



*The tank sat on this landing craft waiting for the ice cover to melt enough to move it.*

## Why is My Water Bill So Big?

It's easy to use up a lot of water. Here are some everyday activities and the approximate amount of water each uses:

**Laundry:**  
20 to 45 gal per load

**Shower:**  
20 to 30 gal per shower

**Tub bath:**  
30 to 40 gal per bath

**Dishwasher:**  
15 to 30 gal per load

**Toilet:**  
3.5 to 7 gal per flush

**Drinking water:**  
1 to 2 qt per day per person

**Garbage disposal:**  
5 gal per minute of use

**Car washing:**  
5 gal per minute of use

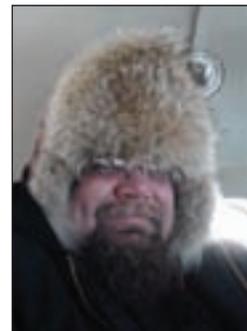
**Lawn watering :**  
7 to 43 gal per 100 ft<sup>2</sup>  
(depends on region of the country)



The tank started its journey in February, when it was shipped to Seattle and transferred to a ship going to Anchorage. After it arrived, the tank was moved to a landing craft (shown in picture above). Once the tank was on the craft, it had to wait until the ice cover melted enough to sail up river to its final destination.

The next hurdle was getting the tank to the town. Jack told us they had to barge the heavy tank at just the right time so the tides would be in their favor. Then, they brought the tank about 35 miles upriver before it was offloaded with a front end loader. After all this, they chained it to the front of the loader and drove it another seven miles to town.

The entrance of the building where they were installing the tank was too small for heavy equipment to get the tank inside. Instead, Jack and the local operator used three pieces of 2" pipe to "roll" the tank in.



*Jack Willis*

Jack says that he and Willard Lind, the local operator, were the only ones that worked on this project. It took them six days and four cases of parts to finish the job!

The people in the community were extremely happy when they were done because they now have decent and continuous water pressure to their homes.

***People like Jack and Willard really make a difference to rural communities. Thanks for your hard work!***

## You Need that Tank Where?

When products leave our warehouse, we like to hear from our customers how everything worked out. Sometimes we get some interesting stories about what happens beyond BlueBook.

One such adventure comes from Jack Willis, a Utility Operations Specialist for the Alaska Native Tribal Health Consortium. He purchased a large pressure tank to be installed in the small town of Chignik Lake, which is located in a remote area on the south side of the Alaska peninsula.

*They used three pieces of pipe to roll the tank into the building.*



*Willard helping install the tank in its final home!*



## Tech Talk

### Choosing the Best Blower for your System

Blowers provide the right airflow to meet your system's process requirements. They're available as either positive displacement or centrifugal systems.

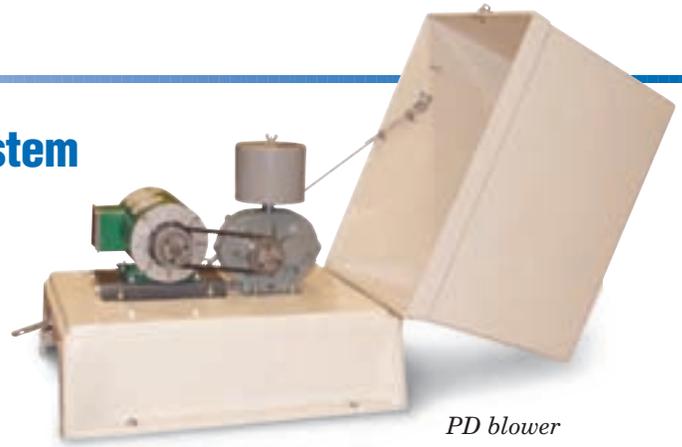
**Positive displacement (PD) blower systems** are typically used in plants requiring larger air volumes and greater pressures. Output airflow from a PD blower remains relatively constant with varying discharge pressure.

However, you can change

the amount of air these blowers produce by simply putting on new sheaves.

PD systems come prepackaged and assembled at the factory. For greater safety, optional pressure, temperature and motor cutout switches are available. If you need to reduce noise, select an optional sound enclosure.

**Centrifugal blower systems** usually run more quietly than PD blowers. Output airflow from a centrifugal blower changes with varying discharge pressure. They are generally equipped with additional controls to regulate the flow as the discharge pressure varies. Optional equipment such as bearing and vibration monitoring devices will protect your investment.



PD blower



Centrifugal blower

#### When choosing your system, you need to know:

- A. The PSI needed for your system** (usually the height of the water above your diffusers). You'll also need to know how many elbows and what type of discharge silencer you will be using.
- B. The power requirements needed:** 120V, 230V or 460V, and phase (1ph or 3ph).
- C. CFM requirements.** There are several ways to determine this. You need to know what kind of diffusers you will use and how many are in your system. You also need to know what you are aerating (the demand).
- D. Type of diffusers you will be using:** fine, medium or coarse bubble. The size and number of bubbles determine the total surface area, which has a direct relationship on oxygen transfer ability.
- E. Noise!** Whether you are placing the blower system in a building or outside, you will have to consider the neighbors and possibly add silencers, enclosures or soundproofing to your system.
- F. Blower control.** Will you run your system only during certain hours or 24 hours a day?

Call our Aeration Tech Support group at **1-800-548-1234** to help you choose the right blower system for your needs and properly size your system.

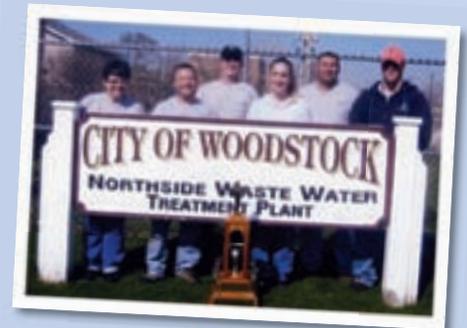


### Great People

#### Illinois Treatment Plant of the Year

Congratulations are in order for the Woodstock Northside Treatment Plant, which was selected as the Illinois Treatment Plant of the Year in 2008.

This award is a high honor, given the number of plants in the state and the high standards used in the judging process. Woodstock has a population of about 20,000 and is located in northern Illinois.



#### Looking good!

Here are the guys from the Michigan Water Environment Association, Local Section 7 "Smooth Operators" team at their Operator's Challenge. They're wearing hard hats they got from

USABlueBook. Good job on finishing second place in the challenge. We give you first place for style!



## Radio Transmission Locating: Little Known Trick

There are many tricks to locating. One particular trick is rarely taught, but is a valuable technique to add to your toolbox of knowledge. It lets you successfully locate deep items (greater than 20 ft), items under reinforced concrete and items in highly congested areas where multiple utilities are in the ground.

To locate in these difficult situations, use a ground extension reel instead of a grounding stake. When using an extension reel, the signal doesn't travel through the soil to complete the circuit. Instead, the signal travels through the pipe you are trying to locate and back to the transmitter via electrical wire.

To make the connection, hook up your positive (red) lead according to manufacturer's recommendations. Instead of connecting the negative (black) lead to a grounding stake, connect it to the ground extension reel lead.



Connect the ground extension lead end to a valve, hydrant, or other connection farther down the pipe you want to locate. Make sure that the wire from the ground extension reel is placed at least 10 feet away from the pipe you are locating so you don't pick up any interference.

This little-known trick is one of many that can increase your accuracy and decrease your non-locates. For more information or instruction, please feel free to contact me, Don Van Veldhuizen at 503-544-0456 or [dvanveldhuizen@usabluebook.com](mailto:dvanveldhuizen@usabluebook.com) or LoAnn Mayer at 847-377-5162.



## Break Time!

### THE ADVENTURES OF CAPT. CRAPPER



### Word Search

- Blowers
- Operator
- Locating
- Signal
- Valve
- System
- Radio
- Plant
- Diffuser
- Tank
- PSI
- Water

A	H	B	D	E	E	G	T	I
J	L	A	L	V	K	N	A	U
L	A	O	L	O	A	K	N	N
B	G	A	C	L	W	K	K	U
L	V	E	P	A	A	E	U	N
O	P	E	R	A	T	O	R	P
I	U	S	J	A	E	I	Z	S
R	M	Y	W	R	R	S	N	I
A	Z	S	P	O	U	M	R	G
D	I	F	F	U	S	E	R	N
I	M	S	Y	S	T	E	M	A
O	Z	Q	P	O	U	M	M	L

# BlueBits

News and Bits from **USABlueBook**

*Look inside for:*

- News from the Field
- Tech Talk
- Ask Don
- Break Time!

## **A \$50 for your thoughts?**

*Or we should say for your stories!*

*Just send your funny or interesting work story (or photo) to [stories@usabluebook.com](mailto:stories@usabluebook.com). If we print it, you'll receive a \$50 gift card from [giftcertificates.com](http://giftcertificates.com) or a \$50 USABlueBook credit.*

## **New Products 120 is coming!**

**64 pages of the latest and greatest products!**

We want to offer you the most current products and technologies available. Our New Products catalog is a supplement to the #120 "Big Book", and contains the very latest in equipment and supplies from names you trust.

Your New Products catalog will be arriving any day now!



## **Upcoming Trade Shows—stop by and say hi!**

**Pack Expo**, Las Vegas, NV, October 5-7

**CWWA 18th Annual Conference**,  
St. Thomas, U.S. Virgin Islands, October 5-9

**H<sub>2</sub>O-Expo/NRWA**  
Louisville, KY, October 6-8

**WVOA**, Green Bay, WI, October 6-9

**NAWT**  
Orlando, FL, October 9-10

**WEFTEC**  
Orlando, FL, October 12-14

**Alaska RWA**, Anchorage, AL, October 26-29

**Maine RWA**, Freeport, ME, December 8-9

