Confidential

### Introduction of Excelsior, Inc. and our Technologies and Products

### **EXCELSIOR**

#### Excelsior, Inc.

3-30-2 Wakabayashi, Setagaya Ward, Tokyo

Postal Code: 154-0023

Phone: 03-5431-7341, Fax: 03-5431-7021

URL: <a href="http://excelsior-inc.com/">http://excelsior-inc.com/</a>

Excelsior, Inc. provides odor-free toilets without using electricity or scooping up human waste.

#### **Company Overview**

Company Name	Excelsior, Inc.
Established	April 15,1997
Location	3-30-2, Wakabayashi, Setagaya Ward, Tokyo 154-0023, Japan
Business Domain	Manufacturing

■ Portable Eco-friendly Toilet "Mt. Fuji Toilet"





Products

Temporary Toilet
"Mt. Fuji Toilet"



#### [Problems Facing our Customers, their Needs, and our Solutions: Overview \*Pattern (1)]

#### **Overview**

Problems facing our customers and their needs

#### Our solutions

Scenes where our solutions are used

1

When disaster stops operations of infrastructures (When flush toilets cannot be used)



Remove germs and eliminate bad odor by using tablets of "Mt. Fuji Toilet," special defecation treatment tablets

How to use

Put the tablets in the plastic bag before use of the toilet.



Bind the plastic bag after use of the toilet and dispose of the bag.

2

For rescue parties working in the event of disaster; at the time of outdoor activities and driving



Usable in any place as it includes the poncho for users' privacy.



Set up the paper box with the plastic sheet over the top.
Place the tablets in the bottom. Use the poncho while using the toilet. Please make sure to bind the bag. The tablets will eliminate odor and harden the waste.



3

Also usable as a temporary toilet without using electricity or scooping up human waste



Setting tablets of "Mt. Fuji Toilet" in a temporary toilet box, you can use it as an odor-free temporary toilet with no need of electricity or scooping up human waste.





Once processed, the waste becomes odor-free and recyclable as a material for greening materials used in deserts. It is also possible to be resolved in soil. Therefore, no waste will be newly generated.

#### [Problems Facing our Customers, their Needs, and our Solutions (Products)]

#### Problems Facing our Customers, their Needs, and our Solutions

Problems
Facing our
Customers
and their
Needs

- When flush toilets cannot be used in the event of emergencies
- Where no sewer infrastructures are built
- When you want to go to the toilet suddenly during mountain climbing or driving

Our Solutions

#### Tablets of "Mt. Fuji Toilet"

Our special defecation treatment tablets can be used at a toilet cut from any water supply. Placing the tablets in a temporary toilet, you can use the toilet immediately.





 At the time of earthquake disaster, water and sewage systems become broken, and supply of electricity stops, causing pumps to stop their operation. As a result, we will not be able to use flush toilets. This will also be true at the time of water disasters caused by typhoons and tsunami.



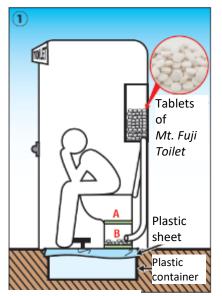


In most developing countries, people use holes they simply dig as toilets in rural villages and tourist destinations. This situation is posing hygienic and environmental problems.

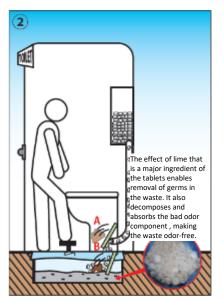


# An Example of How to Use a Temporary Toilet

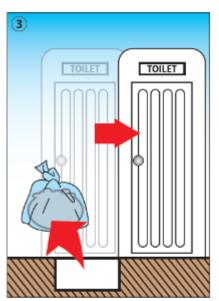
Mt. Fuji Toilet is easy to use: just set up a toilet box, and place tablets inside it. The illustrations below show an example of how to use it as a temporary toilet in an ideal way. Modification can be made depending on conditions of countries or areas.



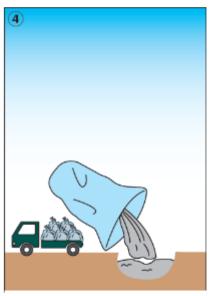
(1) Defecate.



(2) Once you step on the pedal after defecation, valve A opens so that the waste falls onto valve B. At valve B, the waste is mixed with tablets of Mt. Fuji Toilet, then falls due to its own weight into the plastic container placed below. At the same time, new tablets are supplied onto valve B.



(3) Remove the toilet to take out the bag containing the waste.



(4) Dig a hole in a desert area to bury the waste by mixing with soil. This is an eco-friendly way of disposing of human waste, helping afforestation.

Also, this way enables adjustment of biodegradability, allowing human waste to be resolved in soil in a hygienic way.

#### [Track Records]

#### [Records of Delivery]

#### ■ Toilets for Disasters

- ✓ Japan Ground Self-Defense Force, Japan Maritime Self-Defense Force
- ✓ Tokyo Electric Power Company, Incorporated, Tokyo Gas Co., Ltd., NIPPON TELEGRAPH AND TELEPHONE CORPORATION (Utility companies)
- √ NHK, TBS (Mass media)
- ✓ Private companies, such as the Bank of Tokyo-Mitsubishi UFJ, Ltd., Sumitomo Mitsui Banking Corporation, Mitsubishi Heavy Industries, Ltd., Hitachi, Ltd., Kobe Steel, Ltd., Rakuten, Inc., ITOCHU Corporation, Narita International Airport Corporation, and Hino Motors, Ltd.
- ✓ Universities and schools, such as Meiji Gakuin University, Tokyo University of Agriculture, Soka Gakuen, Takushoku University, and Seikei Gakuen

#### Portable and Temporary Toilets

- ✓ Mt. Fuji (in cooperation with Yamanashi Prefecture)
- ✓ Mongolia (Ulan Bator)
- ✓ Norikura Highland (as mountain toilets in Japan North Alps)

and many other cases.



### Outdoor Toilet at tourist site in Mongol













Just excavation Toilet (There is no sewage system)

### Demonstration at Naadam in 2015

We have been adopted JICA'S Program of Small and Medium-Sized Enterprise (SME) Partnership Promotion Survey in 2015.











After treatment by Mt.Fuji Toilet (No Bad smell)

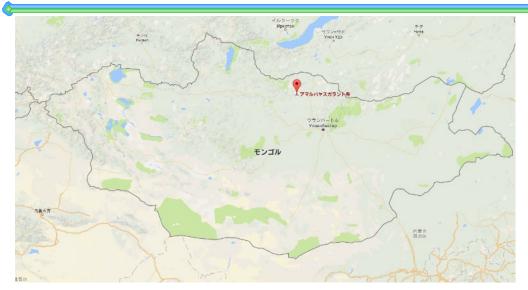


We are demonstrated Mt.Fuji Toilet at Naadam which is a traditional festival in Mongol.



Demonstration at Amarbayasgalant Temple in 2015

We have been adopted JICA'S Program of Small and Medium-Sized Enterprise (SME) Partnership Promotion Survey in 2015.









Demonstration at festibal of Amarbayasgalant Temple

### Demonstration of Severe Winter in Mongol

We have been adopted JICA'S Program of Small and Medium-Sized Enterprise (SME) Partnership Promotion Survey in 2015.













Under -27 °C , We are demonstrated Mt.Fuji Toilet at Sükhbaatar Square Of Ulaanbaatar in the New Year event

# Mt.Fuji Toilet Demonstration at Naadam in 2016

We have been adopted JICA'S Program of Small and Medium-Sized Enterprise (SME) Partnership Promotion Survey in 2015.











The Second Time: we are demonstrated Mt.Fuji Toilet at Naadam in Mongol.



### **Demonstration of Fertilizer**



Chemical Fertilizer



No Fertilizer



Using material after treatment by Mt.Fuji Toilet

Demonstration of Fertilizer using material after treatment by Mt.Fuji Toilet



### Cultivation test at Plowed Field of Meiji University







We cultivated lettuce using material after treatment by Mt.Fuji Toilet (2016.06.26)



### Cultivation test at Plowed Field of Meiji University



The lettuce grew (2016.07.22)



No Fertilizer



Using material after treatment by Mt.Fuji Toilet

# Mt.Fuji Toilet

### Cultivation test at Yurt in Mongol





Cultivation test of Japanese mustard spinach (2016.08.14)







Japanese mustard spinach grew enough to eat using material after treatment by Mt.Fuji Toilet (2016.08.30)

## **END**