

Legal System of Decentralized Domestic Wastewater Treatment Management in Japan including the Johkasou Act

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Overall concept of water environment improvement and related legal framework

Target

Establishment of Environmental Quality Standards of Pollution [Basic Environment Law]

Industrial Wastewater Measures

- Establishment of Wastewater Standards
 [Water Pollution Prevention Act]
 Nationwide uniform standards
- Stricter regulation on Wastewater Standards
- Regulations on business operators

[Water Pollution Prevention Act]

Notification, measuring and recording of wastewater, on-site inspection

- → Penalties, improvement orders and other administrative guidances
- Investments, human resource developments, etc.
 for pollution prevention

Domestic Wastewater Measures

- Sewerage System Establishment [Sewerage Law]
- Installation of Johkasou [Johkasou Act] etc.

National Government

- Vision
- Law & Regulations
- Technical Standards
- National Subsidies

Sharing Responsibility

Local Government

- Treatment Master plan and its implementation
- Ordinance
- Construction, Operation and Management of sewerage facilities
- Advice and guidance on Johkasou operation and maintenance

Johkasou Act

Purpose

- Strengthen regulations of manufacturing, installation, operation, maintenance and desludging of Johkasou.
- Provides qualifications for Johkasou installation workers and operators
- Provides registration systems for Johkasou installation vendors and maintenance vendors
- Provide licensing systems for desludging vendors



Promotion of domestic wastewater treatment by Johkasou for conservation of water quality in public water area, preservation of the living environment and improvement of public health

■ Definition

- Johkasou is the decentralized wastewater treatment facility that can treat both black water and grey water from household, building and so on and discharge effluent comply with effluent standards.
- Johkasou should be installed when installing a flush toilet under the Building Standard Law, unless the wastewater is discharged to sewerage systems.

■ Related Laws



Enforcement Ordinance



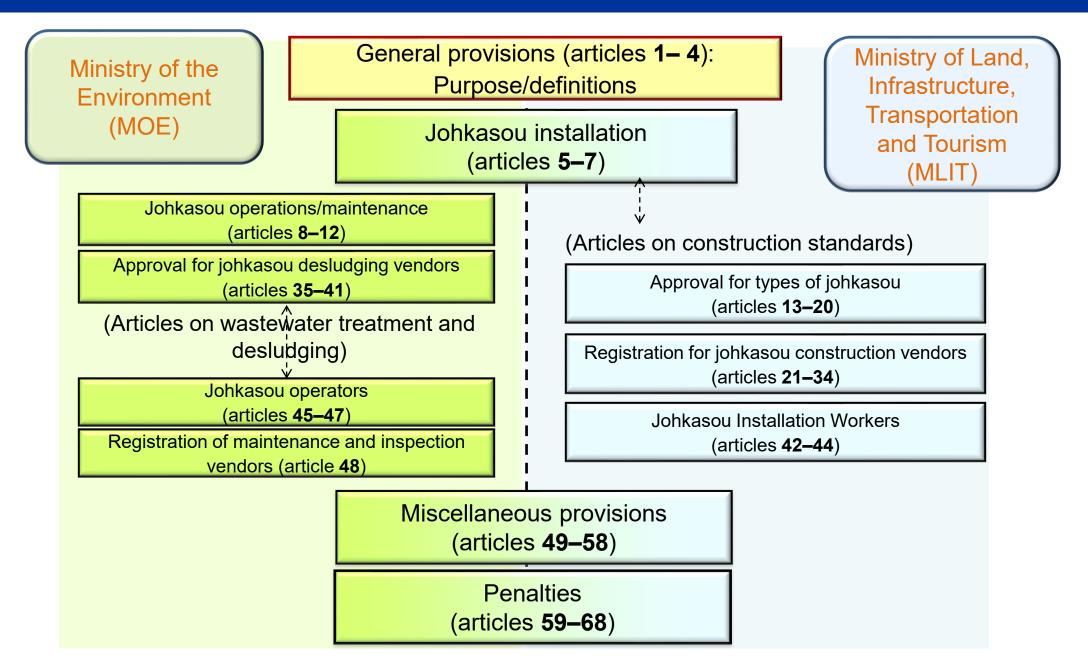
Enforcement Regulations

Enacted in 1983

Define the scale of Johkasou which need Johkasou Operators etc.

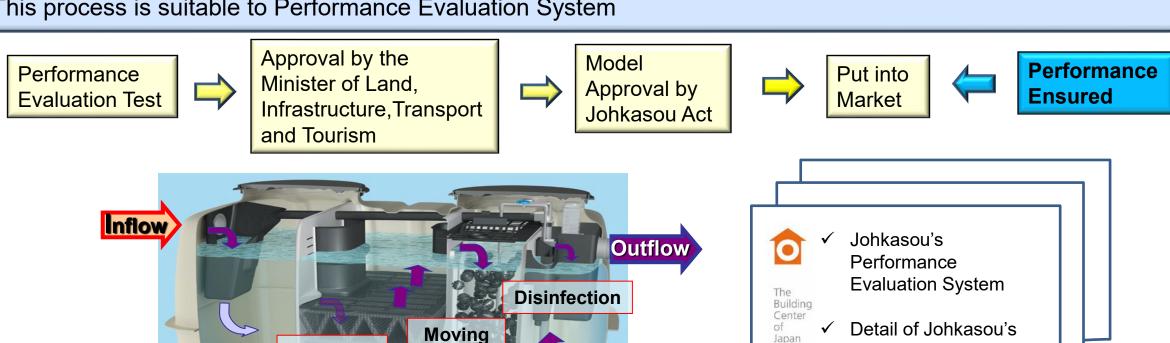
Define the period of inspection, desludging or the technical standard of desludging etc.

Outline of Articles and its jurisdiction in Johkasou Act



Approval process for types of Johkasou (Johkasou Act, Article 13)

- Parties intending to manufacture Johkasou in production plants shall obtain approval from the Ministry of Land, Infrastructure, Transport and Tourism (MLIT) for the type of Johkasou to be manufactured (does apply to test manufacturing)
- This process is suitable to Performance Evaluation System



Sedimentation tank

Sample of Performance Evaluation Type Johkasou

bed tank

Anaerobic

filter tank

Sedimentation

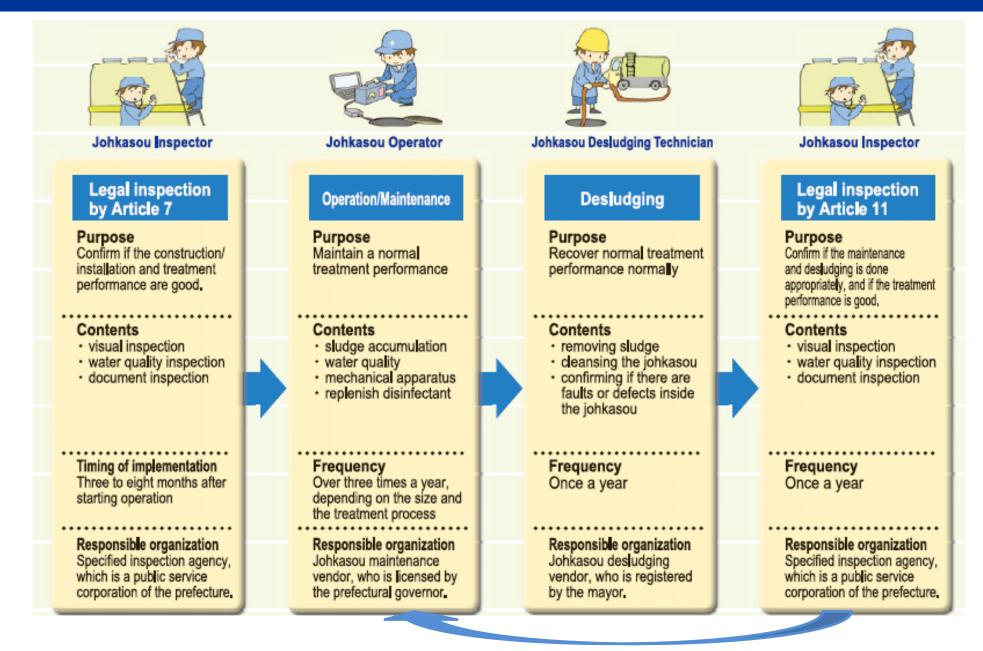
tank

https://www.bcj.or.jp/upload/rating/bizunit/hyoutei/joushi hyoukahouhou.pdf

Performance

Evaluation System

Inspection and Maintenance of Johkasou

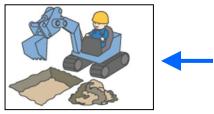


Registration process and qualifications system

Prefecture

Registration

Instructions, advice, recommendations, etc.



Johkasou construction company

National qualifications

[Certified Johkasou Installation Worker]

Person certified to supervise Johkasou construction



Municipality

Approval

Instructions, advice, recommendations, etc.



Johkasou desludging company

Prefecture or other

Registration

Instructions, advice, recommendations, etc.



Johkasou maintenance inspection company

[Certified Johkasou Operator]

Person certified to supervise Johkasou maintenance inspections



Training courses for Johkasou technicians

- Johkasou technicians should acquire extensive knowledge on not only wastewater treatment/johkasou, but also water environment conservation and public health.
- Curriculums for johkasou operator and johkasou installation worker are as shown below.

| Johkasou Operator by Article 45 | Johkasou Installation Worker by Article 42 |
|---|---|
| Laws and regulations related with johkasou 4 H Structure and function of johkasou 22 H Introduction to installation of johkasou 4 H | Fundamental of johkasou Laws and regulations related with johkasou Structure and function of johkasou Management of johkasou installation Introduction to O&M and desludging of johkasou 3 H |
| Total 80 Hours (13 Days) +Test | Total 37 Hours (5 Days) +Test 2 Hours |

2 Hours

