Session Report Cover Sheet

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**Session Title:** EM for Purifying Polluted Waters

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1. Key Issues
Rivers and oceans are being polluted by household effluents and agricultural and industrial wastewater that inflow from surrounding areas. These causes of water pollution are difficult to eliminate and the environmental activities and industrial promotions are also difficult to coexist. This is because there are differences in interests between municipalities, corporations, and communities.

2. Actions
Application of Effective Microorganisms (EM) has made it possible to restore ecosystem in already polluted waterways.

1). Asechi River in Mie prefecture, Japan: After the application of EM by local volunteers, fish, plants, and birds came back to live in the river, and the foul odor and accumulated sludge were reduced. This reduced the dredging cost by 30,000,000 yen (250,000 USD).

2). Ariake Bay in Fukuoka prefecture, Japan: EM is applied to rivers by residents, and EM mud balls (mud balls fermented with EM) are thrown in by the seaweed farmers. In two years, the ocean was purified and the sales of seaweed have increased from 277 million yen (2 million USD) to 479 million yen (4 million USD).

3). China: Irrigation projects are currently being conducted by the Chinese government. Water purification part is being assigned to Hohai University and other research organizations. Hohai University focuses on the effect of EM technology and is getting good results. Extending EM solution lowers the running costs and increases the effects.

4). EM soap: By producing soaps with EM, it is possible to make a detergent that is environmentally friendly. On top of that, using EM soap can promote water purification. This is because EM activates the microorganisms that can decompose the causes of water pollution.

3. Commitments
The purification of the Weishan Lake will be continued by Hohai University and Nanjing office of EM Research Organization. They hope to develop the common knowledge that EM treated industrial wastewater can be reused as the safe irrigation water.

EM Citizens Forum (NPO) will continue to work for the project assigned by the city of Yokkaichi. They are promised the yearly budget of 2,000,000 yen (17,000 USD) for their activity. With this activity, they hope to encourage other areas to purify their rivers.
The Network for Reviving Ariake Sea continues to promote that every household uses EM to transform the “cause of pollution” into “cause of purification”. Also, they would like to give advices to interested parties to build a network of NGO/NPO for purifying waterways. These activities would make people realize that each one of us can contribute to work toward purifying the ocean without depending on the government. These purification activities would cause the revolution in the field of agriculture, general industry, and marine industry.

4. Recommendations
United Networks for Earth Environment (NPO) would like to increase the number of cooperative individuals and organizations. We also want to network with individuals and other research organizations that would conduct scientific researches on EM technology.