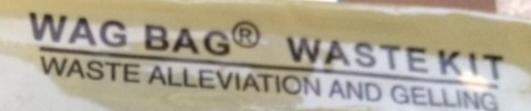
5th Annual Water and Sanitation Workshop:

Arctic Wastewater Treatment and
Disposal: current status and research
needs

GIFT BAGS © (Door Prize)

WAG BAG



The WAG BAG® WASTE KIT includes:

- 1 Degradable waste bag with gelling agent, odor neutralizer
 & decay catalyst
- 1 Degradable zip-close disposal bag
- Toilet paper and hand sanitizer

Instructions without the PETT® toile

- Position waste bag for use.
- · Place used waste bag in zip-close disposal bag.
- · Discard in trash receptacle for disposal.

HONEY BUCKETS

They are reality and will be for awhile

Is There A Better Mouse Trap?



Honey Buckets They are reality and will be for a while Is There A Better Mouse Trap?





What Are The Cost To Eliminate The Honey Bucket Using The WAG BAG?

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HOW OFTEN DOES THE AVERAGE PERSON POOP?



The normal range for daily pooping is from three times a day to once every three days. Therefore, it would be fair to say that the average person poops about once a day.

How Many Times Does That Equal?

Scenarios	Months/Year	Days/Month	Bags/Day	Bags/Year	% Full Year
Year Round	12	31	1	365	100%
3 Months in Camp	9	31	1	275	75%
Fish Camp & School	9	31	0.75	206	56%

Annual WAG BAG Cost By Community

Community	People	Bags/Year	Cost/Year
Alatna	37	13,505	\$ 10,804
Allakaket	105	38,325	\$ 30,660
Arctic Village	152	55,480	\$ 44,384
Atmautluak	277	101,105	\$ 80,884
Birch Creek	33	12,045	\$ 9,636
Chalkyitsik	69	25,185	\$ 20,148
Cheformak	418	152,570	\$ 122,056
Circle	104	37,960	\$ 30,368
Crooked Creek	105	38,325	\$ 30,660
Diomede	115	41,975	\$ 33,580
Eagle	86	31,390	\$ 25,112
Kipnuk	639	233,235	\$ 186,588
Kivalina	374	136,510	\$ 109,208
Kongiganak	439	160,235	\$ 128,188
Koyukuk	96	35,040	\$ 28,032
Lime Village	29	10,585	\$ 8,468
Newtok	354	129,210	\$ 103,368
Oscarville	70	25,550	\$ 20,440
Platinum	61	22,265	\$ 17,812
Shishmaref	563	205,495	\$ 164,396
Stebbins	556	202,940	\$ 162,352
Stevens Village	78	28,470	\$ 22,776
Stony River	54	19,710	\$ 15,768
Takotna	52	18,980	\$ 15,184
Teller	229	83,585	\$ 66,868
Tuluksak	373	136,145	\$ 108,916
Tununak	327	119,355	\$ 95,484
Venetie	166	60,590	\$ 48,472
Wales	145	52,925	\$ 42,340

What About The Cost Of Running A Honey Bucket System

							WAG BAG	WAG Cost	WAG Cost/	Sodas/
Community	People	Bags/Year		Cost/Year	НВ	Cost/Year	User Cost	Person/Month	Home/Month	Home/Month
Alatna	37	13,505	\$	10,804	\$	30,000	(\$19,196)	(\$43.2)	(\$172.94)	(57.65)
Allakaket	105	38,325	\$	30,660	\$	30,000	\$660	\$0.5	\$2.10	0.70
Arctic Village	152	55,480	\$	44,384	\$	30,000	\$14,384	\$7.9	\$31.54	10.51
Atmautluak	277	101,105	\$	80,884	\$	30,000	\$50,884	\$15.3	\$61.23	20.41
Birch Creek	33	12,045	\$	9,636	\$	30,000	(\$20,364)	(\$51.4)	(\$205.70)	(68.57)
Chalkyitsik	69	25,185	\$	20,148	\$	30,000	(\$9,852)	(\$11.9)	(\$47.59)	(15.86)
Cheformak	418	152,570	\$	122,056	\$	30,000	\$92,056	\$18.4	\$73.41	24.47
Circle	104	37,960	\$	30,368	\$	30,000	\$368	\$0.3	\$1.18	0.39
Crooked Creek	105	38,325	\$	30,660	\$	30,000	\$660	\$0.5	\$2.10	0.70
Diomede	115	41,975	\$	33,580	\$	30,000	\$3,580	\$2.6	\$10.38	3.46
Eagle	86	31,390	\$	25,112	\$	30,000	(\$4,888)	(\$4.7)	(\$18.95)	(6.32)
Kipnuk	639	233,235	\$	186,588	\$	30,000	\$156,588	\$20.4	\$81.68	27.23
Kivalina	374	136,510	\$	109,208	\$	30,000	\$79,208	\$17.6	\$70.60	23.53
Kongiganak	439	160,235	\$	128,188	\$	30,000	\$98,188	\$18.6	\$74.55	24.85
Koyukuk	96	35,040	\$	28,032	\$	30,000	(\$1,968)	(\$1.7)	(\$6.83)	(2.28)
Lime Village	29	10,585	\$	8,468	\$	30,000	(\$21,532)	(\$61.9)	(\$247.49)	(82.50)
Newtok	354	129,210	\$	103,368	\$	30,000	\$73,368	\$17.3	\$69.08	23.03
Oscarville	70	25,550	\$	20,440	\$	30,000	(\$9,560)	(\$11.4)	(\$45.52)	(15.17)
Platinum	61	22,265	\$	17,812	\$	30,000	(\$12,188)	(\$16.7)	(\$66.60)	(22.20)
Shishmaref	563	205,495	\$	164,396	\$	30,000	\$134,396	\$19.9	\$79.57	26.52
Stebbins	556	202,940	\$	162,352	\$	30,000	\$132,352	\$19.8	\$79.35	26.45
Stevens Village	78	28,470	\$	22,776	\$	30,000	(\$7,224)	(\$7.7)	(\$30.87)	(10.29)
Stony River	54	19,710	\$	15,768	\$	30,000	(\$14,232)	(\$22.0)	(\$87.85)	(29.28)
Takotna	52	18,980	\$	15,184	\$	30,000	(\$14,816)	(\$23.7)	(\$94.97)	(31.66)
Teller	229	83,585	\$	66,868	\$	30,000	\$36,868	\$13.4	\$53.67	17.89
Tuluksak	373	136,145	\$	108,916	\$	30,000	\$78,916	\$17.6	\$70.52	23.51
Tununak	327	119,355	\$	95,484	\$	30,000	\$65,484	\$16.7	\$66.75	22.25
Venetie	166	60,590	\$	48,472	\$	30,000	\$18,472	\$9.3	\$37.09	12.36
Wales	145	52,925	\$	42,340	\$	30,000	\$12,340	\$7.1	\$28.37	9.46

What Are The Cost To Eliminate The Honey Bucket Using The WAG BAG?

Cost Per Person Per Day 1/4 20 oz. Soda



Cost Per House Per Day



Is That Reasonable To Eliminate The Honey Bucket For The Home Owner?

Economy Of Scale?

2,228,690

TCC - 470,000 YKHC - 1,117,000

Cost of WAG BAGS For An Order Of 2,228,690?



Honey Buckets They are here and will be for a while Is There A Better Mouse Trap?



