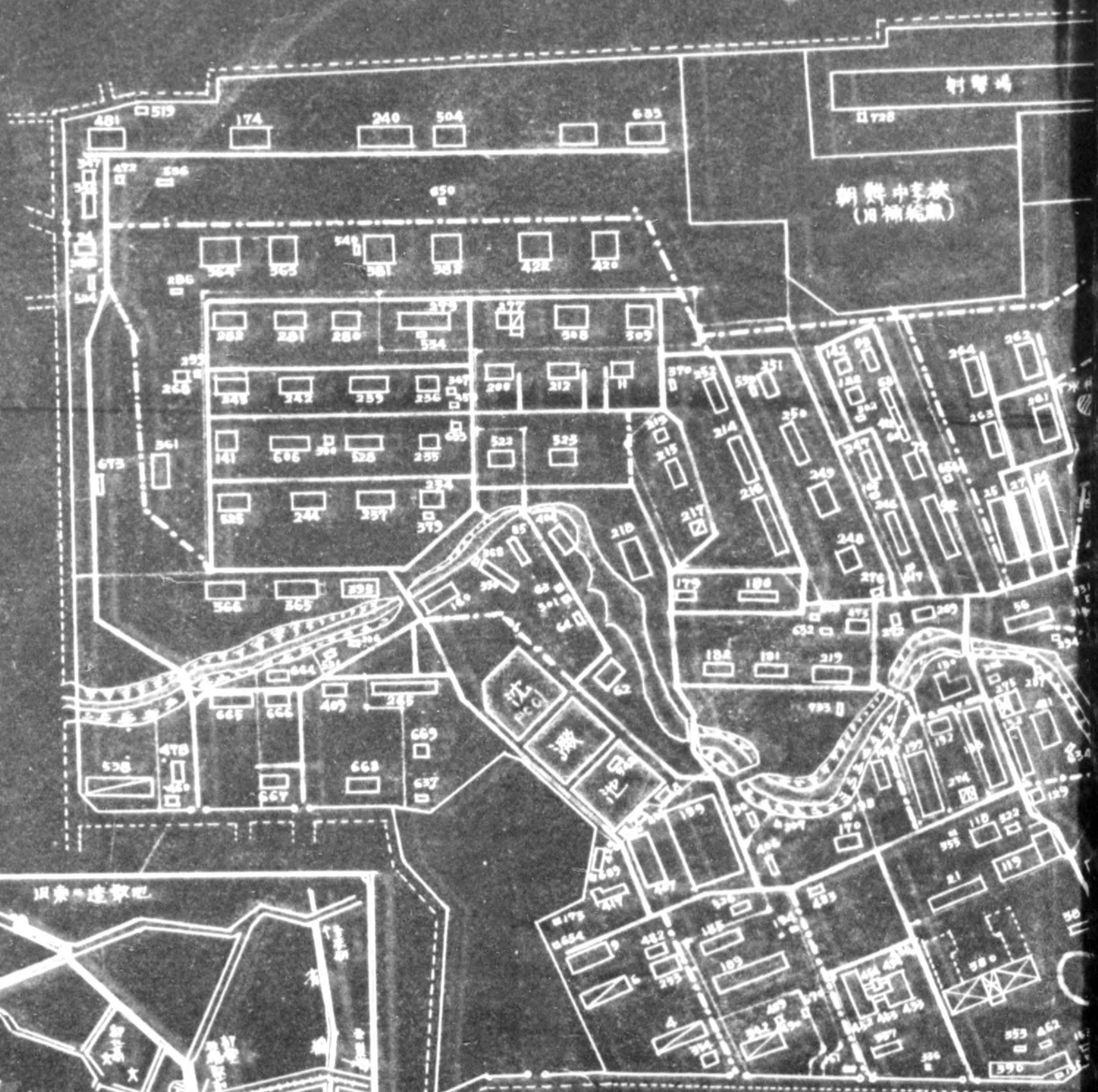
Items belonging to C

Code No.	Name of Items	measure & Accessories	Quant.	Weight	Remarks
		1 A-Meter 0-300A			Bldg no. 8
		1 V-Meter 0-250V			Not separable
39-54 1265	Distributing Panel	2 white Marble Panels	1 set	54 kg	from Trans. of
		2 Knife Switches			39-54-297 U +
		1 Current Trans			39-54-393 U
		1 Pilot Lamp			
		12 Discon Switches			Bldg no 8
		39 Pin Type Insulators			Not separable
39-54 2785	Accessories	6 Cable heads			from Dist. Panels of
		Gas Pipes	1 set	252 kg	39-54-505 U +
		Dia 4.3 cm x 8.7 m			39-54-506 U
		Dia 3.8 cm x 5.2 m			
		13 High Tension Insuls.			Bldg no 54
39-54		4 Low " "			Not separable
2786	Accessories	3 Primary-Cutouts	1 set	87 kg	from Trans. of
		2 Cable heads			39-54-301 U
		1 Angle-Steel			39-54-363 U +
		65x65x10x3300 mm			39-54-392 U

Code No	Name of Items	Measure & Accessories	Quant.	Weight	Remarks
		2 Primary Cutouts			Bldg No. 3
39-54		3 Disco Switches			Not separable
2787	Accessories	8 High Tension Insuls.			from Trans. of
		2 Current Trans.	1 set	83 Kg	39-54-335 U
		3 Cable heads			39-54-336 U &
		16 Porcelain Bushing			39-54-675 U
39-54 3174	Pipings & Accessories	Pipings & Accessories (71 Items)	1 set	1500 Kg	Bldg No 3
Total				12,016 Kg	

旧東京第二陸軍造兵廠構内図 S:1/4000

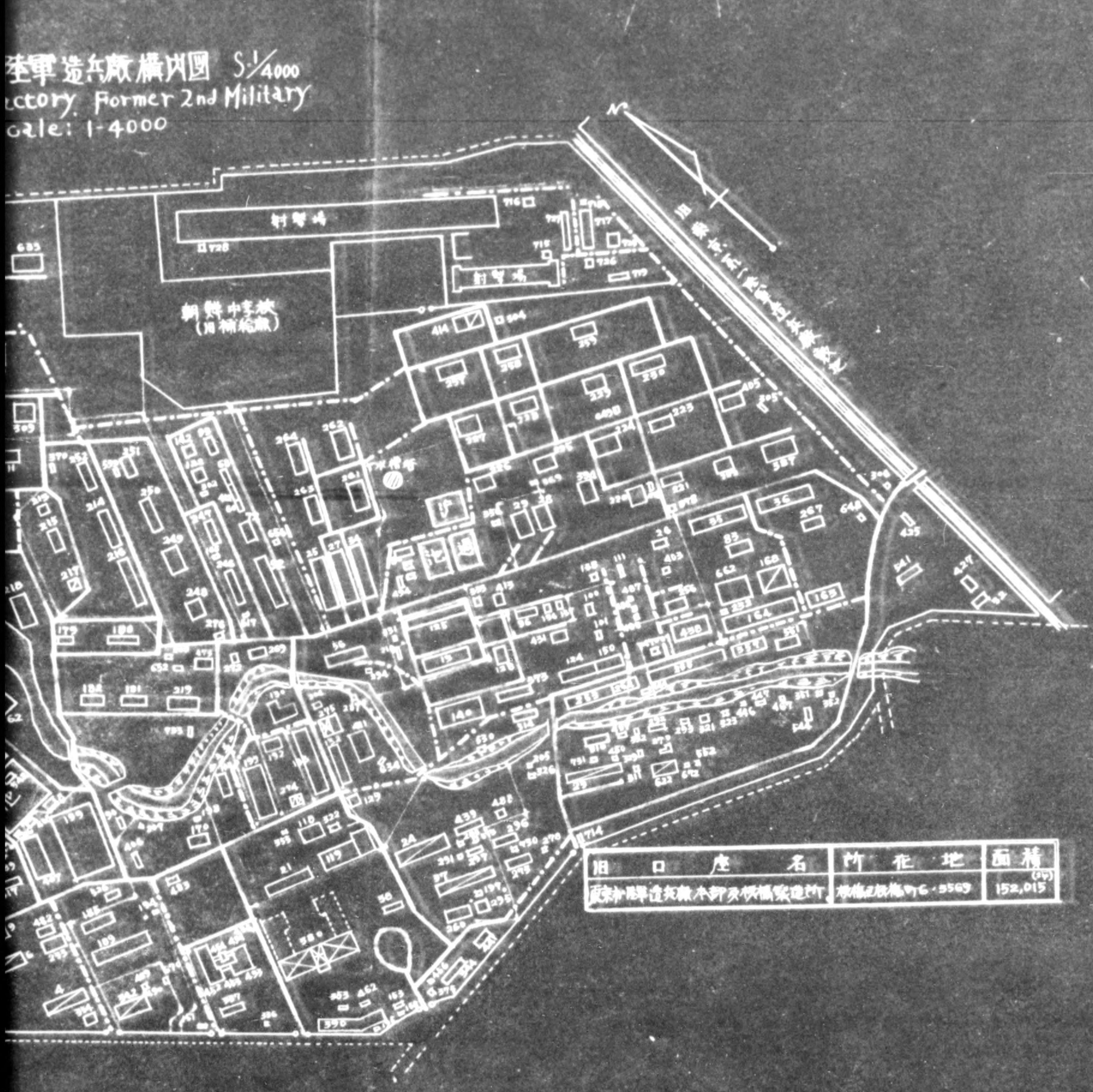
Itabashi Factory, Former 2nd Military Arsenal, Scale: 1-4000



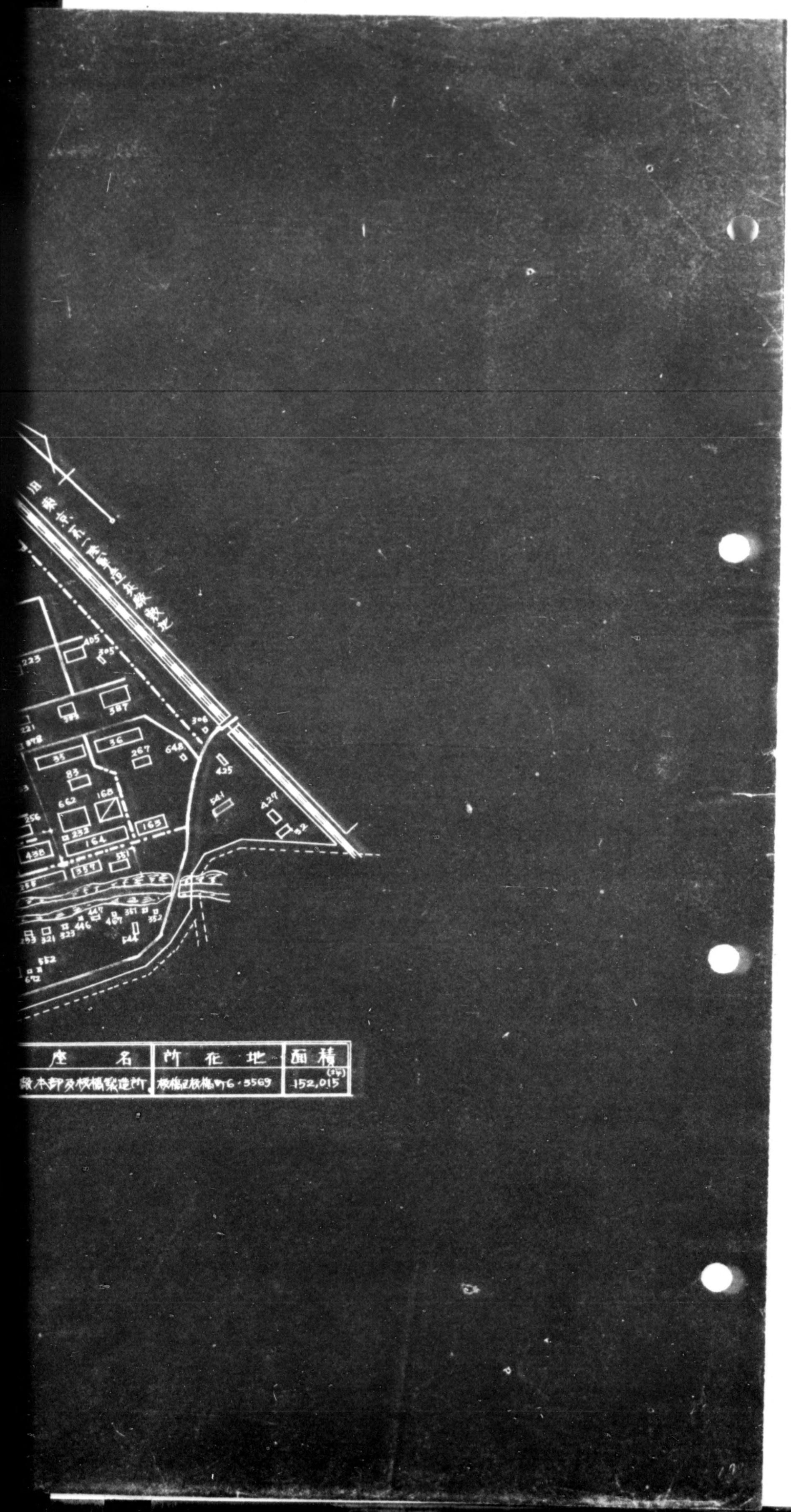
775013

旧陸軍造兵廠構内図 S:1/4000

Factory Former 2nd Military
Scale: 1-4000



旧　所　在　名	竹　在　地	面積
東京都陸軍造兵廠本部及板橋製造所	板橋区板橋町6・5569	152,015 (坪)



座名	所在地	面積
鋲本部及板橋製造所	板橋区板橋町6・3569	152,015 (坪)

TO: Mr. C.W. Allen

1. Articles in Group C are parts of some of the articles in Group A. They should have been given the "Authorized Use Code Numbers. Those numbers mentioned in C were registered for evaluation.

2. Please get us one copy of the letter to be issued from H2S, Kanto Civil Affairs Region to (Tokyo Finance Bureau or) Jap. authorities informing the "Authorized Use" for Tokyo Water Works Bureau. As the business goes very slowly in Japanese offices, we think it is necessary to make sure the notification or to watch out their business.

S. Kadoya

SUBJECT: Chlorine Cost, Control and Distribution

1. This is a review of chlorine cost and subsidies by National Government of the situation in Tokyo-to.

A. Aug 1946 - March 1947 Chlorine cost ¥4,410.00 per metric ton. Total subsidy by National Government = 90% of total cost of chlorine plus costs of installations not required by ordinary Japanese operations, but required by Occupation Forces.
Actual subsidy ¥3,601,206

B. April 1947 - 25 Aug 1947 Cost of chlorine ¥4,450 per metric ton.
25 Aug 1947 - 31 March 1948 " " " ¥9,289 per metric ton.
Actual subsidy..... ¥6,442,319

C. April 1948 - 18 July 1948 Cost of chlorine ¥9,289 per metric ton.
19 July 1948 - 31 March 1949 " " " ¥20,040 per metric ton.
Actual subsidy ¥17,952,830

D. 1 April 1949 - 31 May 1949 Cost of chlorine ¥20,040 per metric ton.
Actual subsidy recurred ¥2,902,520

2. The subsidy stopped as of 31 May 1949.

3. Distribution control stopped as of 6 April 1949 indicating supply sufficient.

4. Price control stopped as of 1 Oct 1949 at which time Tokyo-to was paying ¥20,040 per metric ton.

5. Increased to ¥27,300, and verbal agreement between Asahi Denko and Tsurumi Soda for maintaing this price until 1 April 1950.

6. No knowledge on what the price will be from this date -- probably believes ¥40,000 & 50,000 as this is prevailing cost to other users.

7. Water rates have been increased 10 times since 1 Nov 1945.

An Example Household Area
1945= 20 M (cubic)= ¥3.50 + ¥0.2 per additional M (cubic)
1950= 10 M (cubic)= ¥65 + ¥8 " " "

8. General remarks-
As all controls are off of chlorine, it is up to the water

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8. General remarks-
As all controls are off of chlorine, it is up to the water

departments to get chlorine at prevailing rates. However, the cost should be increased on the Procurment Demand and to the Japanese Public if cost go up. Cost of chlorine is actually only a very small percentage of cost of production of water, yet it must be remembered that the chlorination for Japanese standards are about 0.2 P.P.M. and the Occupation Forces are requiring 2.0 P.P.M. the difference is considerable and is hardly fair to the Japanese although they do desire benefit from it.

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Memo for Record:

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actual subsidy ¥3,601.206

B. April 1947 - 25 Aug 1947 Cost of Chlorine ~~¥4450~~ ¥4450.0 per metric ton
25 Aug 1947 - 31 March 1948 " " " ~~¥4450~~ ¥9289.90 " " "
actual subsidy ¥6,442,319

C. April 1948 - 18 July 1948 cost of Chlorine ¥9,289.90 per metric ton
19 July 1948 - 31 March 1949 " ¥2,9040.00 " " "
actual subsidy ¥17,952,830

D. 1 april 1949 – 31 May 1949 Cost of chlorine ¥ 2,0,040 per metric ton
actual subsidy received ¥ 2,902,520

II. The subsidy stopped as of 31 May 1949. ~~Contr~~

III Distribution control stopped as of 6 april 1949 indicating supply sufficient.

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A. Example House holdusers.

1945 = 20 M^3 = ¥3.50 + ~~¥~~0.20 per additional M^3

1950 = 10 M^3 = ¥65.0 + ¥8.0 " " "

VIII General remarks –

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Percentage of contamination of water yield It must be remembered that the Absorbation for Japanese standards are about 0.2 P.P.M and the Occupation Forces are using 2.0 P.P.M the difference is considerable and is hardly fair to the Japanese although they do derive benefit from it.

File
CWA

DECEMBER PRODUCTION DATA CONCERNING LIQUID CHLORINE

Asahi Denka Kogyo K.K.
2850 9-Chome, Ogu-machi
Arakawa-ku, Tokyo

DATE	NO. OF CELLS IN OPERATION		HOURS IN OPERATION		ELECTRIC CURRENT (AMP)		AMOUNT OF ELECTROLYTIC SODA (Approximate Calculation)	(a) AMOUNT OF CHLORINE (Approximate Calculation)	CHLORINE CONCENTRATION	(b) LIQUID CHLORINE PRODUCED	b/a
	NO.1	NO.2	NO.1	NO.2	NO.1	NO.2					
1	44.5	103	14.42	15.00	4.369	3.463	12.656	10.852	98.4	3.840	35.4
2	44	103	24.00	24.00	4.450	4.479	23.692	20.341	97.5	8.580	42.3
3	44	103	24.00	24.00	4.450	4.459	23.613	20.238	98.0	9.280	45.8
4	45.25	103	24.00	24.00	4.450	4.409	23.360	20.118	98.0	9.620	48.0
5	46	103	23.67	24.00	4.450	4.349	23.220	20.035	98.0	7.950	39.7
6	46	103	24.00	24.00	4.450	4.345	23.656	20.349	98.0	7.920	38.9
7	46	103	24.00	24.00	4.450	4.311	23.297	20.055	98.4	7.200	36.0
8	46.8	103	24.00	24.00	4.450	4.316	23.548	20.375	98.2	6.925	34.0
9	47.8	103	24.00	24.00	4.368	4.467	26.320	20.962	98.8	7.830	37.4
10	48	103	24.00	24.00	4.450	4.485	24.267	20.885	98.6	7.220	34.6
11	48	103	24.00	24.00	4.489	4.300	23.393	20.153	99.0	7.970	39.5
12	49.3	103	24.00	24.00	4.500	4.254	23.538	20.337	98.6	7.450	36.7
13	50	103	24.00	24.00	4.500	4.288	23.694	20.287	98.6	7.510	37.2
14	50	103	24.00	24.00	4.417	4.065	22.796	19.542	98.6	6.690	34.2
15	50	103	24.00	24.00	4.500	4.340	23.408	20.124	98.8	7.020	34.9
16	51.3	103	23.00	24.00	4.500	3.940	22.466	19.304	98.6	7.390	38.2
17	52	103	24.00	24.00	4.500	4.348	24.247	20.839	98.4	7.350	35.3
18	51.4	103	24.00	24.00	4.500	4.400	24.833	21.379	98.2	7.480	35.1
19	52.3	103	24.00	24.00	4.500	4.302	24.272	20.968	98.0	7.270	34.7
20	53	103	24.00	24.00	4.500	4.390	25.016	21.449	98.4	6.740	31.4
21	54.2	103	24.00	24.00	4.459	4.181	23.924	20.545	98.4	5.700	27.8

DATE	NO. OF CELLS IN OPERATION		HOURS IN OPERATION		ELECTRIC CURRENT (AMP)		AMOUNT OF ELECTROLYTIC SODA (Approximate Calculation)	(a) AMOUNT OF CHLORINE (Approximate Calculation)	CHLORINE CONCENTRATION	(b) LIQUID CHLORINE PRODUCED	b/a
	NO.1	NO.2	NO.1	NO.2	NO.1	NO.2					
22	55	103	24.00	24.00	4.474	4.327	24.666	21.135	98.4	6.080	28.8
23	55	103	24.00	24.00	4.452	4.344	25.237	21.751	98.4	6.510	30.0
24	55	103	24.00	24.00	4.500	4.283	24.884	21.421	98.4	6.720	31.4
25	56.3	103	23.83	24.00	4.444	4.303	24.671	21.334	98.8	7.590	35.6
26	57.1	103	24.00	24.00	4.500	4.308	24.899	21.316	99.0	6.850	32.1
27	57	103	24.00	24.00	4.500	4.379	24.998	21.592	98.8	7.750	35.8
28	57.8	103	24.00	24.00	4.500	4.390	25.494	21.897	98.4	7.720	35.2
29	58	103	22.00	22.00	4.325	4.167	20.920	19.735	98.6	7.460	37.8
Total							684,985	589,318		211.615	
Average	55.7	103	23.55	23.62	4.473	4.301			98.4	211.615	35.9

AMOUNT OF LIQUID CHLORINE DELIVERED DURING DECEMBER, 1950

DATE	SAKAI	YODOSA-SHI	KANAMA-CHI	SHIBAURA SEWAGE DISPOSAL STATION	SUNAMACHI SEWAGE DISPOSAL STATION	OHTA MUNICI-PAL OF-FICE	TOKORO-ZAWA WATER WORKS	HACHIO-JI MU-NICIPAL OFFICE	BOSHU WATER WORKS	SAITAMA SOUTH WATER WORKS	CHIBA WATER WORKS	CIVILIAN USE	PLANT USE	TOTAL
1	-	-	-	4,000	-	-	-	-	-	-	-	5,600	-	9,600
2	-	-	-	-	1,250	-	-	-	-	-	-	12,250	-	13,500
4	1,000	2,400	-	-	-	-	-	-	-	-	-	7,210	-	10,610
5	4,800	2,000	2,400	-	-	-	-	-	-	-	-	1,750	-	10,950
6	-	-	2,000	-	-	-	-	-	-	-	-	-	-	2,000
7	2,400	2,000	2,400	-	-	1,000	-	-	-	-	-	2,750	-	10,550
8	-	-	2,000	-	-	-	-	-	-	-	-	6,255	-	8,255
9	2,400	2,000	-	-	-	-	100	-	-	-	-	3,950	-	8,450
11	-	2,400	-	-	-	-	-	-	-	-	-	2,750	-	5,150
12	2,400	-	4,400	4,000	-	-	-	-	-	-	-	7,200	-	18,000
13	-	2,000	2,400	-	-	-	-	-	-	-	-	2,000	-	6,400
14	-	2,400	2,000	-	1,250	-	-	350	-	-	-	3,250	-	9,250
15	2,400	2,000	-	-	-	-	-	-	-	-	-	7,300	-	11,700
16	-	-	2,400	-	-	-	-	-	-	-	-	7,000	-	9,400
18	2,400	2,000	-	-	-	-	-	-	-	-	-	5,450	-	9,850
19	-	2,400	2,000	-	-	-	-	-	-	-	-	2,050	-	6,450
20	-	-	-	-	-	-	-	-	50	-	-	3,300	-	3,350
21	-	-	2,000	-	-	-	-	-	-	-	-	10,900	-	12,900
22	2,400	-	-	-	-	-	-	-	-	-	-	2,450	-	4,850
23	-	4,400	-	-	-	-	-	-	-	-	-	4,700	-	9,100
25	2,400	1,000	-	4,000	-	-	-	-	-	-	-	14,750	-	22,150
26	-	2,000	4,400	-	1,250	-	-	-	-	850	-	1,750	-	10,250
27	1,000	2,400	-	-	-	-	-	-	-	-	1,500	4,300	-	9,200
28	2,400	-	2,000	2,000	-	-	-	-	-	-	-	5,700	310	12,410
Total	26,000	31,400	30,400	14,000	3,750	1,000	100	350	50	850	1,500	124,615	310	234,325

Brought over from November	37.860
Put into storage during December	211.615
Total	249.475
Amount delivered during December	234.325*
Amount carried over to January	15.150

Odawara Seishi (paper)	21.500
Mitsubishi Seishi (paper)	17.500
Nitto Seishi (paper)	15.000
Tohoku Pulp (paper)	15.000
Nihon Kei Kinzoku (chemicals)	14.500

*Water works	91.650
Sewage disposal station	17.750
Civilian use	124.615**
Plant use	310

File - Tokyo Water

NOVEMBER PRODUCTION DATA CONCERNING LIQUID CHLORINE

Asahi Denka Kogyo K.K.
2850 9-Chome, Ogu-machi
Arakawa-ku, Tokyo

DATE	NO. OF CELLS IN OPERATION		HOURS IN OPERATION		ELECTRIC CURRENT (AMP)		AMOUNT OF ELECTROLYTIC SODA (Approximate Calculation)	(a) AMOUNT OF CHLORINE (Approximate calculation)	CHLORINE CONCENTRATION	(b) LIQUID CHLORINE PRODUCED	b/a
	NO.1	NO.2	NO.1	NO.2	NO.1	NO.2					
1	24	102	24.00	24.00	3,917	4,800	20,491	17,523	98.0	7.240	41.3
2	24	102	24.00	24.00	3,792	4,800	20,840	17,816	98.4	7.000	39.3
4	24	102	12.42	12.52	2,746	3,815	7,364	6,272	98.3	2.130	34.0
5	24	102	24.00	24.00	4,000	4,801	20,464	17,575	98.4	8,380	47.7
6	24	102	24.00	24.00	3,946	4,800	20,593	17,660	98.4	7.260	41.1
7	24	102	24.00	24.00	3,934	4,800	20,193	17,157	98.4	7.040	41.0
8	24	102	24.00	24.00	4,000	4,800	20,689	17,734	98.2	6,870	38.7
9	24	102	24.00	24.00	3,929	4,800	20,523	17,649	98.4	5,730	32.5
10	24	102	24.00	24.00	3,859	4,800	20,391	17,457	98.4	6,500	37.5
11	24	102	24.00	24.00	3,850	4,773	20,091	17,083	98.8	6,410	37.5
12	23.1	102	24.00	24.00	4,000	4,804	20,337	17,378	98.4	6,800	39.1
13	23	102	24.00	24.00	3,984	4,800	20,177	17,288	98.4	6,850	39.6
14	23	102	24.00	24.00	3,963	4,792	20,355	17,452	98.4	8,550	49.0
15	40.4	102	18.58	19.25	4,209	4,463	17,670	15,054	98.2	5,920	39.3
16	45	102	24.00	24.00	4,227	4,742	23,677	20,347	98.0	8,040	39.6
17	45	102.7	24.00	24.00	4,195	4,611	23,407	19,932	98.4	8,310	41.7
18	45.7	103	18.92	22.67	4,089	4,517	20,992	18,047	98.2	6,590	36.4
19	45.3	103	24.00	24.00	4,300	4,800	23,772	20,344	98.2	7,940	39.1
20	44.1	103.6	24.00	24.00	4,300	4,800	23,995	20,587	98.2	8,070	39.4
21	44.7	104	22.30	22.83	4,300	4,589	22,675	19,388	98.3	8,010	41.4
22	45.7	104	22.92	23.42	4,275	4,594	23,459	20,176	98.3	7,335	36.4

DATE	NO. OF CELLS IN OPERATION		HOURS IN OPERATION		ELECTRIC CURRENT (AMP)		AMOUNT OF ELECTROLYTIC SODA (Approximate Calculation)	(a) AMOUNT OF CHLORINE (Approximate Calculation)	CHLORINE CONCENTRATION	(b) LIQUID CHLORINE PRODUCED	b/a
	NO.1	NO.2	NO.1	NO.2	NO.1	NO.2					
23	45	104	24.00	24.00	4.300	4.600	23.989	20.850	98.2	8.110	38.9
24	44.13	103.5	24.00	24.00	4.300	4.679	23.410	20.076	98.0	8.430	42.1
25	44	103	24.00	23.67	4.300	4.783	23.788	20.438	98.2	8.750	42.9
26	44	103	23.83	23.83	4.300	4.800	23.860	20.460	98.4	9.730	48.0
27	44	103	22.42	22.42	4.215	3.273	18.666	15.955	98.8	6.200	38.8
28	45.29	103	23.42	23.33	4.279	3.655	20.793	17.974	98.6	7.190	40.0
29	45.18	103	24.00	24.00	4.244	4.600	24.532	21.125	98.4	10.040	47.5
30	45	103	23.83	23.83	4.344	4.600	24.208	20.502	98.2	9.780	48.3
Total							615.395	527.299		215.205	
Average	35.2	102.6	23.06	23.23	4.146	4.622			98.3		40.8

AMOUNT OF LIQUID CHLORINE DELIVERED DURING NOVEMBER, 1950

DATE	SAKAI	YODOBASHI	KANAMACHI	SHIBAURA SEWAGE DISPOSAL STATION	SUNAMACHI SEWAGE DISPOSAL STATION	HACHIOJI MUNICIPAL OFFICE	OHTA MUNICIPAL OFFICE	SAITAMA SOUTH WATER WORKS	OHME TOWN OFFICE	CHIBA WATER WORKS	UENOHARA TOWN OFFICE	CIVILIAN USE	PLANT USE	TOTAL
1	-	2,000	2,000	-	1,250	200	-	-	-	-	-	-	-	5,450
2	-	-	-	-	-	-	-	-	-	-	-	5,250	-	5,250
4	3,400	4,400	-	1,500	-	-	-	-	-	-	-	7,650	-	16,950
6	2,400	500	-	-	-	-	-	-	-	-	-	1,750	-	4,650
7	-	-	-	-	-	-	-	-	-	-	-	3,500	-	3,500
8	-	2,000	4,400	-	-	-	-	-	-	-	-	7,000	-	13,400
9	2,400	-	-	2,000	-	-	250	-	-	-	-	10,100	-	14,750
10	-	2,000	2,000	-	-	-	-	-	-	-	-	-	-	4,000
11	2,400	-	-	-	1,250	-	-	-	-	-	-	1,750	-	5,400
13	-	2,400	2,000	-	-	-	-	1,000	-	-	-	3,300	-	8,700
14	2,400	2,000	-	-	-	-	-	-	-	-	-	3,000	-	7,400
15	-	-	-	2,000	-	-	-	-	-	-	-	1,500	-	3,500
16	-	2,400	-	-	-	-	-	-	-	-	-	4,950	-	7,350
17	-	-	2,400	-	-	-	-	-	-	-	-	1,200	-	3,600
18	2,400	-	-	-	-	-	-	-	-	-	-	6,000	-	8,400
20	-	2,000	2,400	2,000	-	-	-	-	-	-	-	9,750	-	16,150
21	-	2,400	-	-	-	-	-	-	100	1,500	-	2,850	-	6,850
22	2,400	-	2,000	-	-	-	-	-	-	-	-	11,900	-	16,300
24	-	-	2,400	-	-	-	-	-	-	-	-	6,900	-	9,300
25	2,400	2,000	-	-	-	-	-	-	-	-	-	5,350	-	9,750
27	-	2,400	2,000	2,000	-	-	-	-	-	-	100	4,005	-	10,505
28	2,400	-	-	-	-	-	-	-	-	-	-	3,390	-	5,790
29	-	-	2,400	-	-	100	-	-	-	-	-	-	-	2,500
30	2,400	2,000	-	-	-	-	-	-	-	-	-	5,750	450	10,600
Total	25,000	28,500	24,000	9,500	2,500	300	250	1,000	100	1,500	100	106,845	450	200,045

/
Comp Shaw

Brought over from October	22,700
Put into storage during November	215,205
Total	237,905
Amount delivered during November	200,045*
Amount carried over to December	37,860

*Water works	80,750
Sewage disposal station	12,000
Civilian use	106,845**
Plant use	450

**Odawara Seishi (paper)	14,000
Mitsubishi Seishi (paper)	13,500
Nihon Kei Kinzoku (Chemicals)	10,500
Nitto Seishi (paper)	7,500
Nihon Pulp Kogyo (paper)	10,000

Allen for your info
Ida

File
Tokyo-to water system

OCTOBER PRODUCTION DATA CONCERNING LIQUID CHLORINE

Asahi Denka Kogyo K.K.
2850 9-Chome, Ogu-machi
Arakawa-ku, Tokyo

DATE	NO. OF CELLS IN OPERATION		HOURS IN OPERATION		ELECTRIC CURRENT (AMP)		AMOUNT OF ELECTROLYTIC SODA (Approximate Calculation)		(a) AMOUNT OF CHLORINE (Approximate Calculation)	CHLORINE CONCENTRATION	(b) LIQUID CHLORINE PRODUCED	b/a
	NO.1	NO.2	NO.1	NO.2	NO.1	NO.2	NO.1	NO.2				
1	0	101	0	24.00	0	4.800	0	16.717	14.433	98.2	6.570	45.5
2	0	101	0	23.67	0	4.800	0	15.662	13.419	98.2	6.070	45.2
3	0	101	0	24.00	0	4.800	0	16.120	13.949	98.0	6.275	45.0
4	0	101	0	24.00	0	4.655	0	16.845	14.540	98.2	6.330	43.5
5	0	101	0	7.00	0	3.671	0	4.247	3.684	98.3	0.860	23.3
6	24	101	17.33	24.00	2.634	4.779	1.384	17.047	15.871	98.2	4.860	30.6
7	23.15	101	24.00	24.00	3.754	4.800	3.221	16.669	17.034	98.4	5.820	34.2
8	23	101	24.00	24.00	3.984	4.800	3.356	17.019	17.501	98.2	5.820	33.3
9	22.9	101	23.70	24.00	3.777	4.800	2.978	16.684	16.872	98.4	6.920	41.0
10	23	101.67	24.00	24.00	3.821	4.788	3.326	17.216	17.620	98.2	8.050	45.7
11	23	102	23.62	23.62	3.963	4.758	3.140	16.752	17.146	98.2	7.340	42.8
12	23	102	24.00	24.00	4.184	4.800	3.403	16.815	17.280	98.8	8.000	46.3
13	23	102	23.67	24.00	4.128	4.800	3.318	16.662	17.050	98.2	6.390	37.4
14	23	102	24.00	24.00	4.150	4.800	3.409	17.088	17.045	98.2	7.080	41.5
15	23	102	24.00	24.00	4.200	4.800	3.424	17.187	17.792	98.2	6.710	37.8
16	23	102	24.00	24.00	4.200	4.800	3.402	17.353	17.887	98.4	6.440	36.0
17	23	102	24.00	24.00	4.146	4.800	3.338	17.558	17.926	98.2	6.120	34.2
18	23	102	24.00	24.00	4.200	4.800	3.473	17.395	17.756	98.2	6.270	35.3
19	23	102	24.00	24.00	4.200	4.800	3.415	17.377	17.710	98.2	6.660	37.6
20	23	102	24.00	24.00	4.200	4.800	3.302	17.949	18.291	98.4	5.850	32.0
21	23.7	102	24.00	24.00	4.043	4.800	3.262	17.395	17.652	98.2	5.640	31.9
22	24	102	24.00	24.00	3.992	4.800	3.480	17.175	17.606	98.4	5.460	31.0

DATE	NO. OF CELLS IN OPERATION		HOURS IN OPERATION		ELECTRIC CURRENT (AMP)		AMOUNT OF ELECTROLYTIC SODA (Approximate Calculation)		(a) AMOUNT OF CHLORINE (Approximate Calculation)	CHLORINE CONCENTRATION	(b) LIQUID CHLORINE PRODUCED	b/a
	NO.1	NO.2	NO.1	NO.2	NO.1	NO.2	NO.1	NO.2				
23	24	101.35	24.00	24.00	3.996	4.800	3.454	17.525	18.168	98.2	4.860	26.7
24	24	101.7	24.00	24.00	3.844	4.800	3.254	17.496	17.940	98.2	4.620	25.7
25	24	102	24.00	24.00	3.906	4.800	3.315	17.457	18.009	98.2	6.850	37.9
26	24	102	24.00	24.00	3.888	4.800	3.274	17.358	17.837	98.4	4.750	26.6
27	24	102	24.00	24.00	3.808	4.800	3.305	17.600	18.122	98.2	5.100	28.1
28	24	102	24.00	24.00	3.913	4.800	3.274	17.406	17.800	98.2	5.585	31.4
29	24	102	24.00	24.00	4.000	4.800	3.470	17.573	18.123	98.2	4.130	22.8
30	24	102	24.00	24.00	3.742	4.800	3.094	17.180	17.435	98.4	4.820	27.6
31	24	102	24.00	24.00	3.775	4.800	3.014	17.144	17.921	98.4	5.730	32.0
Total							601.756		517.419		181.980	
Average	23.44	101.67	23.70	23.43	3.940.4	4.756				98.3		35.2

No.1: No.1 Electrolytic Room
No.2: No.2 Electrolytic Room

AMOUNT OF LIQUID CHLORINE DELIVERED DURING OCTOBER, 1950

DATE	SAKAI	YODOBASHI	KANAMACHI	SHIBAURA SEWAGE DISPOSAL STATION	SUNAMACHI SEWAGE DISPOSAL STATION	BOSHU WATER WORKS	HACHIOJI MUNICIPAL OFFICE	CHIBA WATER WORKS	CIVILIAN USE	PLANT USE	TOTAL
2	-	-	-	-	-	-	-	-	3,150	-	3,150
3	-	-	-	2,000	-	-	-	-	5	-	2,005
4	-	4,400	2,000	-	-	50	-	-	3,500	-	9,950
5	4,800	-	-	-	-	-	-	-	5,250	-	10,050
6	-	-	-	-	-	-	-	-	1,000	-	1,000
7	-	2,000	2,000	2,000	1,250	-	-	-	5,550	-	12,800
9	2,400	2,000	2,400	-	-	-	-	-	3,250	-	10,050
10	-	-	-	-	-	-	-	-	8,300	-	8,300
11	-	2,000	-	-	-	-	-	-	2,350	-	4,350
12	2,400	2,400	-	-	-	-	150	-	1,100	-	6,050
13	-	2,400	2,000	2,000	-	-	-	-	4,350	-	10,750
14	2,400	-	-	-	-	-	-	-	3,000	-	5,400
16	2,400	2,000	-	-	-	-	-	-	1,750	-	6,150
17	-	2,400	2,000	-	1,250	-	-	-	1,450	-	7,100
18	-	-	2,400	-	-	-	-	1,500	1,750	-	5,650
19	-	-	-	2,000	-	-	-	-	2,500	-	4,500
20	2,400	2,000	-	-	-	-	-	-	6,050	-	10,450
21	-	-	2,000	-	-	-	-	-	2,500	-	4,500
23	-	2,400	-	-	-	-	-	-	-	-	2,400
24	2,400	-	-	2,000	-	-	-	-	1,350	-	5,750
25	-	-	2,400	-	-	-	-	-	3,200	-	5,600
26	2,400	-	2,000	-	-	-	-	-	5,250	-	9,650
27	-	-	-	-	-	-	-	-	6,000	-	6,000
28	2,400	2,000	-	-	-	-	-	-	1,805	-	6,205
30	-	-	2,400	2,000	-	-	-	-	2,500	-	6,900
31	-	-	-	-	-	-	-	-	7,250	120	7,370
Total	24,000	26,000	21,600	12,000	2,500	50	150	1,500	84,160	120	172,080

Brought over from September	12,800
Put into storage during October	181,980
Total	194,780
Amount delivered during October	172,080*
Amount carried over to October	22,700

*Water works	73,300
Sewage disposal station	14,500
Civilian use	84,160**
Plant use	120

**Odawara Seishi (paper)	16,450
Mitsubishi Seishi (paper)	13,000
Nitto Seishi (paper)	10,000
Nihon Kei Kinzoku (metal)	8,550
Tohoku Pulp (paper)	5,000

3 months

Tokyo to
each supply

WATER WORKS BUREAU
Tokyo Metropolitan Office

4 February 1950

SUBJECT: Report on Chlorine furnished to Tokyo Water Works.

(1) Quantity by month:

	December'49	January'50
Asahi-Denka	77.000 metric tons	62.750 metric tons
Tsurumi-Soda	22.140 " "	20.000 " "
	99.140 " "	82.750 " "

(2) Costs (Exclusive of Porterage):

	Cost of Chlorine	Rent of Container
Asahi-Denka	27,300 Yen/m.tons	200 Yen/1-50kg Cylinder
Tsurumi-Soda	" "	" "

Remarks: 27,300 Yen/m.ton is a contract price effective up to the end of this month: there is some possibility that it may be raised next month.

(3) Prospect:

It seems very hard to receive more chlorine than the present delivery from each company.

(4) Name (in Full) and address of Company:

a. Asahi-Denka Kogyo Kabushiki-Kaisha,
2850, 9-chome, Ogu, Arakawa-ku, Tokyo-to.

b. Tsurumi-Soda Kabushiki-Kaisha,
7, 1-chome, Suehiro-cho, Tsurumi-ku, Yokahama-shi.

進 急 拡 張 工 事

設	施 工	着 工	
		昭和23年度	昭和24年度
		施 工	施 工