Environmental Engineering and Management Journal

July 2014, Vol.13, No. 7, 1573-1580 http://omicron.ch.tuiasi.ro/EEMJ/



"Gheorghe Asachi" Technical University of Iasi, Romania



ACCIDENTAL POLLUTION WITH AMMNONIA. INFLUENCE OF METEOROLOGICAL FACTORS

Doina Capsa^{1*}, Mirela Panainte², Dana Chitimus², Marius Stanila², Daniel-Catalin Felegeanu²

¹Regional Weather Forecasting Bacau, Romania ² "Vasile Alecsandri" University of Bacau, Faculty of Engineering, Calea Marasesti, 157 Bacău, 600115, Romania

Abstract

Air quality in urban areas mostly depends on the type and size of industrial activities, traffic intensity, municipal and industrial waste management. In addition to these factors, air quality in urban areas also depends on the size and quality of green areas, population density, geographic and climatic conditions. This paper reveals the correlations between air quality aspects in Bacau City, Romania (related to 2011) and the most representative climatic factors that influence the pollutant dispersion. The correlation was made based on data resulted from the analysis of ammonia (NH₃) concentrations and their variations in the case of accidental pollutions caused by an important chemical plant located in the south-east of Bacau City, Romania

Key words: air pollution, ammonia, climatic factors, humidity, temperature, wind

Received: March, 2014; Revised final: July, 2014; Accepted: July, 2014

Author to whom all correspondence should be addressed: e-mail: capsadoina@gmail.com ; Phone: +40740980816