12. In-Situ Bioaugmentation of Oil-contained Soils

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Bioremediation has recently been catching attention in the field of soil contamination control as a low-cost soil treatment method imposing small burdens on the environment. Oil-containing soils have been discovered at the sites of former filling stations or factories in an increasing number of cases. Then, Our Okumura Corporation has focused on bioremediation of oil-containing soils and found three strains of microorganisms with high oil degrading capacity jointly with IIB Inc. These organisms can aerobically degrade gasoline, kerosene, light oil, bunker A and other types of oil with a carbon number distribution between C10 and 35. Neither toxicity nor pathogenicity has been recognized in animal experiments using rats or Oryzias latipes, and safety has been verified.

We purified oil-containing soils in-situ using these microorganisms and obtained favorable results. This paper reports the results.

Key words: oil-containing soil, bioaugmentation, in-situ