



OECD WORKSHOP

SAFE MANAGEMENT OF NANOWASTE

**Hosted by the Federal Ministry of Environment,
Nature Conservation and Nuclear Safety (BMU) of
Germany**

Munich, 9-11 May 2012

DRAFT AGENDA (3 May 2012)

The main objectives of the workshop are:

- to get a better understanding of the potential risks posed by nanowaste and waste containing nanomaterials
- to exchange information about existing initiatives/approaches addressing nanowaste management
- to identify what OECD and member country governments can do to ensure safe management of such materials.

The workshop will take place in Room 03 of the International Congress Center of Munich, Messe Munich International – MMI

WEDNESDAY 9 MAY

15:00: Workshop participants are invited for an introduction meeting in Room 03 followed by a visit of the IFAT ENTSORGA fair [<http://www.ifat.de/en/Home>]

Ms. Jutta Struwe, from Prognos AG, will give a welcome address on:

Nanomaterials and Possible Recycling Opportunities

THURSDAY 10 MAY

1) Welcome and introduction: objectives of the workshop

10:00 - 10:10 *by Andreas Jaron (BMU) and Peter Börkey (OECD Secretariat).*

10:10 – 10:30: *Prof. Heidi Foth, Professor of Environmental Toxicology and Director of the Institute of Environmental Toxicology at the Martin Luther University Halle-Wittenberg (Germany),*

will set the scene by addressing the following issues

- ✓ What is meant by “nanowaste”?
- ✓ Why is nanowaste an issue?
- ✓ What do we know about the risks that may result from the different management options for waste containing nanomaterials (landfilling, incineration, recycling)?
- ✓ What can presently be undertaken by OECD and governments to tackle the issue?

2) Potential risks of products containing nanomaterials and of released nanomaterials:

- 10:30 – 11:15 (30 minutes presentation and 15 minutes discussion)

Certain materials or goods contain nanomaterials that may be released into the environment during their production, consumption or disposal/recovery phase. There are circumstances where these operations may release nanomaterials and pose some risks for human health and the environment. The objective of this session is to identify the types of products as well as the circumstances or actions which may lead to such risks, and what types of risks have been identified so far.

Speaker: Ms. Lori Sheremeta (National Institute of Nano-Technology in Canada)

- 11:15 – 11:45 (20 minutes presentation and 10 minutes discussion)

Presentation of the work programme of the OECD Working Party on Manufactured Nanomaterials (WPMN): reasons for tackling the issue of manufactured nanomaterials, objective of the work, relationship with nanowaste.

Speaker: Ms. Mar Gonzalez (OECD Secretariat to the WPMN)

3) Waste management and fate of nanomaterials contained in waste:

3.1 Review of existing waste treatments and their related processes: landfilling, sewage sludge treatment, incineration, recycling.

11:45 – 12:30 (30 min presentation and 15 min discussion)

During this session the existing techniques for managing waste will be examined, with the perspective of possible releases of nanomaterials originally enshrined in waste.

Speaker: Mr. Emeric Fréjafon (INERIS, France)

12:30 – 14:00 Lunch break

3.2 Waste management and fate of nanomaterials:

14:00 – 15:10 (40 min presentation followed by 30 min discussion):

The objective of this session is to identify releases of nanomaterials during the waste treatment operations and the possible pathways to the different environmental media (e.g. emissions from incineration of wastes containing nanomaterials, shredding for recycling, leachates from sewage sludge used in agriculture, etc.).

Speakers:

- *Dr. André Hauser (Office fédéral suisse de l'environnement)*
- *Mr. Emeric Fréjafon (INERIS, France)*

4) **Measurement of environmental exposure to nanomaterials, including nanowastes**

15:10 – 15:55 (30 min presentation followed by 15 min discussion):

This session will discuss the current technologies for measurement of exposure to nanomaterials and nanowastes and the results of actual studies.

Speaker: Dr. Michael Burkhardt UMTEC (Institut für Umwelt und Verfahrenstechnik, Institute for Environment and Process Technology, Switzerland)

15:55 – 16:30 Coffee break

5) **Illustration of issues raised by nanowastes:**

16:30 – 17:15 (30 min presentation followed by 15 min discussion)

Case study on end-of-life tyres including nanomaterials

Speaker: Francis Peters (Michelin, France).

19:00 : Dinner offered by the German Ministry of Environment, Nature Conservation and Nuclear Safety at Hackerhaus, in Munich Center.

FRIDAY 11 MAY

6) **What is currently undertaken on nanowaste within OECD countries and international bodies?**

09:00 – 09:45 (30 min presentation followed by 15 min discussion)

An overview of initiatives/approaches and activities on nanowaste management which exist or are under development, domestically and internationally, has been carried out by *Dr. Mathias Tellenbach (Terra Consult, Switzerland)* on behalf of OECD.

Dr. Tellenbach will present the findings of this survey and lessons revealed by this survey.

7) **What's next?**

09:45 – 10:45 (general discussion led by the Chair)

The Chair will summarise what has been learnt and heard during the previous sessions of the workshop.

On this basis, participants will discuss how can international cooperation help to move the nanowaste agenda forward (e.g. by sharing experience and knowledge, or coordinating research activities, by examining to which extent existing guidelines or

policy approaches might fulfil the needs of nanowaste management, by developing guidance for producers using nanomaterials, for waste managers, etc.).

After the Munich workshop, a report on the discussions and conclusions of the workshop will be produced by the OECD Secretariat, for submission to the next meeting of the WPRPW in November 2012. The report will include proposals for further work and potential role of OECD in this area.

Participants list for Joint BMU-OECD workshop on Safe Management of Nanowaste

9/5/2012 - 11/5/2012

Belgium/Belgique

Ms. Kathleen DIERICK

OVAM

Canada

Miss Veronic PICHARD

*Program Scientist
Waste Reduction and Management Division
Environment Canada*

Ms. Lori SHEREMETA

*Research Council Officer
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Denmark/Danemark

Ms. Trine LETH KØLBY

*Environmental Protection Agency
Danish Ministry of the Environment*

Estonia/Estonie

Mr. Peeter EEK

*Director General Waste Department
Ministry of the Environment*

Finland/Finlande

Mr. Ari SEPPÄNEN

*Environmental Protection
Ministry of the Environment*

France

M. Emeric FREJAFON

*L'Institut National de l'Environnement Industriel et
des Risques
INERIS - French National Institute for Industrial
Environment and Risks*

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Mr. Andreas JARON

*Head of Division
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Federal Ministry for the Environment, Nature
Conservation and Nuclear Safety (BMU)*

Dr. Wolfgang DUBBERT

Federal Environment Agency (Umweltbundesamt)

Professor Heidi FOTH

*Director
the Institute of Environmental Toxicology at the
Martin Luther University
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Ms. Susann KRAUSE

*Deputy Head of Section
Municipal Waste Management Hazardous Waste,
Focal Point to the Basel Convention
Federal Environmental Agency*

Mrs. Jutta STRUWE

*Waste Management and Secondary Raw Materials
Prognos AG*

Mr. Volker WEISS

Federal Environmental Agency

Mr. Benjamin WIECHMANN

*Researcher
Federal Environmental Agency*

Ireland/Irlande

Mr. Brendan O'NEILL

*Senior Adviser (Environment)
Department of the Environment, Community and
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Netherlands/Pays-Bas

Mr. Yuri BRUINEN DE BRUIN

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Ms. Kinga MROZIEWICZ

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Dr. Michael BURKHARDT

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Mr. Andreas HAUSER

Office fédéral de l'environnement (OFEV)

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Ms. Marie BOUCHER

*Office of Resource Conservation and Recovery
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Mr. Henrik LAURSEN

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*Chief specialist
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Dr. Harvey HOUNG

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**Business and Industry Advisory Committee (BIAC)/Comité consultatif économique et industriel
(BIAC)**

Dr. David CARLANDER

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Mme Jenny HOLMQVIST

*Global Product Stewardship Manager
European Chemical Industry Council*

Mr. Francis PETERS

*Worldwide Materials Projects Director
Industry Standard & Government Regulation
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Dr. Martin REUTER

VCI

Mr. Unico VAN KOOTEN

Dutch Waste Management Association - DWMA

Trade Union Advisory Committee (TUAC)/Commission syndicale consultative (TUAC)

Ms. Aida PONCE

*researcher
European Trade Union Institute*

Environmental NGO

Ms. Dania CRISTOFARO

*Pollution Control Officer
ECOS European Environmental Citizens'
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OECD/OCDE

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