TU396 Characterization of a fuel contaminated site for the implementation of combinated decontamination techniquesR. Millan, CIEMAT / Department of Environment; M. RODRÍGUEZ-RASTRERO, M. Sierra, T. SCHMID, F. DÍAZ-PUENTE, N. ARÉVALO, O. ESCOLANO, CIEMAT / Environmental. Fuel spills is a global concern problem that affects soil and water and need of an innovative an environmental friendly solutions. When a heterogeneous media is affected, the combination of different technologies could be recommended. In this framework, the Life Bioxisoil Project (Life ENV 11/ES/505) develops a combination of chemical and biological based technologies to be applied in an aged contaminated site located in SW of Spain. The complex characteristics of the site, an operative industrial facility in a saltmarsh area within a military area had required of an exhaustive characterization of 1.5 Ha to be treated. Physicochemical and biological parameters have been studied in surface and in depth, taking into account pedological and sedimentological criteria. The obtained results show a wide range of THPs affection (in surface and in depth); salt content variability and high calcium carbonate content among others. Furthermore, this area shows a relevant seasonal influence and a critical anthropogenic impact. The selected techniques are: “in situ” chemical oxidation, fitotechnology and enhanced natural attenuation that have been adapted taking into account these specific characteristics and are currently been tested simultaneously. The obtained data will be the base in order to develop an adequate protocol to recuperate this site and can be extrapolated to similar contaminated areas. Keywords: Fuel contamination, site characterization, remediation