

Eco Mark Product Category No. 151

“Johkasou (domestic wastewater treatment tank)

Version1.0”

Certification Criteria

- Applicable Scope-

Johkasou (Applicable to a combined treatment Johkasou capable of covering up to 10 persons)

Established: December 1, 2012

Japan Environment Association

Expiration date: November.30, 2024

Eco Mark Office

NOTE: This document is a translation of the criteria written in Japanese. In the event of dispute, the original document should be taken as authoritative.

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Japan Environment Association
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1. Purpose of Establishing Criteria

Omitted.

2. Applicable Scope

Johkasou (Applicable to a combined treatment Johkasou capable of covering up to 10 persons)

3. Terminology

Omitted.

4. Certification Criteria and Certification Procedure

Criteria items (1) to (8) shall be complied. To show conformance to the individual criteria item, the respective Attached Certificates shall be checked/filled in the corresponding boxes, stamped with the applicant company seal and submitted with other required documents.

4-1. Environmental Criteria and Certification Procedure

(1) A septic tank shall be of an advanced treatment type that has the BOD removal efficiency of 90% or more and a performance evaluation value of effluent quality of BOD 20 mg/L or less, and total nitrogen concentration (T-N) of 20 mg/L or less or total phosphorus concentration (T-P) of 1 mg/L or less.

[Certification Procedure]

An applicant shall enter necessary items in the Attached Certificate and submit a material (a copy of any of a performance evaluation document, minister authorization document, or model conformity certification document) demonstrating that the treatment capabilities described above have been satisfied.

(2) The electric power consumption of the Johkasou shall satisfy the energy saving standard in Table 1. However, this item shall not apply to a phosphorus removal type (T-P 1 mg/L or less) or membrane separation type (BOD 5 mg/L or less).

Table 1 Energy Saving Standard

Number of Persons to be Covered	Power Consumption (Rated Output)*
Five-person tank	52W or less
Seven-person tank	74W or less
Ten-person tank	101W or less

*If power consumption differs depending on whether the frequency is 50Hz or 60Hz, the Johkasou shall meet standard values for both cases.

[Certification Procedure]

The applicant shall enter necessary items in the Attached Certificate and submit a material (specifications, registration of the Zenjokyo (National Johkasou Promotion Municipality Council), etc.) that shows power consumption of a device (blower, etc.) using electric power. In addition, if the applicant uses more than one blower for a Johkasou of model 1, the applicant shall submit a material that shows a guaranteed value of power consumption, a control method thereof (specification of power consumption of the blower, etc.), and power consumption of each blower that is in use at the time of application

(3) The Johkasou shall meet one or more of the following a. to e.:

a. The treatment capability of effluent quality shall be higher than that described in 4-1.

(1).

The Johkasou shall be of advanced treatment type whose performance evaluation value of effluent quality is BOD 10 mg/L or less, and whose T-N is 10 mg/L or less or whose T-P is 1 mg/L or less.

b. The power consumption of the Johkasou shall be reduced by 10% or more from the energy saving standard of Table 1 in 4-1. (2). If the power consumption is reduced by controlling operating hours of the blower (such as by intermittent operation, etc.), it may be acceptable if a converted value of the rated output (in the case of a 24-hour cycle: Rated output x operating hours of 24 hours/24 hours) corresponding to unit time meets the standard.

c. Size of a Johkasou body shall be downsized and meet a standard value of the total capacity in Table 2.

In addition, matters that are desirably to be considered in downsizing are defined in

Section 5(3).

Table 2 Standard of Size of Johkasou Body

Number of Persons to be Covered	Total Capacity
Five-person tank	2.2 m ³ or less
Seven-person tank	3.1 m ³ or less
Ten-person tank	4.5 m ³ or less

- d. The Johkasou shall be a tank that can be used with a disposer.
- e. It shall be a Johkasou mainly made from plastics. The percentage of weight of recycled plastics in the total weight of plastics contained in components of an entire product shall be 25% or more in case of post-consumer material and 50% or more in case of pre-consumer material. If post-consumer material and pre-consumer material are mixed in recycled plastics, the following expression shall be used.

$$\frac{\text{Weight of pre-consumer material}}{\text{Total weight of plastics}} (\%) \times \frac{1}{2} + \frac{\text{Weight of post-consumer material}}{\text{Total weight of plastics}} (\%) \geq 25$$

[Certification Procedure]

The applicant shall enter the choice in the Attached Certificate and submit the following materials:

For a., certification in Section 4-1. (1) also serves the purpose.

For b., certification in Section 4-1. (2) also serves the purpose. However, if the control of operating hours of the blower is also involved, the applicant shall have obtained the minister authorization with a predetermined control method. In addition, the applicant shall also submit a material that shows a basis of calculation of power consumption.

For c., the applicant shall submit a material (specifications) that shows size of the product.

For d., the applicant shall submit a material that shows that the treatment capabilities in (1) above are satisfied by water discharge to which water discharged by a disposer is added.

For e., the applicant shall submit a certificate of weight ratio of weight of plastics and that of recycled plastics in components of the entire product, and a material supply certificate issued by a material supplier.

- (4) The applicant shall have confirmed that the content rate of lead/mercury/cadmium

and compounds thereof, hexavalent chromium compound, polybrominated biphenyl (PBB), and polybrominated diphenyl ether (PBDE) in the main body of the Johkasou (shell, partition plate, filtering medium, blower) has conformed to Table 3. In addition, no fire retardant of short-chain chlorinated paraffin (the number of chained Cs is 10 to 13 and the concentration of contained chloride is 50% or more) has been added as a formula component.

Table 3 Content rate

material	Content rate[wt%]
Lead and its compounds	≤ 0.1
Mercury and its compounds	≤ 0.1
Cadmium and its compounds	≤ 0.01
Hexavalent chromium compounds	≤ 0.1
Polybrominated biphenyl (PBB)	≤ 0.1
Polybrominated diphenyl ether (PBDE)	≤ 0.1

* The content rate refers to the content proportion in a homogeneous substance (minimum unit that can be separated by rule with totally uniform composition).

[Certification Procedure]

The applicant shall enter necessary items in the Attached Certificate, and submit a material that describes an examination method (examination sheet, test result, etc.) to indicate a content rate of corresponding substances in the Johkasou body or to demonstrate that no such a substance is contained, and a material describing the management system.

(5) A Johkasou shall be designed in consideration of serviceability such as maintenance, cleaning, etc. of the Johkasou.

In addition, systems for replacement/replenishment of consumable parts, supply of repair parts, quality assurance, and repair contract have been prepared, and information for this purpose has been provided. A supply period of consumable/repair parts and a period of quality assurance shall be as follows:

- For the main body under normal installation/use conditions, a guarantee period shall be 3 years or more for the shell/partition plate and 1 year or more for the drive unit.
- For any part that cannot be serviced by a replacement or general-purpose product, supply of parts shall be ensured approximately for 7 years even when production thereof is terminated.

[Certification Procedure]

The applicant shall enter necessary items in the Attached Certificate.

For serviceability, the applicant shall provide an explanation, and submit a material

showing that the Johkasou has been registered with the Zenjokyo (National Johkasou Promotion Municipality Council), or it has been checked by a performance evaluation test, etc.

For the systems for supply of consumable/repair parts, quality assurance, and repair contract, the applicant shall submit a copy of corresponding material that provides information, etc.

(6) The applicant shall communicate points of concern appropriately to a constructor, maintenance provider, cleaner, and users (Johkasou manager) of the Johkasou. In addition, an instruction manual to be distributed to the users shall describe (1) precautions for use (matters that users should keep in mind to ensure safety and maintain the water quality) and (2) need for maintenance management (maintenance, cleaning, legal inspection).

[Certification Procedure]

The applicant shall enter necessary items in the Attached Certificate, and describe a method for communicating information (implementation of a workshop on maintenance management, establishment of consultation service, publication of the instruction manual on a Web site, information on how to obtain, etc.). In addition, the applicant shall submit construction instructions, maintenance management instructions, and instruction manual.

(7) In manufacturing the applied product, related environmental laws and regulations and pollution control agreement (hereinafter referred to as the “Environmental Laws, etc.”) must be followed with respect to air pollution, water contamination, noise, offensive odor, and emission of hazardous materials in the area where the plant performing the final manufacturing process (assembling process) is located.

In addition, the state of compliance with the Environmental Laws, etc. for the last five years from the date of application (whether there is any violation) must be reported. If there is any violation, it is necessary that proper remedies and preventive measures have been already taken, and the related Environmental Laws, etc. must thereafter be followed appropriately.

[Certification Procedure]

With respect to the compliance with the Environmental Laws, etc. in the area where the plant performing the final manufacturing process (assembling process) is located, a certificate issued by the representative of the business of manufacturing the applied product or the manager of the relevant plant (entry or attachment of the list of names of the Environmental Laws, etc.) must be submitted.

In addition, it is necessary to report whether there is any violation during the last five

years, including a violation subject to administrative punishment or administrative guidance, and if there is, the following documents in a and b must be submitted:

- a. With respect to the fact of violation, guidance documents from administrative agencies (including order of correction and warning) and copies of written answers (including those reporting causes and results of correction) to such documents (making a series of progress clear);
- b. Following materials (copies of recording documents, and so on) concerning the management system for compliance with the Environmental Laws, etc. in 1)-5):
 - 1) List of the Environmental Laws, etc. related to the area where the plant is located;
 - 2) Implementation system (organizational chart with entry of roles, etc.);
 - 3) Document stipulating retention of recording documents;
 - 4) Recurrence prevention measures (future preventive measures);
 - 5) State of implementation based on recurrence prevention measures (result of checking of the state of compliance, including the result of onsite inspection).

4-2. Quality Criteria and Certification Procedure

(8) The Johkasou shall have received a model certification of the Minister of Land, Infrastructure, Transportation and Tourism. The durability (strength, rigidity, water tightness, chemical resistance) of the Johkasou body shall have undergone the strength verification by the JIS standard, “Johkasou/Part Standard <Revised Version> (Johkasou System Association)”, or FRP rating, etc. In addition, the applicant shall have clarified how it copes with the Product Liability Act (PL Act) (taking out a PL insurance, compliance with “PL Guideline for Model Johkasou (Revised Version 2) (Johkasou System Association)”, etc.).

[Certification Procedure]

The applicant shall enter necessary items in the Attached Certificate and submit a copy of the certificate. In addition, the applicant shall describe how it copes with the PL Act (a certification seal by Johkasou System Association, etc.).

5. Considerations

In the process of manufacturing products, it is desirable to consider the following items, although they are not requirements for certification. Compliance with each item shall be indicated in the Attached Certificate

- (1) In addition to conformity to the choices described in 4.1. (3), the Johkasou shall be designed to give consideration to further low carbonization approaches (use of sludge as

a resource, reduction of sludge volume, reduction of CH₄ and N₂O emissions in water treatment processes, etc.).

[Certification Procedure]

The applicant shall enter necessary items in the Attached Certificate and describe approaches to low carbonization of the applied product, efforts in design thereof, etc.

(2) Consideration shall be given to reuse or recycling of the Johkasou after use.

[Certification Procedure]

The applicant shall enter necessary items in the Attached Certificate and describe content considering recyclability (material indication, separability of dissimilar materials, etc.).

(3) In downsizing as described in Section 4-1.(3), a recommended value for an installation area of the main body listed in Table 3, which gives consideration to an installation area of an independent treatment Johkasou, shall be satisfied, so that change of an existing independent treatment Johkasou to a combined treatment Johkasou can be facilitated.

Table 3 Recommended Value of Installation Area of Main Body of Johkasou

Number of Persons to be Covered	Total Capacity
Five-person tank	1.9 m ³ or less
Seven-person tank	2.6 m ³ or less
Ten-person tank	3.9 m ³ or less

[Certification Procedure]

The applicant shall enter necessary items in the Attached Certificate and submit a material that shows size of a product (total length and total width).

6. Application unit, indication, etc.

Omitted.

December 1, 2012

Established (Version1.0)

March 29, 2018

Extension of expiration

November 30, 2024

Expiration date

The Certification Criteria for the Product Category will be revised when necessary.