

Field olfactometry in Spain with the Nasal Ranger™

Socioenginyeria's Technical Director (Dr. José Cid Montañés) attended the Odor School® at the St. Croix Sensory Evaluation & Training Center in July 2004 and obtained the Odorous Emissions Evaluation Field Certification for Measuring Ambient Odours (Odour Inspector). His odour detection threshold (60 ppbv n-butanol) was evaluated with the dynamic forced-choice ascending series method using the AC'SCENT® laboratory olfactometer and following the most recent European guidelines (UNE:EN 13725) (left picture below). His individual sensitivity (average of 9 in a range of 3 to 13) was also assessed with the Individual Odour Sensitivity Test Protocol developed by St. Croix. Sensory Inc.



The field olfactometer Nasal Ranger™ (right picture above) has been recently introduced in Catalonia (Spain) as a new tool in several projects dealing with the social and environmental impact of bad odours stemming from waste treatment/management facilities:

Coll Cardús Landfill (Vacarisses, Barcelona): In this study a combined approach consisting of odour diaries (affected neighbours), chemical VOC analysis and ambient odour measurements with the Nasal Ranger™ (technician on the left and affected neighbour on the right below) allowed the setting of acceptable odour impact levels and frequencies.



Bufalvent Integrated Waste Center (Manresa, Barcelona): In this study a combination of odour diaries filled by affected residents (previously tested for their individual sensitivity; left picture below) and ambient odour measurements (D/T or OU/m³) with the Nasal Ranger™ (right picture below) following the most likely odour plume (on-site, fenceline and at predetermined off-site distances) are being used.

