



Department of Communications,
Marine and Natural Resources
*Roinn Cumarsáide, Mara agus
Acmhainní Nádurtha*

Mine Waste Management Workshop *Developing EU Best Practice*

Dublin, Ireland – February 18 & 19, 2002



Europe



Industrial Minerals
Your world is made of them



MINING WORKSHOP 18-19 FEBRUARY 2002

Address for Reception on Monday, 18 February

St Patrick's Hall, State Apartments, Dublin Castle

**Julie O'Neill, Secretary General,
Department of the Marine and Natural Resources**

I'm very pleased to welcome you all here to St. Patrick's Hall, Dublin Castle, on the occasion of the Workshop on Mine Waste Management. Dublin Castle was for some hundreds of years the focus of Government and social life in Ireland and, after this reception, you will have the opportunity, if you wish, to take part in a guided tour of the State Apartments. You will be able to view the historic furnishings and decorative detail that adorn these rooms and to hear of some of the historical events in which the Castle figured.

I am glad to see so many from European countries, both member states and prospective member states of the European Union, along with delegates from further afield, have been attending the Workshop. While the extractive sector is near and dear to those attending the Workshop, it is likely to impact strongly on most citizens only in cases of a scar on the landscape or a release of material causing a threat to waters or to wildlife and agriculture. I also suspect that, when complaining about the environmental impact of mining and quarrying, the average citizen does not realise:

- that minerals are essential to society – any material or ingredient that doesn't grow must be extracted from the earth,
- that the industry can be compatible with sustainable development and,
- that, where the most up to date technology is employed for disposal of mine waste, there is no damage to the environment.

A word about old, disused mines and their rehabilitation, which I see forms part of tomorrow's session. Long established existing mining/quarrying operations were not designed to modern standards. They can be problematic, and many have left a bad legacy in areas, causing pollution, and a seriously negative picture of the environmental effects of the industry. It is important that those problems are addressed.

I already mentioned sustainable development, and its now well known three pillars, the environment, the economy and society. While giving full recognition to the environmental pillar, the value of the extractive industry in disadvantaged areas with limited economic potential should get recognition. It is also essential that unnecessary costs are not imposed on the industry. By bringing together the wide range of expertise which you represent, this Workshop should help to identify the options that are available for dealing effectively with extractive industry wastes at former, current and future operations. I look forward to learning of a fruitful outcome to your deliberations.

I hope you will have an enjoyable stay here in Dublin and that you will have other opportunities to visit Dublin and Ireland on business and for pleasure.

Mine Waste Management Workshop

Developing EU Best Practice

Dublin, February 18 & 19, 2002

Final Programme

Monday - February 18, 2002

09:00 – 10:30 Registration

10:30 – 10:40 Welcome address by Mr Tom Power, Assistant Secretary, Department of the Marine and Natural Resources

10:40 – 11:10 Luca Marmo, European Commission, Waste Management Policy
Follow-up of the Communication on Safe Operation of Mining Activities

Session 1: Physical and chemical stability principles

➤ *Geohydrological and meteorological setting, physical stability, etc, and their implications for the choice of strategy and design*

Chair: Dr Jonathan Derham, Irish EPA

11:10 – 11:40 Dr Jonathan Derham, Irish EPA
Introductory Presentation - Setting the Scene

11:40 – 12:10 Mr Stephen Foster, MIRO/INAP
“INAP Research Progress Towards the Elimination of ARD”

12:10 – 12:40 Mr Stewart Cale, Knight Piésold
“The Long Term Stability of Tailings Dams”

12:40 – 14:00 **Lunch**



Session 2: Case studies on key aspects waste characterisation (acid production potential)

Chair: Dr Corina Hebestreit, Euromines

14:00 – 14:30 Dr Jans-Peter Schleinig, Kali und Salz
“Physical Stability of Tailings Heaps of the German Potash Industry”

14:30 – 15:00 Mr Thomas H. A. Schneider, Deutsche Steinkohle AG
“Safety of Tailings Ponds in German Hard Coal Mining”

15:00 – 15:30 Mr Lars-Åke Lindahl, Swedish Mining Association, and Mr Manfred Lindvall, Boliden
“ARD abatement - Three cases, three solutions”

15:30 – 16:00 Coffee break

16:00 – 16:30 Ms Margaret Stokes and Ms Paula Treacy, Anglo American Plc
“Ecologically Engineering A Sustainable Wetland Over Pyritic Mine Tailings”

16:30 – 17:00 Mr Liam Fleming and Mr Thomas Hartney, Aughinish Alumina
“Paste Technology for Thickened Tailings Disposal in the Alumina Industry”

18:30 Reception at Dublin Castle hosted by Ms Julie O’Neill, Secretary General, Department of the Marine and Natural Resources

Tuesday - February 19, 2002

Session 3: Risk management in the extractive industry – Tailings dams

Chair: Mr Lars-Olof Höglund (*Sessions 3 & 4*)

08:30 – 09:00 Mr Lars Olof Höglund
Introductory Presentation - Setting the Scene

09:00 – 09:30 Mr Ken Lyell and Mr Andy Copeland, Anglo American Plc
“Risk Management on Tailing Dams - World Wide Perspective”

09:30 – 10:00 Coffee break

Session 4: Case Studies on Risk management in the extractive industry

➤ *By adopting risk management methods to mine waste management we can identify the best site specific environmental solutions, our objective is to present the current best global approaches*

10:00 – 10:30 Mr Nils Eriksson, Euromines, and Mr Adelino Taboada, Rio Tinto
“Framework for Mining Waste Management”

10:30 – 11:00 Mr Mike Cambridge, Knight Piésold
“The Use of Auditing in Risk Management”

11:00 – 11:30 Dr David Steven, British Salt Limited
“Salt Industry: Disposal of Solids from Brine Purification”

11:30 – 12:00 Mr John Howe, Imerys Minerals Ltd
“Operational Management and Restoration of Wastes in the Industrial Minerals Industry: The China Clay Case”

12:00 – 12:15 Dipl-Ing Heinrich Schultheis, DMT GmbH
“NESMI Competitive and Sustainable Growth Programme”

12:15 – 12:30 Mr Sabri Karahan, Turkish Mining Association
“Exceeding Our Commitments at Ovacik Gold Mine”

12:30 – 13:30 Lunch

Session 5: Inactive Mine Sites

Chair: Dr Ben Dhonau, Department of the Marine and Nature Resources

13:30 – 14:00 Mr Fernando Da Silva Daniel, Instituto Geologico e Mineiro
“Abandoned Mines in Portugal, a Programme of Rehabilitation”

14:00 – 14:30 Ms Loreto Farrell, Department of the Marine and Natural Resources
“Mine Site Management and Rehabilitation at Silvermines, County Tipperary, Ireland”

14:30 – 15:00 Dipl-Ing Rudolf Šembera and Mr Miroslav Mariaš, Ministry of
Economy of the Slovak Republic
*“The Attenuation of Mining of the Mineral Materials in Slovakia –
Mine Flooding Project Dolina Mine”*

15:00 – 15:30 Mr Viv Byrne, CSA Group Limited, and Mr John Palmer, SKM
*“Studies in UK and Eastern Europe – Rehabilitation and Waste
Management Issues for Abandoned Mines”*

15:30 – 16:00 Dr Ian Brackley, SRK UK
“Inventories and prioritisation of inactive mine sites”

16:00 – 16:20 Coffee break

16:20 – 16:50 Round table discussion with government representatives, European
Commission and Industry

16:50 – 17:00 Closing remarks