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**Practical application of bioaugmentation on oil-contaminated soil and its perspective**

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For the practical application of bioaugmentation, entrepreneurs should pass a judgment under the regulation of bioremediation guideline which established 2005. Entrepreneurs should present remediation plan and impact to indigenous ecosystem to Ministry of Economy, Trade and Industry (METI) and Ministry of the Environment and reviewed by a bioremediation committee. After pass the review, these documents were authorized by Ministers of METI and the Environment. In this study, mixed culture of three strains of *Rhodococcus* sp. and *Gordonia* sp. were used for remediation of soil contaminated by oil and benzene. After critical review examined by the committee, the remediation plan had been authorized by the Ministers at May, 2011. Combination of four bacterial strains could degrade oil and benzene in contaminated soil and cell numbers were rapidly decreased after degradation suggesting the remediation process had small impact on natural ecosystem. Four bacterial strains also could degrade A-fuel oil and polycyclic aromatic hydrocarbons (PAHs), and degradation properties of them were different each other. Multiple combinations of four strains can be applied for various contaminations. Since real contamination site sometimes contains heavy metals and PAHs which were toxic to microorganisms, we should make an effort to enhance degradation activity for better remediation processes.