

History of Mikawashima Water Reclamation Center

Mikawashima Water Reclamation Center was begun to build from 1914 and the operation started in March 1922, as the first modern wastewater treatment plant “Mikawashima Sewage Disposal Plant” in Japan. The center has been operating with various waste-water treatment processes, which are the Trickling filter process, the Paddle type activated sludge process (taking in air by the paddle rotation) (1936), and the Diffused conventional activated sludge process (1961).



▲Trickling filter process



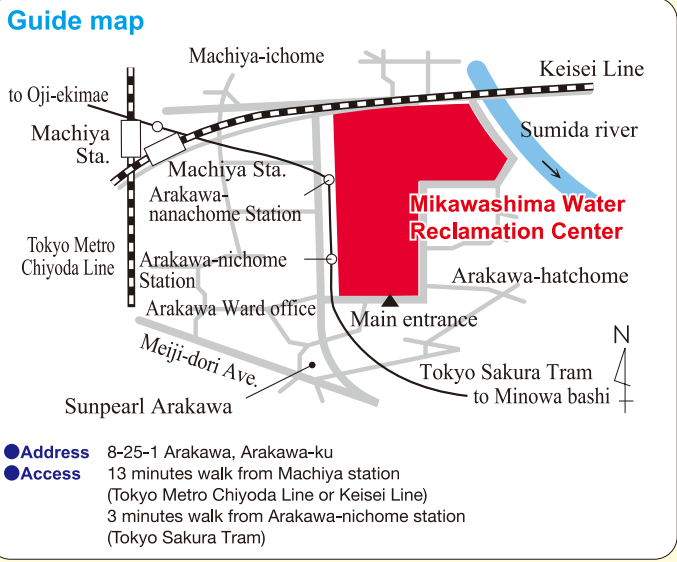
▲Paddle type

Arakawa Sizen Park

We provide the above-ground space of Mikawashima Water Reclamation Center as a park in Arakawa ward. This park consists of two parts in the north and south (61,100m²) and was selected as one of “New Tokyo 100 Views” . There are also baseball field, tennis court, children’s park and traffic garden.



▲Pond in the park



- Business hours: 9:30 - 16:30
- Entry Fee: Free
- Closed: Mondays (open on holiday Mondays, closed the next day) and the year-end and New Year holidays
Open daily throughout the summer (July 16 - August 31)
- Address: Day (October 1)
2-3-5 Ariake, Koto-ku Ariake
Water Reclamation Center Management office (A-tower) 5th floor
- Telephone: 03 (5564) 2458
- Website: <https://www.nijinogesuidoukan.jp/>



Beware of crooked dealers who pretend to be related to the Bureau of Sewerage!

The Bureau of Sewerage does not rely on businesses to repair or clean drainage facilities in housing.

Facility tours of Water Reclamation Centers

Facility tours of water reclamation centers are available except weekends, holidays, and the New Year's season. Please contact us about reservations and details.

«Contact point for arranging facility tours»
Telephone: 03 (3241) 0944
Hours: 9:00 ~ 17:00 (weekdays only)



Water environment cultivated by the district
Mikawashima Water Reclamation Center



Earth-kun, the mascot of Bureau of Sewerage

Mikawashima Water Reclamation Center is the first modern wastewater treatment plant in Japan. In the center, there are ample greenery, and many cherry blossoms, which make scenic beauty in spring with the red brick facilities of Pumping Station at the Former Mikawashima Sewage Disposal Plant. The treatment area includes all of Arakawa and Taito wards, most of Bunkyo and Toshima wards, part of Chiyoda, Shinjuku and Kita wards, consequently the whole area amounts to 3,936ha.

The treated wastewater is discharged from the center into Sumida River. Some of the treated water is further cleaned by filtration at Higashi-Ogu Purification Center and discharged into Sumida River, or used inside Mikawashima Water Reclamation Center for washing and cooling machines.

The generated sludge is pumped through pressure pipelines to Tobu sludge plant for treatment.

A “Cherry blossoms viewing party” is held in the spring.



- (As of April 2024)
- Operation started : March 1922
- Site area : 197,878m²
- Treatment capacity : 665,000m³/day

- Wastewater treatment facilities
- Grit chamber : 21
- Primary sedimentation tank : 18
- Reaction tank : 14
- Secondary sedimentation tank : 32
- High-rate filtration system: 1

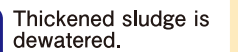
Average quality of influent and final effluent
The final effluent from the water reclamation center complies completely with the water quality standards of the Tokyo Metropolitan Environmental Security Ordinance and is sufficiently clean for fish to live in. (Units: mg/L)

Item	Influent			Final effluent		Regional water quality standards
	Ogu series	Aizome series	Asakusa series	Effluent	Higashi-ogu	
B O D	120	160	170	8	2	25 or below
C O D _{Mn}	78	95	86	10	8	—
Total nitrogen	30.4	34.1	33.4	12.6	13.5	30 or below
Total phosphorus	3.0	3.4	3.7	0.3	0.2	3 or below

Average values of 24-hour test conducted in FY2022
※The higher values of BOD and COD indicate the higher levels of water contamination. BOD describes the amount of oxygen required by microorganisms to eat organic material in water, and COD describes the amount of oxygen required by oxidizer to decompose organic material in water. The quality levels of discharged water are specified in terms of BOD for rivers and COD for seas. Total nitrogen and total phosphorus are closely related to the generation of red tides.



*WWTPs in Tokyo are called “Water Reclamation Centers”.



We treat wastewater from houses and factories and ensure a comfortable living environment.

We protect the city from flooding by draining stormwater immediately from roads or residential areas.

We conserve the water quality of rivers and the sea by treating wastewater and returning treated water to them.

Now we play new roles in creating a good urban environment. We use sewerage resources and energy effectively, for example, reclaimed water and sewerage heat. We also utilize rooftop spaces of our facilities as parks.

The site map illustrates the location of the Arakawa Branch Office and Cultural Property Tour Reception building (marked with an asterisk) in relation to the Sumida River and surrounding infrastructure. The building is situated near the Arakawa nishome station and the Ogu-east trunk sewer. The map also shows the 2nd Asakusa trunk sewer, 2nd Minamisenju trunk sewer, and 2nd Jizobori trunk sewer. The Arakawa nishome station is located near the 2nd Asakusa trunk sewer. The Ogu-east trunk sewer is located near the 2nd Minamisenju trunk sewer. The 2nd Jizobori trunk sewer is located near the 2nd Asakusa trunk sewer. The map also shows the 2nd Asakusa pump building (Management office) and the Pumping Station at the Former Mikawashima Sewage Disposal Plant. The map includes a legend for Wastewater treatment facilities (blue), Storage tank in wet weather (green), and Rooftop park (red outline). The map also shows the location of the Arakawa Branch Office and Cultural Property Tour Reception building (marked with an asterisk) and the 2nd Asakusa pump building (Management office). The map includes a north arrow and a scale bar.

Legend:

- Wastewater treatment facilities
- Storage tank in wet weather
- Rooftop park

Key Features and Infrastructure:

- Transportation:** Keisei Line, Asakusa Line, Tokyo Sakura Tram, Arakawa nishome station, Ogu-east trunk sewer.
- Waterways:** Sumida River, trunk sewer.
- Wastewater Treatment Facilities:** Chlorination tank, Reaction tank, Secondary sedimentation tank, Primary sedimentation tank, Aizome series, Aizome pump station, 2nd Jizobori series, Jizobori trunk sewer, Aizome-east series, High-rate filtration system, Sludge treatment facility, Na-S battery, Blower house.
- Other Facilities:** Sludge is pumped through pressure pipelines to Tobu sludge plant, Pumping Station at the Former Mikawashima Sewage Disposal Plant, 2nd Asakusa pump building (Management office), Office, Mikawashima park, Parking, 2nd Asakusa trunk sewer, 2nd Minamisenju trunk sewer, 2nd Jizobori trunk sewer.

Pumping Station at the Former Mikawashima Sewage Disposal Plant

The red brick pump pit that started operation in March 1922 was initially a symbolic facility of the center. However, this service was replaced with another pumping station on a separate line in March 1999 and abolished.

In December 2007, pumping station at the former Mikawashima Sewage Disposal Plant was designated as a National Important Cultural Property (Building), since “it has high historical value as the representative remains of the former Mikawashima Sewage Disposal Plant, which was the first modern sewage treatment plant in our country, and a series of well-preserved structures such as gate chambers and grit chambers that still remain in the facility are quite valuable in understanding the construction of a pumping station at a modern sewage treatment plant”.

It has been open to the public since April 2013. A tour is available between 9: 00 a.m. and 5:00 p.m., excluding Tuesday, Friday, the year-end and New Year holidays, by advance reservation only. For reservation, please call 03-6458-3940 (Japanese only).

