

## NaS (sodium-sulfur) Battery

Electricity bill is reduced by using the power from the sodium-sulfur battery that is charged in the nighttime with low power rate.

Also we tackle with the power shortage caused by power demand control.



▲NaS battery

## Seaside Ball Game Field on top of the Treatment Facility

Edogawa City Rinkai Ball Game Field, which has been built on the space above the water treatment facilities, is used by many people to play soccer, baseball, etc. The field would serve as an evacuation area in the event of an earthquake.

Application for use : Edogawa City Rinkai Ball Game Field  
Phone:03-3680-9251



▲Treatment facilities are underneath the field

## Sawayaka (fresh) Smoke Stack

The height of the smoke stack is 100 meters. Immediately after opening, it was painted red and white. However, in 2001 we solicited design ideas from local elementary school students and changed it to a more pleasant blue gradation.

It was then repainted and reborn in 2018, with further consideration made for the surrounding landscape.



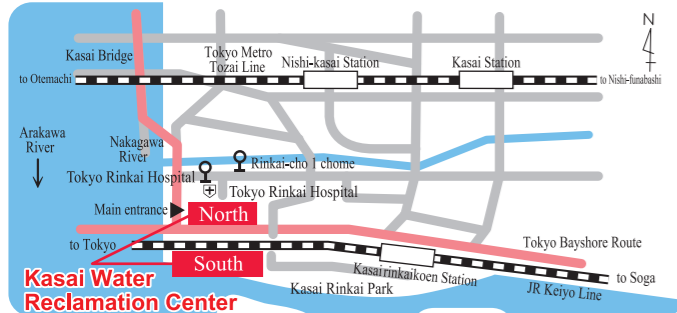
▲The smoke stack appears to be sucked into the blue sky.

## Hydrogen Station

Part of the center site is being used to build a facility that supplies hydrogen, a next generation fuel. (This will be a base for refueling hydrogen fuel cell buses operated by the Tokyo Metropolitan Bureau of Transportation, also known as Toei Bus)



## Guide map



- **Address** 1-1-1, Rinkai-cho, Edogawa Ward, Tokyo 134-0086, Japan  
Phone: 03-5605-9991
- **Access** Get off at Nishi Kasai Station on the Tokyo Metro subway Tozai Line, take a metropolitan bus bound for "Rinkai-cho 2-chome Housing Complex," get off at "Tokyo Rinkai Hospital" or "Rinkai-cho 1-chome," and walk for 10 minutes to the Reclamation Center.  
Or Get off at Kasairinkai Station on the JR Keiyo Line and walk for 20 minutes to the Reclamation Center.

## 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.

国指定重要文化財 大正時代の趣ある赤レンガ風の建造物や地下施設を見学できます

国三河島汚水処分場唧筒(ポンプ)場施設



## ● Tokyo Amesh

Tokyo Amesh is the system that shows rainfall in and around Tokyo in real time.  
The rainfall is measured by radars and ground rain gauges.  
※ Tokyo Amesh is the registered trademark of the Tokyo Metropolitan Government.



## ● Sewer Adventure

Pass the sewer quiz to become a sewer master.



## ● Bureau of Sewerage website

<https://www.gesui.metro.tokyo.lg.jp/>



## Water environment cultivated by the district Kasai Water Reclamation Center



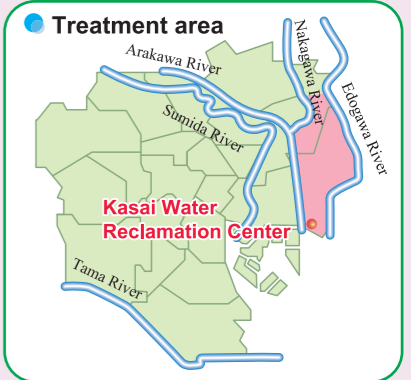
Earth-kun, the mascot of Bureau of Sewerage

Kasai Water Reclamation Center, which is located at the mouth of Arakawa River, consists of facilities in the southern and northern areas that sandwich the Metropolitan Expressway Bayshore Route. Its treatment area is 4,889ha, including most of Edogawa ward surrounded by Arakawa River and Edogawa River and part of Katsushika ward.

Treated wastewater is discharged into Tokyo Bay, while some of it is sand-filtered and use for washing/cooling machines and toilet water in the center.

The generated sludge is dewatered and incinerated at the center along with sludge pumped from Nakagawa Water Reclamation Center and Kosuge Water Reclamation Center.

The treatment area has 8 pumping stations, 4 of which are operated remotely from Kasai Water Reclamation Center.



### (As of April 2026)

- **Operation started :** September 1981
- **Site area :** 361,744m<sup>2</sup>
- **Treatment capacity :** 400,000m<sup>3</sup>/day
- **Wet weather storage tank :** 87,300m<sup>3</sup>
- **Stormwater storage tank :** 69,000m<sup>3</sup>
- **Wastewater treatment facilities**  
Grit chamber : 18  
Primary sedimentation tank : 10  
Reaction tank : 10  
Secondary sedimentation tank : 10  
High-rate filtration system : 1
- **Sludge treatment facilities**  
Thickener : 4  
Concentrator : 7  
Dewatering machine : 18  
Incinerator : 3

### ● 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.

Item	Influent	Final effluent	Regional water quality standards
BOD	120	3	—
COD <sub>Mn</sub>	67	8	35 or below
Total nitrogen	26.7	9.3	30 or below
Total phosphorus	2.8	0.8	3 or below

Average values of 24-hour test conducted in FY2026

※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.



# Sewerage System

Sewerage system is mainly composed of 3 components\*:  
sewers, pumping stations and wastewater treatment plants (WWTPs)\*.  
**Sewers** collect and carry wastewater.  
**Pumping stations** pump wastewater to avoid sewers getting deeper.  
**WWTPs** treat and clean wastewater.  
We perform inspection, cleaning and maintenance every day to keep them working properly.  
\*WWTPs in Tokyo are called "Water Reclamation Centers".

## WWTP

**Grit chamber**  
Wastewater flows into this chamber first. Large objects are removed, then sand and grit are settled out.

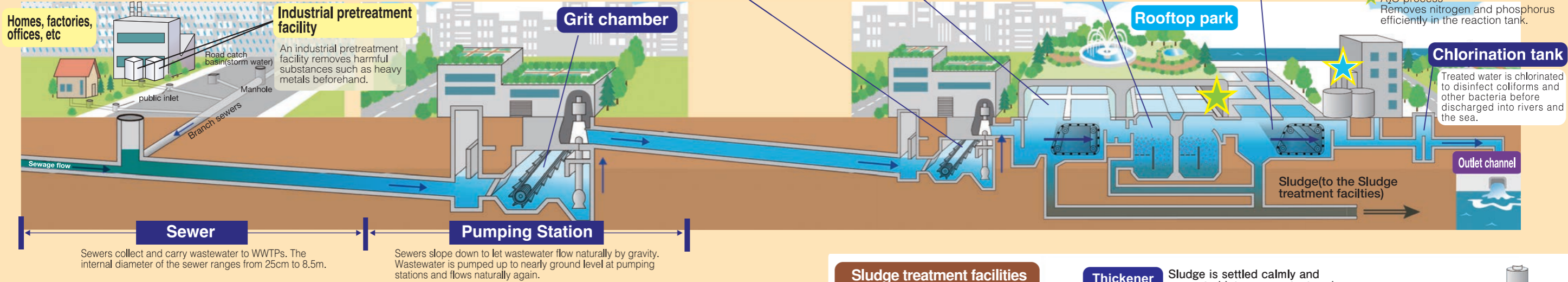
**Primary sedimentation tank**  
As wastewater flows in slowly through this tank for 2 to 3 hours, solids sink to the bottom.

**Reaction tank**  
Organic matter in wastewater is absorbed to activated sludge, where microorganisms break it down. As microorganisms grow, activated sludge becomes easy to settle.

**Secondary sedimentation tank**  
As activated sludge formed in a reaction tank flows slowly in this tank for 3 to 4 hours, it is separated into supernatant and sludge.

**Advanced wastewater treatment**  
We introduce following facilities to clean treated water even more.  
★ Sand filter/Biologically active filter  
Removes residual suspended solids that the secondary sedimentation tank cannot remove completely.  
★ A<sub>2</sub>O process  
Removes nitrogen and phosphorus efficiently in the reaction tank.

**Chlorination tank**  
Treated water is chlorinated to disinfect coliforms and other bacteria before discharged into rivers and the sea.



# The Role of Tokyo Sewerage

## Improvement of a Living Environment by Treating Wastewater

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

## Flood Prevention by Draining Stormwater

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

## Water Quality Conservation in Rivers and the Sea

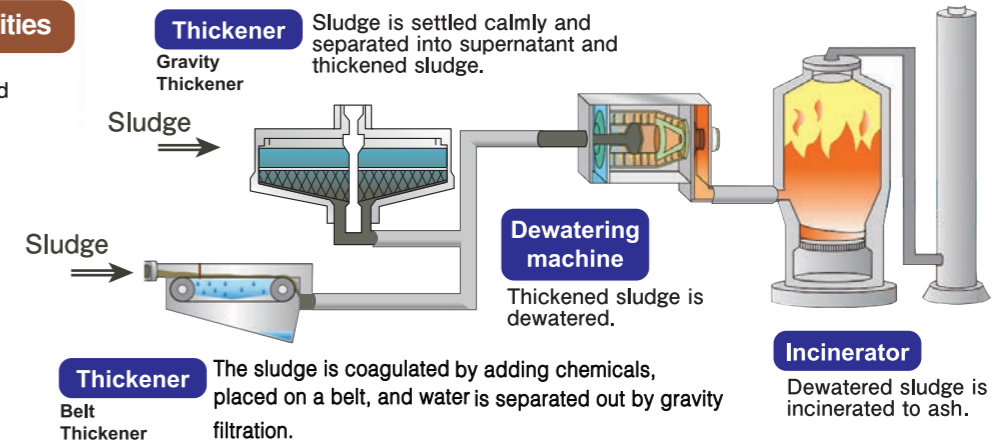
We conserve the water quality of rivers and the sea by treating wastewater and returning treated water to them.

## Our New Roles

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.

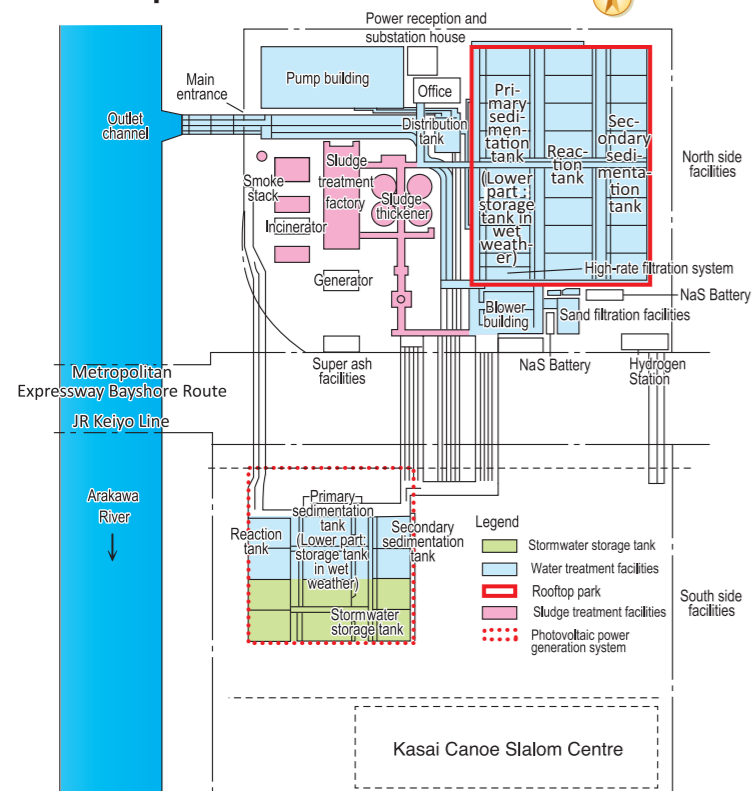
## Sludge treatment facilities

Sludge is thickened, dewatered and incinerated.



※If a WWTP does not have sludge treatment facilities, it transports its sludge to another WWTP that has such facilities.

## Ground plan



## Features of Kasai Water Reclamation Center

### Photovoltaic (Solar) Power Generation

To help prevent global warming, a photovoltaic power generation system, which does not emit CO<sub>2</sub> at the time of power generation, was installed and the generated power is consumed by the center as part of its total power consumption.

The total power generation capacity is 490kW, 290kW of which is generated by single-axis tracking type generators. The annual power production is equivalent to the power consumed by 160 ordinary households.



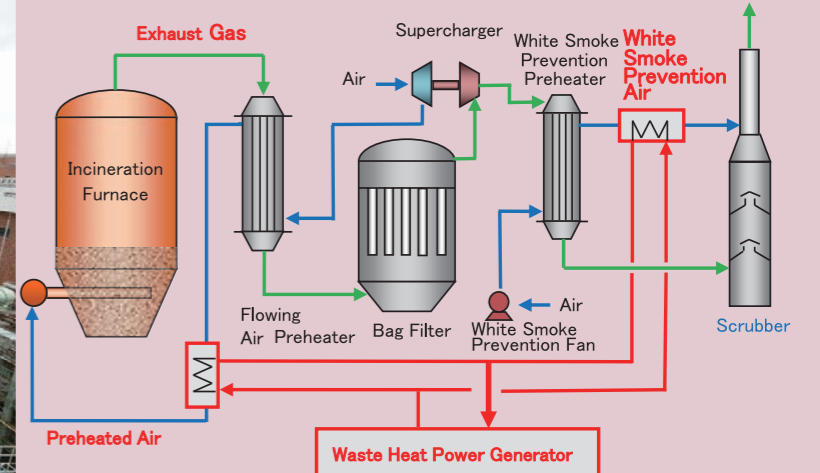
▲ Single-axis tracking type photovoltaic cell

### Energy Independent Incinerator

Since the incinerator is designed to generate electricity by waste heat from sludge incineration and to provide power for itself, it contributes to the reduction of energy consumption and greenhouse gas emissions.



▲ Energy Independent Incinerator



▲ Power Generation Flow Utilizing Waste Heat