NACE CODE E39

DEVELOPMENT OF PROCESSES FOR THE REDUCTION OF THE POLLUTANT LOAD FROM HYDROCARBONS AND TENSIOACTIVES IN WASTEWATER

Innovations and Benefits - Oxidation methods for the degradation of hydrocarbons and/or tensioactives contained in
- waste streams produced during the remediation activity of road pavings after splilling of mineral oils and fuels
- waste water coming from recovery processes of bilge-water oil and industrial oil mixtures.

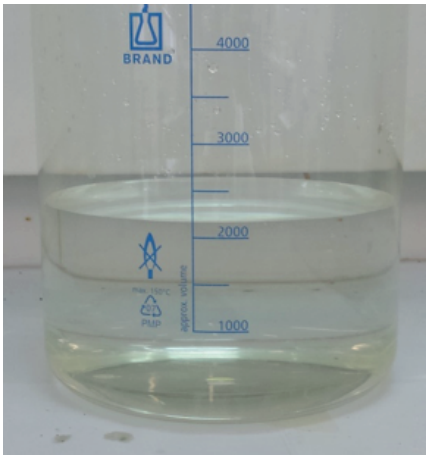
The recovery processes allows the degradation of the organic substrate converting it into carbon dioxide through the use of reagents of low environmental impact and/or through apposit catalyts.

Use -

Valorisation of water resource, reduction of the pollutant load due to the organic compounds present in complex matrices containing hydrocarbons and tensioactives. This technology, together with treatment procedures focused on the removal of inorganic pollutants, allows obtaining waste streams which can be potentially discharged directly into surface waters.

Applications and ongoing Activities - Lab scale tests to verify the effectiveness of the the proposed recovery processes on different matrices.

- synthesis of biodegradable products for the removal of hydrocarbons and mineral oils accidentally splilled on the road paving
- study of the treatment of the waste streams produced by the remediation process
- feasibility study for building a treatment plant at pre-industrial scale



RESEARCH TO PROVE FEASIBILITY | TECHNOLOGY DEMONSTRATION | SYSTEM TEST, LAUNCH & OPERATIONS

BASIC TECHNOLOGY RESEARCH | TECHNOLOGY DEVELOPMENT | SYSTEM/SUBSYSTEM DEVELOPMENT

TRL 1 | TRL 2 | TRL 3 | TRL 4 | TRL 5 | TRL 6 | TRL 7 | TRL 8 | TRL 9

TECHNOLOGY READINESS LEVEL

Italian National agency for new technologies, Energy and sustainable economic development
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Territorial and Production Systems Sustainability Department
Resource Efficiency Division
Integrated waste, wastewater and raw materials management technologies Lab.
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