

**Options for revising the Gothenburg Protocol (ECE/EB.AIR/WG.5/2009/4)**  
**Amendments suggested by Norway**

**Preamble paragraph 3**

*Aware* that nitrogen oxides, sulphur, volatile organic compounds, [and - delete] reduced nitrogen compounds [and particulate matter] have been associated with adverse effects on human health, [and - delete] the environment [and climate change].

Comment: Document ECE/EB.AIR/WG.5/2009/4 states that the options for revising the Gothenburg Protocol should include co-benefits and trade-offs of climate change policies. Norway therefore suggests that WGSR goes through the protocol text with the specific aim to identify paragraphs where climate change should be more explicitly addressed (e.g. Page 4, paragraph. 17; article 8 e), g), k); article 10, paragraph. 2 b)

**Preamble paragraph 25**

*Noting* that measures taken to reduce the emissions of nitrogen oxides and reduced nitrogen compounds should involve consideration of the full biogeochemical nitrogen cycle and, so far as possible, not increase emissions of reactive nitrogen including nitrous oxide [and not increase nitrate levels] which could aggravate other nitrogen-related problems,

Comment: We do not find it correct to refer to nitrate being emitted as the text stands now.

**Article 1**  
**DEFINITIONS**

Paragraph 11 reads: “Volatile organic compounds”, or “VOCs”, means, unless otherwise specified, all organic compounds of an anthropogenic nature, other than methane, that are capable of producing photochemical oxidants by reaction with nitrogen oxides in the presence of sunlight;

Comment: The definition of VOC is problematic with respect to comparability between countries of reported emissions. It might be a challenge to include emissions of all VOCs, which according to current knowledge will include more than a hundred compounds with different properties. Norway does not have a ready-made proposal for how to deal with the unfortunate situation that it is a disparity between the above definition of VOC and what is possible and or practical for Parties to report.

Proposal: Norway proposes that relevant bodies under the Convention on LRTAP (e.g. the TFEIP) look into the definition of VOCs and return to WGSR with a proposal for a better definition. How a possible change in the definition of VOC in the Gothenburg Protocol might affect the VOC Protocol will also have to be analyzed.

## Article 2

Alternative to item (c)

c) For Particulate matter

(i) For Parties within the geographical scope of EMEP, the critical levels of particulate matter, as given in annex I;

(ii) For Canada, the Canada-wide Standard for particulate matter;  
and

(iii) For the United States of America, the National Ambient Air Quality Standard for particulate matter.

d) Ozone

(i) For Parties within the geographical scope of EMEP, the critical levels of ozone, as given in annex I;

(ii) For Canada, the Canada-wide Standard for ozone;  
and

(iii) For the United States of America, the National Ambient Air Quality Standard for ozone.

Comment: Norway thinks that it is not logic to include particulate matter and ozone in the same paragraph as proposed in document ECE/EB.AIR/WG.5/2009/4.