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Environment and Energy Efficiency

Clean Energy Siphoning for Cleaner Waterways

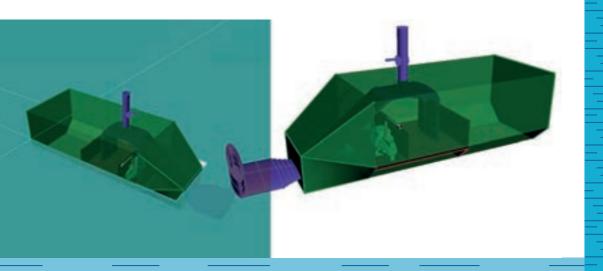
Siphoning may refer to the process by which water is raised over a crest and discharged at a lower level.

A practical siphon works because the gravity pulling on water from the lower column of water creates a reduced pressure at the crest in a siphon, thereby allowing the water in the taller column of liquid to rise above the crest. Once the siphon system is established, it works on practically no input of energy, as long as the water keeps flowing from the gravity. The practical applications of siphoning would typically include regulating irrigation water, flushing toilets, cleaning aquarium dirt, etc.

Inland waterways around the world are often clogged by unwanted waste materials and we-

eds that make them non-navigable. An efficient device that would help clear these unwanted material is a current need to streamline the inland water transportation. This project presents a proposal to use the principle of siphoning to build an 'inland water siphon-cleaner' that would suck up the floating waste material from the surface of the waterways. The proposal also includes how this system can be incorporated to the design of an inland barge that could function in a waterway cleaning initiative.

Furthermore, as the siphoning process in itself does not involve use of external machinery, this can also be thought of as an efficient and clean energy initiative to keep the waterways clean and navigable •



Waterborne

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