

Center for physical measurements - CFM

Rep. No: **LET 20070306/D**

Laboratory for ecology in toxicology - LET

Date: 1.10. 2007

## REPORT OF MEASUREMENTS

1. Client: **NEBULUS d.o.o., ZBILJSKA CESTA 4, 1215 MEDVODE**
2. Measured object: **Smoking cabin SMOKEPOINT on location Obrtna ul. 3, HORJUL**
3. Number and date of contract: **the confirmation of the offer 4.9.2007**
4. Purpose of the measurement: **the control measurements**
5. Date of measurement: **13.9. 2007**
6. Date of previous measurements:
7. Type of measurements: **CONCENTRATION OF VOLATILE ORGANIC COMPOUNDS  
INSIDE SMOKING CABIN SMOKEPOINT**
8. Sphere of activity: **/**

Measurements performed by:

Report prepared by:

Report approved by the head of LET:

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## 1. TASK

Company Nebulus d.o.o., Medvode, instructed the control measurements of concentrations of chemical substances, which are a result of smoking in the cabin SmokePoint. Cabin of size 129.8 x 208.3 x 254cm, fitted with a system for cleaning the air filter HEPA H13 and charcoal adsorption aired material, is for the purpose of measurements installed in a room with a volume of 48.6 m<sup>3</sup> (4 x 4.5 x 2,7m). The room is free of artificial ventilation. During the two hour measurements from one to four smokers were present in the smoking cabin. The total number of smoked cigarettes was 32. The room was at the time of sampling not ventilated, except for a moment through the door on arrival or departure of smokers. In this report, we present the results of measurements of concentration of volatile organic compounds, which we have measured inside smoking cabin.

## 2. PRINCIPLE OF THE MEASUREMENTS

A measured volume of sample air is drawn through sorbent tube with activated carbon. The collected vapour is desorbed by a solvent and the solution is analysed with a gas chromatograph with FID detector HP 5890 and with Agilent 6890N equipped with mass selective detector.

## 3. RESULTS OR THE MEASUREMENTS

We present the concentrations of volatile organic compounds, which were inside smoking cabin SmokePoint in time and in terms of measurement in Table I:

Table I:

<i>substance</i>	<i>Concentration (µg/m<sup>3</sup>)</i>
total volatile organic compounds (TVOC)	338
benzene	13
toluene	18
xylene	13



Report reviewed by:

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