

Jerrycan_-_tank

Application level		Management level	
Household	XX	Household	XX
Neighbourhood		Shared	XX
City		Public	X



Applicable to systems:	Languages / langues / idiomas		
4, 8			

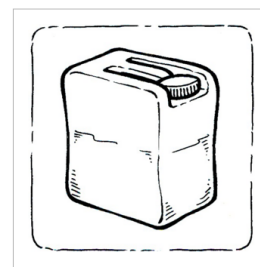
Inputs: Urine , Stored Urine

Outputs: Stored Urine , Urine

Jerrycans are light, plastic containers that can be easily carried by one person and are readily available. When sealed, they can be used to store or transport urine easily and without spills. In case separated urine cannot be used near the point of production, it can be transported in a Jerrycan or tank to a central collection/storage facility or to agricultural land for application.

On average, a person generates 1.5L of urine a day although this quantity may vary significantly depending on the climate and fluid consumption. A family of 5 can be expected to fill a 20L Jerrycan with urine in approximately two days. The urine can then be either stored on site or transported immediately.

For compounds or communities that all have urine diverting systems, it may be more appropriate to have a larger, semi-centralized storage tank that can be transported by other means. Where urine-diversion systems are common, a micro-enterprise may specialize in the collection and transport of Jerrycans using a bicycle, wagon or donkey and cart.



Advantages	Disadvantages/limitations
<ul style="list-style-type: none"> - Very low capital and operating costs. - Potential for local job creation and income generation. - Easy to clean and reusable. - Low risk of pathogen transmission. 	<ul style="list-style-type: none"> - Heavy to carry. - Spills may happen.

Adequacy

A well-sealed Jerrycan is an effective way of transporting urine short distances. It is inexpensive, easy to clean and re-useable. This type of transport is only appropriate for areas where the points of generation and use (i.e. home and field) are close together, otherwise a more formalized collection and distribution system is necessary.

Jerrycans can be used in cold environments (where urine freezes) as long as they are not completely filled. Stored frozen urine can be then used in warmer months when it is needed for agriculture.

Because of safety concerns and difficulty with transport, no other liquids (blackwater or greywater) should be transported in Jerrycans

Health Aspects/Acceptance

There should not be any health risks to those carrying a Jerrycan as urine is generally sterile and the Jerrycans seal well. While carrying a Jerrycan may not be the most pleasant activity, it is likely more convenient and less costly emptying a pit.

In some locations, urine has an economic value and it may be collected from the household for free. Families who invest the time to transport and use their own urine may be rewarded with increased agricultural production improving the families health and/or increasing their income.

Upgrading

If urine is viewed as a commodity, locally run businesses may collect and transport it for free or for a small fee.

Maintenance

To minimize bacterial growth, sludge accumulation and unpleasant odours, Jerrycans should be washed frequently.

Acknowledgements

The material on this page was adapted from: Tilley, E. et al. (2008). Compendium of Sanitation Systems and Technologies ^[2], published by Sandec ^[3], the Department of Water and Sanitation in Developing Countries of Eawag ^[4], the Swiss Federal Institute of Aquatic Science and Technology, Dübendorf, Switzerland. The publication is available in English, French, and will be made available in Spanish. Available in the IRC Digital Library ^[5]

References and external links

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References

- [1] http://www.eawag.ch/organisation/abteilungen/sandec/publikationen/compendium_e/index_EN
 - [2] http://www.eawag.ch/organisation/abteilungen/sandec/publikationen/publications_sesp/downloads_sesp/compendium_high.pdf
 - [3] http://www.eawag.ch/organisation/abteilungen/sandec/index_EN
 - [4] http://www.eawag.ch/index_EN
 - [5] <http://www.irc.nl/docsearch/title/163208>
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