

# Honeybucket Hoppers



In some communities that use honeybuckets, a collection system is used where individual households dump their honeybucket waste into "honeybucket hoppers" that are distributed around the village. These hoppers are also sometimes called bins, bunkers, or boxes. They normally hold about 70 gallons of waste. The sanitation operator usually hooks the hopper up to a four-wheeler or a snowmachine and hauls the hopper out to the lagoon to dump out the waste. Using this type of system is one way a community can reduce human contact with honeybucket waste and prevent disposal of human waste at the solid waste site. There can be some issues with using honeybucket hoppers however. If a secure lid is not available for the hopper, spillage of honeybucket waste can occur when transporting full hoppers to the lagoon if roads/boardwalks are bumpy. Freezing temperatures can also cause problems if the waste freezes and then causes the hoppers to crack. This document talks about where and how to purchase honeybucket related equipment.



## Types of Equipment Needed to Operate a Honeybucket Hopper Collection System

The actual honeybucket hopper is composed of three parts: the container, the frame, and the lid. The container is usually made out of plastic or polyurethane fiberglass. The frame is generally metal and the container sits inside the frame. The frame is what allows the hopper to be hooked up to a four-wheeler or a snowmachine. The lid fits on the top to prevent kids, animals, and snow from getting in



Most communities haul their hoppers by putting them on a trailer and pulling it behind a four-wheeler in the summer and a snowmachine in the winter. For the trailer to be functional in all seasons you will also need a set of wheels and a set of skis for the trailer. Some companies, such as Bob's Services (listed further in this document), sell an entire hopper setup (container, frame, lid, trailer, lid, wheels, and skis).

## Where to Purchase Honeybucket Hopper Equipment

Companies that sell honeybucket hopper equipment and their 2013 prices are listed below.

**Arctic Insulation & Manufacturing** [www.arcticinsulation.net](http://www.arcticinsulation.net)

1704 Ship Avenue Anchorage, AK 99501

Phone: 907-677-9540

Fax: 907-677-9541

Equipment	Price of each
Trailer for hauling hoppers	\$7,100
Honeybucket hopper container	\$1,925
Hopper cover	\$750
Hopper frame	\$1,250

**Bob's Services** [www.bobsservices.com](http://www.bobsservices.com)  
 2009 Spar Avenue Anchorage, AK 99501  
 Phone: 907-276-3221 Fax: 907-276-1972

Equipment	Price of each
Trailer for hauling hoppers	\$6,886
Honeybucket hopper container	\$2,145
Hopper cover	\$791
Hopper frame	\$362
Set of wheels for summer use	\$385
Set of skis for winter use	\$443

**The Alaska Utility Supply Center (AUSC)** with ANTHC can sometimes use their buying power to get better rates. Pitka's Point, for example, routed their order through AUSC and purchased hoppers from Arctic Insulation. You can contact John Sims at AUSC at 907-729-3600 extension 3525 or [jfsims@anthc.org](mailto:jfsims@anthc.org).

Note if you only need containers and your frames are still functional, then new hopper containers can be manufactured to fit your current frames.

If you are looking for engineering drawings of hoppers, go to this link [www.zendergroup.org/docs/hb\\_drawings.pdf](http://www.zendergroup.org/docs/hb_drawings.pdf) for drawings of honeybucket hoppers that were made for Kivalina.

### Replacement Liners for Cracked Hoppers

If you have cracked hoppers, one option is to purchase liners for the hoppers to prevent leaking. The liners are made of thick plastic and they line the whole inside of the hopper (you place them in). Purchasing new containers to replace cracked ones is generally a better long-term solution but liners are less expensive and they can be a good short term solution while you are waiting on upgrading your equipment.



You can purchase liners from the following company:  
**NOMAR Alaska** [www.nomaralaska.com](http://www.nomaralaska.com)  
 104 E. Pioneer Ave Homer, AK 99603

Contact: Kate Mitchell

Phone: 907-235-8363 Toll free: 1-800-478-8364 Email: [nomarkate@yahoo.com](mailto:nomarkate@yahoo.com)

NOMAR Alaska is located in Homer and they can make custom-fit hopper liners out of an industrial fabric that is welded and waterproof. Akiachak purchased 10 liners through NOMAR in 2012 and the liners have been working very well. The sewer operators have not complained about any leaks. Akiachak provided NOMAR with the hopper measurements and they received the liners about a week after ordering them. One liner costs \$175 without shipping. The total cost to ship 10 liners from Homer to Akiachak was \$1800. The liners fold up so that they can ship easily. Akiachak used IGAP funds to purchase these liners. They called their EPA project officer to get approval for spending IGAP funds on the liners. If you have additional questions, please contact Greg Charlie in Akiachak at [usaqaa5547@yahoo.com](mailto:usaqaa5547@yahoo.com) or 907-825-4700.



### **Possible Funding Sources for Purchasing Honeybucket Equipment**

#### **IGAP**

IGAP funds can be used in some cases if you have enough money in your budget. Talk to your EPA project officer to see if you can get approval to use IGAP funds. Akiachak was able to fund the purchase of honeybucket hopper liners with IGAP funds. IGAP Special Projects (or Unmet Needs Grant) might also be eligible for purchasing hoppers. Again, check with your EPA project officer to determine this.

#### **USDA**

USDA Rural Development WWG can be used to fund honeybucket equipment. A 25% match is needed but federal funds can be used for the match. Zender Environmental can help you apply for these grants free of charge through our technical assistance program. Information on water and waste grants is available here: [http://www.rurdev.usda.gov/UWEP\\_HomePage.html](http://www.rurdev.usda.gov/UWEP_HomePage.html). You can contact Misty Hull at USDA directly at 907-761-7734 or [misty.hull@ak.usda.gov](mailto:misty.hull@ak.usda.gov) if you have questions about the application process. Or you can contact Zender Environmental at 907-277-2111 or [lzender@zendergroup.org](mailto:lzender@zendergroup.org). More information about the USDA WWG grants can be found at <http://www.zendergroup.org/docs/usda.pdf>

#### **Community Environmental Development Project Grants (CEDP)**

ANTHC and Zender Environmental are awarding money for demonstration projects, not to exceed \$30,000, through the EPA Multimedia/Fred Hanson Fund Grants. Projects need to demonstrate an innovative approach for improving human health and the environment of Tribal communities in rural Alaska. The purpose of the project is to be a model for other communities facing similar issues. More information can be found on our website: <http://www.zendergroup.org/cedp.html>. You can also contact Desirae Roehl at 907-729-3496 or Jacqueline Shirley at 907-952-9973 if you have questions. CEDP grant money was used by

Newtok to fund their honeybucket vacuum system. You can find out more about that project here: [www.anthc.org/chs/ces/hve/upload/Newtok-Honey-bucket-Sanitation-Project-2011-Final.PDF](http://www.anthc.org/chs/ces/hve/upload/Newtok-Honey-bucket-Sanitation-Project-2011-Final.PDF)

### **Capital Improvement Projects (CIP)**

Trying to get hoppers funded through CIP will be difficult if you have identified something other than honeybucket hoppers as your long-term sanitation goal. For example, if a flush tank and haul system is identified as your long-term goal with community support in a master plan, then it will be hard to convince funders that honeybucket hoppers would not be discarded within a few years once the flush tank and haul system is up and running. In this case, you may have to explore options like purchasing replacement liners instead. However, if honeybuckets are identified as your community's long-term sanitation system, then CIP may be a good route for funding. Check at this website to see if your project is on the CIP list and to get an application: <http://dec.alaska.gov/water/vsw/>. If your project isn't on the list then contact the sanitation engineer for your community. You can look up your engineer here: [http://dec.alaska.gov/water/vsw/pdfs/Community\\_Assignments.pdf](http://dec.alaska.gov/water/vsw/pdfs/Community_Assignments.pdf)

### **BIA**

Hoppers can be funded with the construction of new homes. For BIA HIP homes that have just been built or will be built soon, contact Rebecca Pollis (907-729-5686 or [rpollis@anthc.org](mailto:rpollis@anthc.org)) or David Beveridge (907-729-3542) at ANTHC. Housing funds may be available through Indian Health Services, but the funds are first come first served. Funding is distributed on a priority basis and HIP homes have first priority.

BIA also has discretionary funding at the end of the year sometimes. Usually all you need is a one page description of the equipment you want and how much it costs. For environmental program monies, contact Mark Kahklen Environmental Specialist (907) 271-4004

[Mark.Kahklen@bia.gov](mailto:Mark.Kahklen@bia.gov) For an application, go to [www.zendergroup.org/docs/bia.pdf](http://www.zendergroup.org/docs/bia.pdf)

### **AVCP**

AVCP also receives funds for water and sewer service. For new AVCP homes you need to contact AVCP and request new hoppers for every few homes that are built. If the additional housing will significantly increase your wastewater load then you should also request any equipment you will need, such as trailers, ATVs, or snowmachines. You can contact AVCP housing at 907-543-3121 and ask for Joey Billy.

### **Direct Grants**

Direct grants can be funded through your state legislator. Contact your legislator to see if this is a possibility. You can find your representative's contact information at the following link: [http://www.elections.alaska.gov/vi\\_eo\\_state\\_dist.php](http://www.elections.alaska.gov/vi_eo_state_dist.php). You can submit a short request with the basic details. It is not necessary to put together a big proposal. The application is online at the following link: <http://www.legfin.state.ak.us/CAPGIS/CAPGIS.php>. Contact your house or senate representative if you have never used the system before. They will walk you through how to get a login and password. If you want to talk to someone about the process of getting a direct grant,

you can contact Roderick Atti in Toksook Bay at [pat\\_ag@yahoo.com](mailto:pat_ag@yahoo.com) since they have been through it before.

### **Indian Community Development Block Grants (ICDBG)**

The ICDBG can be used to replace hoppers and equipment. You can get money for water and sewer facilities. Tribes and Alaska Native villages must have an established relationship to the federal government as defined in the program regulations. The following link has more information and a training manual for writing the grants:

[http://portal.hud.gov/hudportal/HUD?src=/program\\_offices/public\\_indian\\_housing/ih/grants/icdbg](http://portal.hud.gov/hudportal/HUD?src=/program_offices/public_indian_housing/ih/grants/icdbg)

The regular Community Development Block Grants (CDBG) could also be a source of funding.

[http://portal.hud.gov/hudportal/HUD?src=/program\\_offices/comm\\_planning/communitydevelopment/programs](http://portal.hud.gov/hudportal/HUD?src=/program_offices/comm_planning/communitydevelopment/programs)

### **Further funding possibilities**

See Zender Environmental's funding webpage for more grant ideas and funding sources

<http://www.zendergroup.org/funding.html>

### **Other Assistance for Honeybucket Funding or Issues**

#### **Local Health Corporations**

Contact your local health corporation to see if they have any available resources. While you are waiting for hoppers or liners to arrive, your local health corporation can help you with community outreach on the best way to protect public health. You can find contact information at the following link: <http://www.anhb.org/index.cfm?section=links>

#### **Rural Maintenance Workers (RMWs)**

Contact your RMW to ask if there are any honeybucket hoppers in a nearby community. Some communities are willing to donate or sell their hoppers once they are hooked up to a piped system. You can also ask your RWM for general guidance or assistance with honeybucket issues. The contact information for your RMW is here:

<http://dec.alaska.gov/water/rmw/pdfs/RMWDirectory.pdf>

#### **ANTHC/VSW Engineers**

Contact your ANTHC or VSW engineer and ask if there are any projects with funding for general, community sewer equipment. Sometimes there is leftover money that is available for use. You can also ask for assistance or advice about honeybucket and general water/sewer issues. You can find contact information here:

[http://dec.alaska.gov/water/vsw/pdfs/Community\\_Assignments.pdf](http://dec.alaska.gov/water/vsw/pdfs/Community_Assignments.pdf)

#### **SWAN Village-to-Village Message Board**

This online tool can be used to post messages to other Villages about environmental topics. It can be used as a resource to ask other Villages if there are any used hoppers for sale, or to sell used hoppers yourself. Go to this link to use the message board

<http://members.boardhost.com/SWAN/>

## Free Technical Assistance

Contact Zender Environmental for honeybucket questions, grantwriting help, or other honeybucket assistance at 907-277-2111 or [lzender@zendergroup.org](mailto:lzender@zendergroup.org)

## Alternatives to Using and Transporting Honeybucket Hoppers

### Newtok

A few communities are trying alternatives to using honeybucket hoppers. One example is the Native Village of Newtok. Newtok collects honeybucket waste by using a flush haul tank and vacuum which is hooked up to a trailer on a four-wheeler. The vacuum is attached to a honeybucket lid so it is sealed and it vacuums the waste into the tank. This way the honeybuckets do not need to be carried anywhere, and it eliminates the potential spillage onto boardwalks in the community and other pathways to the lagoon.

They also developed an ordinance to prohibit the improper disposal of honeybucket waste and they have discussed setting a collection service fee to help sustain the service. Newtok's goal is to improve public health by eliminating and reducing the need for their residents, especially children, from having to haul honeybuckets and to reduce human contact to human waste.

For more information about this system, contact Phillip Carl at [newtokigap@yahoo.com](mailto:newtokigap@yahoo.com) 907 237 2314 or Cowater Alaska, Inc. at <http://cowateralaska.com>

To see more photos and information about their project see the following webpages:

[www.anthc.org/chs/ces/hve/upload/Newtok-Honey-bucket-Sanitation-Project-2011-Final.PDF](http://www.anthc.org/chs/ces/hve/upload/Newtok-Honey-bucket-Sanitation-Project-2011-Final.PDF)

[www.anthc.org/chs/ces/hve/upload/Newtok-Honey-bucket-presentation.ppt](http://www.anthc.org/chs/ces/hve/upload/Newtok-Honey-bucket-presentation.ppt)



### Akiachak

In 2012/2013 Akiachak was awarded a Community Environmental Demonstration Project Grant to test a vacuum haul system which will be used to collect honeybucket wastes from shared community honeybucket hoppers around the village. They will be using a Cowater 160 gallon sewage vacuum system to transfer the wastes from the hoppers in an air tight container. As part of the project they will be developing an operation guide for the system as well as a detailed summary of the project which will be available to the public.

For more information about this system, contact Greg Charlie at 907 825 4700

[gregcharlie@yahoo.com](mailto:gregcharlie@yahoo.com)