



# The Problem



Household toilet facility known as a "honey bucket." A plastic bag lined bucket collects urine and feces.



Plastic bags of feces from honey buckets are disposed of in a sewage lagoon.

- Over 6,000 rural Alaska homes lack running water and a flush toilet. Many more depend on aging and deteriorating piped and haul systems.
- Lack of in-home water and sewer service in rural Alaska causes severe skin infections and respiratory illnesses.
- To correct this public health problem, agencies have funded conventional, community-wide piped and truck haul systems. Although these systems work, they are expensive to construct and many communities cannot afford their high operational costs.
- Funding to build systems has declined severely while costs have risen sharply. The deficit between available funds and needs is over \$667 million.
- A different approach to delivering these services is needed.

***DEC is committed to improving the health of residents in rural Alaska***

(Revised May 2013)



# The Solution

The Alaska Department of Environmental Conservation announces a new project to spur worldwide research to develop innovative and cost effective water and sewer systems for homes in remote Alaska villages.

The project focuses on decentralized water and wastewater treatment, recycling and water minimization. These approaches have a high

potential for use in individual homes and housing clusters.

Our goal is to significantly reduce the capital and operating costs of in-home running water and sewer in rural Alaska homes.



## The Project Plan

1. Form joint venture teams of engineers, innovators, sociologists, and people with rural Alaska experience.
2. Fund selected teams to research and develop new and sustainable in-home water and sewer systems.
3. Test systems in lab and field.
4. Select successful systems that will be affordable to build, operate and maintain.

***For more information visit the project website at: [WaterSewerChallenge.alaska.gov](http://WaterSewerChallenge.alaska.gov)***

or email the Project Coordinator at:  
[dec.water.ak.ws.challenge@alaska.gov](mailto:dec.water.ak.ws.challenge@alaska.gov)