



**Workshop on VOC installations: Requirements –
Emission Monitoring – Best Available Techniques**
Minsk – Belarus
November 11-12, 2019

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Agenda

- The demand
- Organisation of the workshop

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Context of the workshop on VOCs

- During the works of the Berlin Workshop to Promote the Ratification of Protocols of the UNECE Air Convention with Focus on Countries in the EECCA Region, held in Berlin, May 14 to 16, 2019, **recommendations from EECCA countries emerged to access more easily to the Protocols**
- It is important that EECCA governments **have a clear understanding of the Gothenburg Protocol and its requirements.**
- **Regarding VOCs especially, further assistance is needed.**
- There are **needs of providing assistance and guidance to the EECCA experts on estimation and measurement of VOCs emissions**
- The organisation of **an hoc workshop on specific questions on VOC was proposed.**

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Context of the workshop on VOCs

- An ad hoc workshop organised on installation emitting VOCs:
 - ✓ Requirements of the GP
 - ✓ Emission monitoring, solvent management plan
 - ✓ Best Available Techniques
- The workshop organized with funds of the Federal Government of Germany made available through the German Federal Agency for Environment (UBA).
- The venue of the workshop kindly offered by the Ministry of Natural Resources and Environmental Protection of the Republic of Belarus, in Minsk.
- Part of the institutional activities carried by the Task Force on Techno-Economic Issues (TFTEI), technical body of the UN-ECE Air Convention, in line with the item 2.3.7 of the workplan 2018-2019 (ECE/EB.AIR/2017/1) for the implementation of the Convention.

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Context of the workshop

- Workshop on VOC mainly intended to provide clear examples of measurement methods and their application to correctly approach the issue of VOC, in line with the Gothenburg Protocol provisions.
- The workshop devoted to a limited number (up to 12) of specific experts and practitioners from EECCAs, involved in VOC management, with about 5 experts from Germany (UBA) and 2 from France (Citepa)
 - Belarus,
 - Georgia,
 - Ukraine,
 - Moldova.

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Context of the workshop

Day 1:

09:30 am - Welcome – Introduction and objectives of the workshop

09:45 am - **Presentation of annex VI on VOC emissions** of the Gothenburg Protocol and the **guidance, expressions of ELVs** (Nadine Allemand, Citepa)

10:15 am - **Measurement of VOC emission from stacks of installations** (Dr. Robert Behm/Dr. Richard Schlachta)

- Emission measurement methods for determination of total VOC concentration,
- Emission measurement techniques for determination of individual VOC,
- Other parameters to monitor (waste gas flue gas, O₂, t°...)
- Requirements for measurement sections and sites and for the measurement objective, plan and ,
- Continuous monitoring/point monitoring and representativeness issues
- Conversion of units (C eq in VOC)

11.30 am Discussion and exchange

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Agenda of the workshop

Day 1:

13.00 pm - **Principles of the solvent management plan (SMP)**: (Nadia Taieb, Citepa)

- How to develop a solvent management plan
- How to estimate the different component of the balance

14.00 **How to develop a SMP - exercises**: (Nadia Taieb)

- Printing industry
- Fine chemicals process

15.00 – 15.30: Discussions – exchanges/ question/ answers on the SMP

15.30 Break

15.45 **Case studies from Germany – Implementation of Chapter V IED** (Dr. Robert Behm/Dr. Richard Schlachta – examples for a better enforcement)

16.45 Final discussion and wrap-up

17.00 End of Day 1

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Agenda of the workshop

Day 2:

9:00 am – German Country Experience with installations of Chapter V IED –Part I

Case studies including permitting/registration and inspection as well as application of Best Available Techniques to prevent and to reduce VOC emissions (Robert Behm/Dr. Richard Schlachta) – Part I

Different types of installations are illustrated

10.30 – 11.30 - German Country Experience with installations of Chapter V IED – Part II

Case studies including permitting/registration and inspection as well as application of Best Available Techniques to prevent and to reduce VOC emissions (Dr. Robert Behm/Dr. Richard Schlachta) – Part II

11.30 Discussion and exchange on Chapter V IED installations

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Agenda of the workshop

Day 2:

13.00 – 15.15 Control of volatile organic compound (VOC) emissions resulting from the **storage of petrol and its distribution from terminals to service stations** – German country experience and Best Available Techniques (Robert Behm, Dr. Richard Schlachta)

Petrol vapour recovery during refuelling of motor vehicles at service stations – German country experience and Best Available Techniques (Robert Behm, Dr. Richard Schlachta)

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Agenda of the workshop

Workshop 2: Improve the permitting procedures in Belarus - SAQEM

Begins at 15:30, 12th Nov

Ends at 17.30, 12th Nov

Introducing the provisions of Chapter V of IED and Chapter VI of Gothenburg Protocol in the Permitting system of Belarus. Establishing ELV and special control procedures. Preparing Solvent Management Plans. Foreign experience to be followed. Progress made so far.

Analysis of the Integrated Permitting system in Belarus based on the analysis of existing permits. Recommendation on how to fill the existing Gaps at National and Installation level.

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Thank you very much
for your attention!
Questions?

TFTEI Technical Secretariat

