

EMTM and Measures Against disasters (Proposal)

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EM Research Organization, Inc.

Practical use of EM™ Application in times of disaster

The best way of applying EM™ in a time of disaster is to spray (or scatter) as much as you can in a place or a thing that produced foul odors such as for restrooms or the decayed food until the mental discomfort is gone.

Common issues raised in disaster areas

- Sanitation problem
- Water-related issues

Countermeasures for sanitation problem with EM™

- ✧ Suppress putrid (decomposing) smell

It is often seen that food in the refrigerator goes bad and produces a foul odor at the disaster area due to the power outage. In such case, it is easily increased the disease-causing bacteria and therefore disaster victims especially people with a weakened immune system have a great risk of getting infected. Thus, spraying Activated EM·1® (AEM) helps not only reducing the foul odor, but also suppressing the pathogens growth.

- ✧ Countermeasures for foul odors in restrooms and some other places

Temporary restroom facilities are usually placed near residential area, and the foul odor comes from the restrooms cause a severe stress to people who live around there. In such a case, applying EM™ Bokashi to the toilet helps the people reduce their stress.

- ✧ Water treatment for general use (non-drinking water)

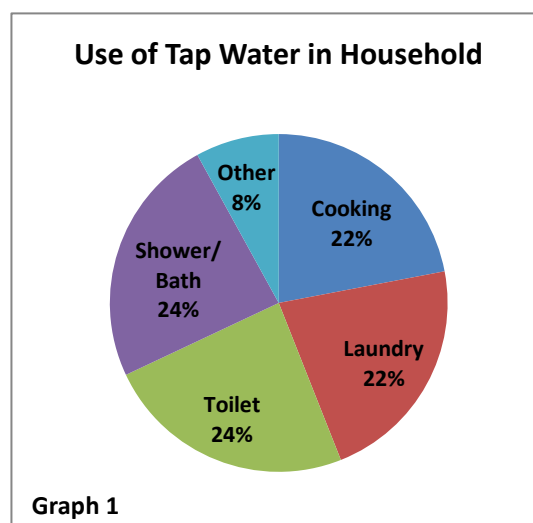
When the clean-water supply system breaks down due to the disaster, the water that might contain the pathogens would be used. In such a case, adding AEM (1,000 times to water) and EM™ ceramics (5,000-10,000 times to water) in a bucket of water helps to control pathogens.

- ✧ Skin brushing with AEM (substitute for taking a shower/bath)

To wipe your whole body with a towel (or a piece of cloth) steeped in the diluted AEM with water (10 - 1,000 times) helps suppress the growth of bacteria on the body surface and then prevents infection or catching a cold.

Countermeasures for water issues with EM™

The way to ensure safe drinking water is a serious problem in times of disaster because the clean-water supply system breaks down and therefore the emergency water supply service is the only way to get drinkable water. Also, we use water not only for cooking but also for many other purposes. As shown the Graph 1, the majority of the water in household is used for non-drinking or cooking purpose; therefore, the important thing at the time of disaster is that how effectively you can use the water for those purposes.



✧ Laundry/Washing clothes

When looking at the “laundry” in the Figure 1, you can see the almost one-fourth of the total is used for laundry. The water with machine wash can be used only once and moreover, when you use the detergent, you cannot recycle the used water.

Here we recommend using EM™ for laundry.

First, ferment EM·1® with rice rinsed water (making “EM Fermented Rice Rinsed Water”). Second, dilute the “EM Fermented Rice Rinsed Water” with water (500-1,000 times) and then soak the dirty clothes in the diluted “EM Fermented Rice Rinsed Water” overnight. By doing so, it easily removes the dirt on clothes. Finally, rinse the clothes lightly and dry them in the sun. The supernatant part of the used water can be reused for washing clothes again.

✧ Restrooms/Toilets

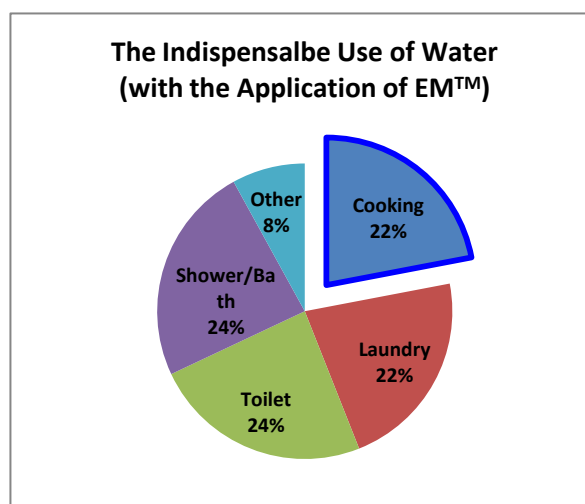
As mentioned earlier, the foul odor in a restroom becomes a problem at the time of disaster. This is usually because we cannot flush the toilet due to the water outage. In this case especially for temporary restroom facilities, to scatter EM™ Bokashi or AEM after use prevents the foul odor and facilitates to decompose the waste. This also enables us to reduce the number of flush toilets and save water as well.

◇ Taking a shower/bath

It is difficult to secure water for a shower/bath at the time of disaster. For substitute for taking a bath, "Skin Brushing with EM™" stated earlier is recommended.

Conclusion for water issues

Because we can reuse the water for other purposes by applying EM™, the most of the water supplied from public sectors in times of disaster can be used for drinking and cooking.



The way of EM™ cultivation in times of disaster

It would be better to use the boiled river water or sea water to make AEM because there will be lack of the tap water and well water in times of disaster. The use of sea water enables to make more AEM.

The way of applying EM™ in the past disaster

Recently, the news of natural disaster takes people's attention in Japan. Especially today, there are many voices of warning about Tokai Earthquake (the Pacific coast of central Japan at 200km to the southwest of Tokyo) and Nankai Earthquake (off the Coast of Shikoku Island in the southwest of Japan). Therefore, we shall introduce a few examples of EM™ application in the time of past disasters as follows:

➤ Example of the Great Hanshin-Awaji Earthquake, Japan

Volunteers who regularly use EM™ in daily life applied EM·1® and EM™ Bokashi to reduce foul odors coming from temporary toilets and succeeded to eliminate the odors. Moreover, EM™ was used to control odors coming from garbage cans.

➤ Example of Taiwan Earthquake, Taiwan

EMRO manufactured and donated EM·1® in disaster areas. Those EM™ solutions were applied to suppress foul odors coming from toilets and the collapsed livestock barns.

Learning from the EM™ applications in the time of past disasters

In times of disaster, there would be various negative factors to make AEM such as blockade of transportation and water outage. Also, to force the victims to use EM™ without their wills at the chaos after the disaster may cause them to get exhausted or stressful despite of the fact that EM™ application is useful and effective.

So, how should we use EM™ as measures against natural disasters?

It is important for us to feel that EM™ is essential to our daily life. So, place EM·1® within your reach in order to use it whenever you need and keep using it at any time so that the use of EM·1® would become a part of your daily routine. As a result, EM™ would be something essential for you even in times of disaster.

At the end

Even through the concept for natural disaster/hazard prevention is widespread in Japan these days, we have a tendency to see it from the third person because the natural disaster is unusual and extraordinary event to us. However, no one can predict when it happens, and by the time we noticed, it would be too late to prevent. Thus, the measures against natural disaster must be prepared beforehand.

What we need to do is to keep our awareness of disaster prevention in daily life, and do not forget to live an EM™ Lifestyle that is to use EM™ everyday; this is part of disaster-prevention activities.

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