## HEADQUARTERS U.S. STRATEGIC BOMBING SURVEY (PACIFIC) APO 234 C/O POSTMASTER, SAN FRANCISCO

INTERROGATION NO: 243

PLACE: Rm 535, Meiji

Building

DATE: 3 Nov 45

Division of Origin: Medical Division.

Subject: Water Supply in Tokyo.

Personnel interrogated and background of each:

E. IWASAKI, Chief of supply section, Tokyo Water Works
Bureau.
Interview took place at 1500, 31 Oct 45.

Where interviewed: Tokyo Water Works Bureau.

Interrogator: Colonel RALPH E. TARBETT, Captain PAUL HOUSER

Interpreter: Lt CARY, USNR.

Allied Officers Present: Col TARBETT, Capt HOUSER.

## Summary:

Supply available to old city, not to Tokyo-To estimated in area 6,000,000 persons. Water supplied to 900,000 households, average 5 persons, estimated 4,500,000 population.

Mr IWASAKI stated that 90% of the population were served before bombing; after bombing, 85% were served and are being served at present. Consumption is now about the same as before bombing, due to leakage. 306 Mgd metric tons are being used. Reference: Report by IWASAKI to Civilian Defense Division.

There are an estimated 250,000 wells in Tokyo proper, mostly shallow 20m; some, in large buildings and hotels, are 100 to 120m in depth. The Laboratory has a check on the quality of this supply. Mr. IWASAKI stated that many of the shallow wells were not used. They are generally used in area outside main city not supplied with city water. Shallow dug and driven wells are used about 50-50. An estimated 1.5 million people in the prefecture outside of the metropolitan area are served by private wells. A review of laboratory tests on Public Supply may be obtained after Nov 18, from the City Hygiene Laboratory.

Damages from bombing: Eight conduits from intakes to plants were damaged, but not put out of service. They were repaired in one month. Five filter units were damaged and but out of service. These were by-passed and service was not interrupted. 381 breaks in mains occurred, mostly in 6" and 4" pipes. One 32" main was broken. No disinfection of repaired or new mains is practiced. They are flushed, only.

In the raids of March 10 and May 29, 555,800 service pipes were damaged and leaked, due to burning of houses. Emergency shut-offs consisted of pinching the lead service pipe at the end. This was not too effective, however, as the water pressure would soon open the pinched end. They experienced great difficulty in finding curb cocks to shut off water. 400 to 500 men

are now employed in finding cocks and cutting off water, at the rate of three per day per man. From May to August 1945, they shut off 135,000 curb cocks.

All conduits, mains and filters were repaired by August. There was no interruption of water service during or after raids. The Kanamachi plant was shut down for one hour on March 9 or 10, due to cut-off of electric power. Although the various systems are interconnected, the Kanemachi system is not served successfully from the others.

Plans for Emergency Drinking Water: 3,802 wells\* were dug for use of water for both fire fighting and domestic consumption. 210 wooden tanks with a capacity of about 2.5 cum each, were provided at 20 district stations. Each station was provided with a truck for conveying the tanks of water to stricken areas. These tanks were equipped with spigots for drawing water into containers brought in by the people. 148 were destroyed during raids. The water in the tanks was not disinfected. Eight portable truck-mounted filters were constructed. These had a capacity of 40cm per hour. No coagulent or chlorine used. We tested out on all kinds of water throughout the city, and found no coagulent or chlorine used anywhere.

The type of bombing and extent of damage to buildings and not to water service made emergency equipment unnecessary.

\* These wells were not disinfected, but small vials of calcium hypochlorite were distributed to the people with instructions for treating the water should use of the wells become necessary.

Report on sources and treatment plants is available from Colonel Hinman.

DISTRIBUTION: All Divisions.