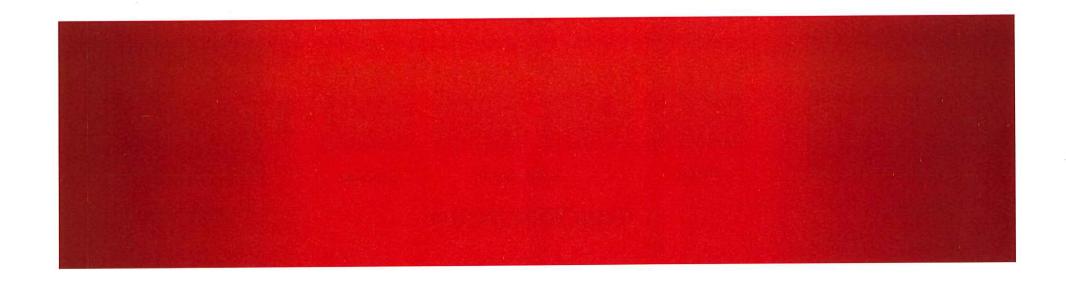
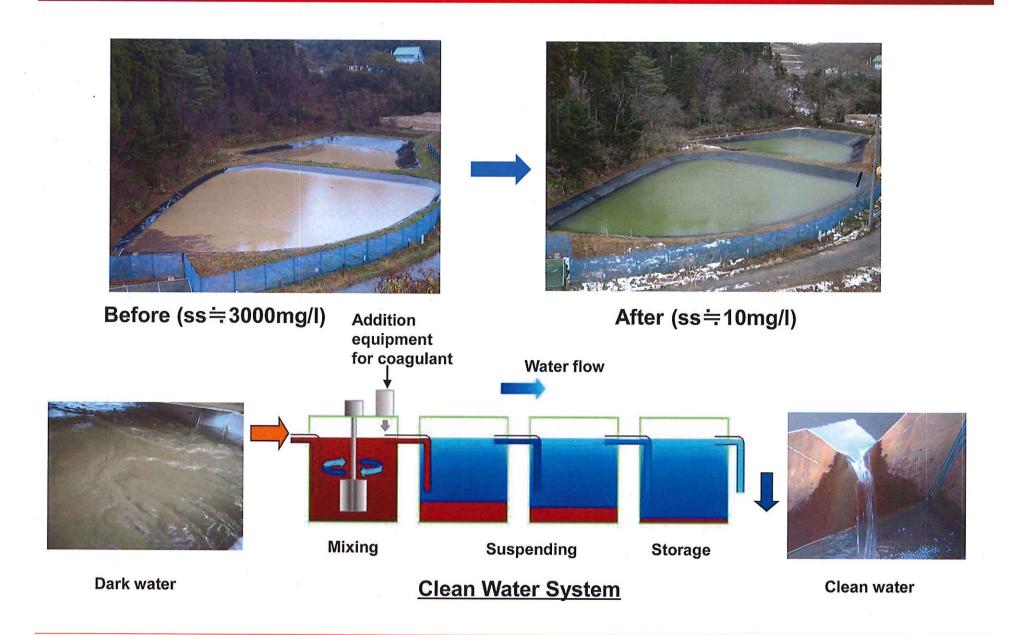


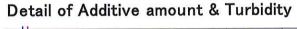
# Treatment for wastewater

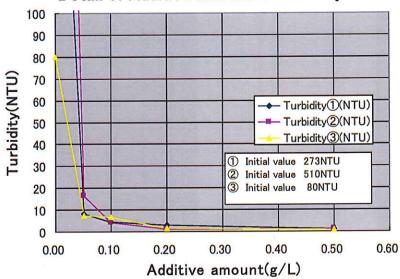


### Results of dark water treatments



## Purge ability of the coagulant

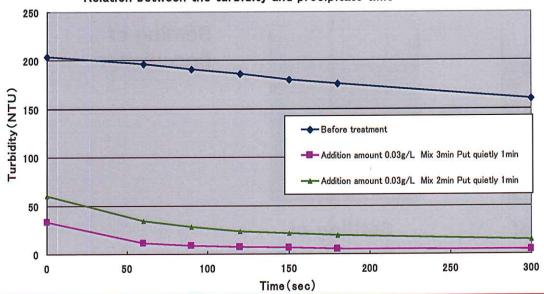






Coagulant [AMARA]

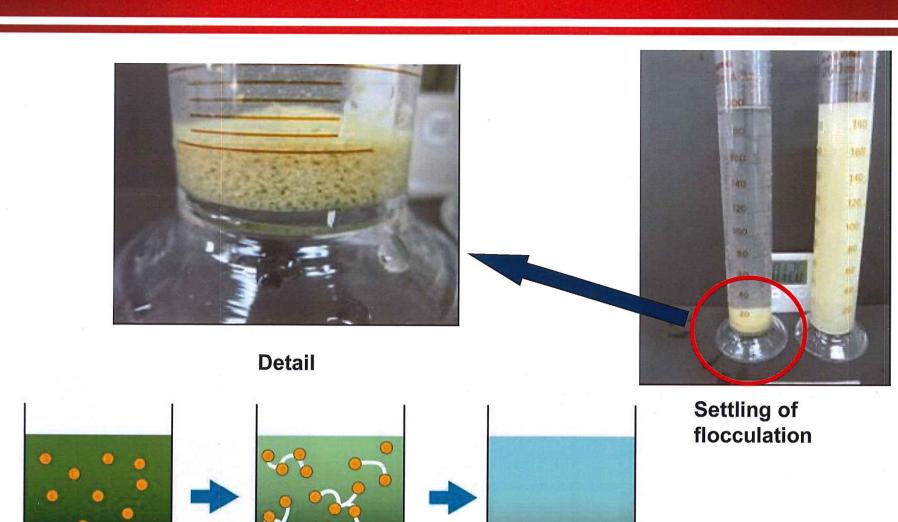
#### Relation between the turbidity and precipitate time





Before and after

### Principle of flocculation



Dark water

Formation of flocculation

Settling of flocculation

### Treatment for dyeing waste water



Dyeing water



After the additional coagulant



**Waste Water Treatment System** 



Before waste water



**Treatment water** 

### Treatment for enameled factory's waste water





For the effective functionality, the details of every polluted water are required.

Abilty:10m<sup>3</sup>/hr(max)

Target: boron(<10mg/L),fluorine(<8mg/L)

### Effect for turbid water treatment system



Waterway situation before treatment Discharge Toyokawa after treatment

### Water for lives(1)





สาเกรายสายสายสา era minai Aramida Kingdom of Cambodia อาเมสฐาอนูลที่อัสมูสเข้าเอเมรา Nation Religion King ศณิยาลัยสังเลาสล์ ล้อ ลิกาก Ministry of Environment Department of Pollution Centrel Laboratory Office **ឬក៏ដ៊ីចំ**ក្រល់ឆ្អន់ល់ទីតាគ ' Hangles បានឃើញនៅថ្ងៃទី grana street on date: Director Department 1881\_1<u>2</u>



Neighboring well in Cambodia

#### Toul tachan village in Cambodia

**Quality water test for Arsenic** 

ប៉ារ៉ាម៉ែត្រ Parameter	<b>ខ្នាត</b> Unit	លក្ខជល Sesuit	
		Mittapheap	Toul Tachan
Arsenic (As)	mg/l	0.103	0.108

យកសំណាក់ ការរក្សារទុក និងការដឹកជញ្ជូនសំណាក់ទឹកមកមន្ទីពិសោធន៍(គំរោង)ក្រុមហ៊ុនអនុវត្តដោយខ្លួនឯង។

#### Results of quality water test for Arsenic

Analycis agency	Density of arsnic (mg/l)	Note	
Ministry of the Environment (Kingdom of Cambodia)	0.103	APHA Method 3500-As	
Incorporated foundation (Japan)	0.005 0.006	JIS K0102.61.4	

Guideline of elution amount of the arsenic

Cambodia	0.05 mg/	
USEPA	0.05 mg/l	
WHO	0.01 mg/l	
Japan	0.01mg/l	

### Water for lives (2) in Japan

### Secure of the water in case of emergency



Water from pool







Purification agent for lives [MALIS]



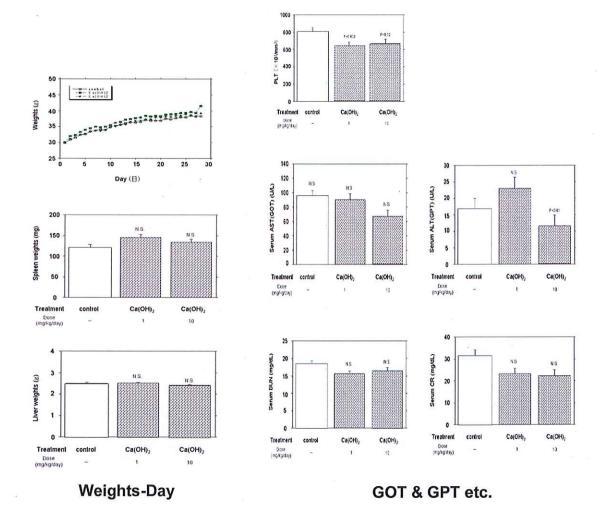
Newspaper article



**Demonstration by the Red Cross** 

### Sub acute toxicity test by mouse

### Safety demonstration for Emergency water purification agent "MALIS"

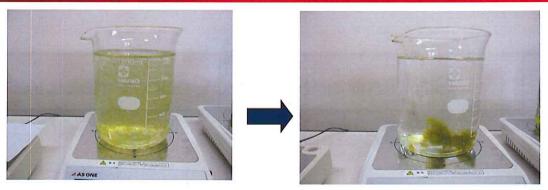


Judgments: Regarding emergency water purification agent "MALIS", the assessment was done on the whole body, the blood cell, the immunity and the spleen of mice.

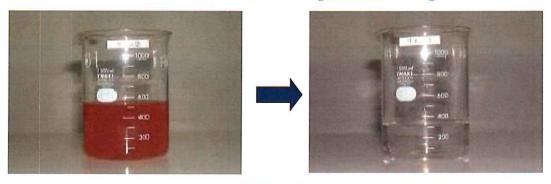
As a result, even though these values slightly fluctuate within the normal range, emergency water purification agent "Malis" was judged that there is no sub acute toxicity by 28days dosing.

Test Laboratory: An incorporated foundation Ishikawa prefectural Institute of Preventive Medicine

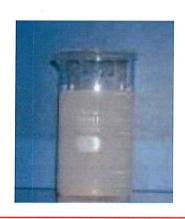
### Others



water-bloom[ Green laver]



[Wine]





[Raw milk)]



[Raw of thePalm oil]



[Step 1 : Palm oil]



[Step 2 : Palm oil]

### List of achievements

Construction	Area	Contaminants	Countermeasures
Land formation work for University	Ishikawa	Turbid water treatment from job site	Plant system
Base of the bridge	Aichi	Turbid water treatment from job site	Plant system
Tunnel	Iwate	Waste water after washing the ready mixed concrete	Sale of coagulant
Dam	Yamaguchi	Turbid water treatment from job site	Sale of coagulant
Park	Myanmar	Treatment for water-bloom [green laver]	Sale of coagulant
Enameled factory	Aichi	Treatment for waste water from factory	Plant system